FINAL SUBMISSION
ON THE
NORTHEAST B.C.
LAND USE AND OCCUPANCY STUDY

[Volume 1. Parts I-VIII]

PREPARED BY:

UNION OF B.C. INDIAN CHIEFS
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FOR THE DEPARTMENT OF INDIAN AFFAIRS

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PREFACE

The preparation and presentation of this report to the Department of Indian Affairs presents a number of special difficulties. The Land Use and Occupancy Study of Northeast British Columbia lasted some eighteen months. In the course of this time an enormous, indeed overwhelming volume of material and data were accumulated. A report that sought to include all available results and documentation would simply be unmanageable and useless. Also, there are maps and other visual materials that cannot easily be submitted in report form. And, finally, there are documents and statistics that, because of their highly confidential nature, cannot be submitted along with papers that can and should be publicly accessible. Before introducing what we present here, we would like to propose a possible solution to these and some related problems.

In many ways, the final days of the hearings in Fort St. John constituted a reporting-out process for our study. With the help of a good locale, slides, questions, and oral presentation by a number of the researchers, a substantial proportion of our findings were then made public. The transcript of these public proceedings, therefore, constitutes something in the nature of a report. At that time a careful selection of materials was made with a view to offering those that could usefully and appropriately be

publicized. It might be said, therefore, that this report to your Department need do no more than offer a revised or edited version of the transcripts of those hearings. The difficulty here, however, is twofold. On the one hand, to do justice to the materials presented at the hearings there is a need for printed maps, and this need is not easily satisfied. On the other hand, there are details and indeed whole sections that were left out at the hearings in the interests of clarity and brevity. To these might be added a third, if rather different consideration: the spoken and written word are suprisingly different in quality, and a verbatim transcript of oral testimony often does not do justice to the material.

Towards the end of the last phase of the public hearings it was suggested that the materials we presented be made widely available. This suggestion derived, perhaps, from a feeling that some of the material would be of interest to persons and institutions whose primary concerns are neither those of the Department of Indian Affairs nor those of the Union of B.C. Indian Chiefs. Senior officials of the Northern Pipeline Agency, Foothills, and the Department all suggested that we at some point turn our findings into a book that would be used in universities as well as other Indian research, policy and political contexts. Since the hearings we have discussed this matter extensively, and have come to

the conclusion that a publication is not only useful but the only proper way of doing justice to the issues, not to mention the investments of money and time thus far made.

This means that we are now considering three different forms for this document - each with its own use, validity and advantages. There is the transcript of the hearings, already printed and available - albeit with some limitations - on request. There is, secondly, the report that we are handing to you now. And, finally, there is the prospect of a publication that goes beyond either of the other forms. In the case of the two best known Land Use and Occupancy Studies that sought from the outset to be as comprehensive in nature as the one we are just completing, publication of the results was built into the plan and budget from the outset. We are referring here, as you probably realize, to the Land Use and Occupancy Study of the Northwest Territories, edited by Professor Milton Freeman, and published in 1975 by the Department of Indian and Northern Affairs; and to the Labrador study published in 1977, also by the Department, under the title Our Footprints Are Everywhere. A consequence for these two other studies of the initial resolve to arrive at a final publication in book form was the very high costs. The N.W.T. report entailed a total outlay of some 550,000 dollars, of which a significant proportion was engendered by the demands of publication. If for no other reason,

these demands tend to be high because of the nature of the cartographic work that must go into them. Conscious of these publication problems, we decided that the Northeast B.C. study should not be budgeted on the assumption of a final publication in book form. In this way costs could be dept down and administrative as well as technical difficulties at least postponed.

Now, however, the question of a publication has arisen. And it seems to us that the status of this report and the publication issue should not be kept apart. We duly propose that this report, although it is the final submission of material to your Department, constitute a document with limited circulation. We are not enjoining confidentiality upon you, but are recommending that this text be used only by your Department for project-related purposes. If this is the understanding, then we can enclose materials and include writing styles that are not consistent with the demands of a wider publication. We would then, in the wake of this report, prepare a manuscript for general publication, including maps and other art work of the highest possible standards. A preparation of a book, which is what this would be, involves enormous expense if it is done in the same way as has been the practice with these studies in the past. However, given the interest in the findings and the

need on many sides to see them publicized there may be a very easy way to avoid disproportionate costs in this regard.

The best way to make materials of the kind we have on hand public and readily accessible is by use of a commerical publishing house. Government departments do not have distribution systems that can effect a full and proper publication without entailing enormous costs to themselves. Commercial publishers are hesitant to take on projects of this kind, however, for two good reasons: sales are not confidently predictable at very high levels, while the cost of cartographic and other art work is too high to take the attendant commercial risks. But we could have the advantages of commerical publication with minimal costs to either the publisher or others by offering a manuscript to a publisher with a subsidy for cartographic work. This is a project that we shall be discussing in the coming weeks, and shall also raise with the Northern Pipeline Agency and Foothills - both of whom have urged us in the strongest terms, and with some tentative offers of financial assistance, to publish our work in the most general and accessible way that we can find.

For the purposes of this report we assume that some way will indeed be found for publication of a book-type document. This is not, therefore, the public document at which we shall finally arrive. The advantage of this is that it can be both

rather more technical, detailed and specialized than would otherwise have to be the case. Moreover, it allows us to draw quite directly on some of the presentations at the formal hearings.

The structure of this interim report, anticipatory as it is of a far more public published work, is very straightforward. Along with this preface, there are nine sections. The first of these focuses on the industrial context, and includes the maps and text supplemental to materials presented at the hearings. The second section is Dr. Weinstein's evidence on Indian land use as presented at the hearings. The diagrams he used are reproduced herewith. Hugh Brody's introduction to land use and occupancy studies is then given along with the best reproduction of the maps that we have at hand. These are the hunting, trapping, fishing and other land use maps that were assembled as primary data and then processed in the field. Section four is an edited transcript of Brody's account of the questionnaire results. The sensitivity of these data will be appreciated: we have decided not to include the tabulated statistics. The next section is a paper on the scientific status of the findings, pertaining both to land use mapping and questionnaire results. This is something that was touched on from time to time in the course of questioning of Brody by various intervenors at the hearings. But we decided then that the technical paper we had on hand should not be read into the record, simply in order to save time.

We therefore include it here. The next two sections - six and seven - are the transcripts of Brody's considerations of impacts. The first of these was spoken from notes and we offer it in an edited and somewhat revised version here. The advantage of staying close to the transcript in this case is simple and obvious: in his elaboration of the points, Brody included all the material in the paper he wrote on the subject, but went beyond the paper in a number of regards - the most important of which was his consideration of the history of traplines. Since section seven was read from a prepared text, the use of the transcript - once again with some editorializing - presented no problems. The eighth section is Professor Jackson's submission on Treaty 8 - once again an edited version of an oral presentation at Fort St. John. The final section - an appendix under separate cover - is a report on Indian land use and occupancy prepared by Dr. Weinstein prior to the material presented at the hearings.

Along with these written materials, we have accumulated a very extensive map archive and a collection of secondary and related materials. We do not append a list of these materials - to do so would be to deluge you with opague bibliographical references. However, we wish to place on record that in the Union of B.C. Indian Chiefs' library and files there are these secondary and tertiary sources to which anyone interested in the subjects will of course be

able to turn. Before moving on to the texts themselves, there are a number of methodological and project related matters that must be reviewed.

Methodology

The Northeast B.C. Land Use and Occupancy Study was first designed at a series of meetings, held in Vancouver in the spring of 1978. A number of staff members, advisors and project workers attended these meetings. But we looked for initial guidance to persons who had worked on Land Use and Occupancy Studies in the past. With the help of their experience, we decided to follow the tradition in at least one basic regard: it was agreed that the work should be founded on land use maps. These are explained in section five of the report. We departed from the tradition, however, in one important regard: it was decided that the mapping work should be carried out, as much as possible, by local band members. Despite some methodological problems this raised, we felt that a project of this scale should contribute directly to both the training and employment of residents. It was also decided in the early planning stages that our study would include a comprehensive account of the industrial and developmental context - the non-Indian economic interests in the region. In this regard it went some distance beyond anything that had been attempted in projects of this kind.

To these two primary components - land use maps and non-Indian economic interests - we added a third: a questionnaire that sought to achieve a sectoral economic analysis of the Indian reserves of the region. Specific methodological issues are raised for each of these components in the sections where the findings are reported below, along with the general discussion in section seven.

Timing

A preliminary visit to the communities, including discussions with Chiefs and band members whose help would be essential to the project's success, was undertaken in the summer of 1978. Mapping was begun in September of the same year, and continued intensively until March of 1979. Bits and pieces of additional mapping of Indian land use continued thereafter, but the main work on map biographies after March centered on the analysis of results and preparation of composite land use maps. This work continued through the spring and summer. The preparation of the industrial maps was begun in late fall, 1978, and completed by August of 1979 in penultimate form. The move from these penultimate to final versions of the maps was carried out with the help of a return-to-verify process to the communities: maps were taken to each of the reserves, and key individuals were asked to make corrections where they saw fit. In this way errors in both the non-Indian and Indian maps were corrected prior to commencement of the hearings. The questionnaire was

designed in December, 1978 and administered in February through May of 1979. Results were analyzed in the summer.

In conjunction with all the Indian land use mapping and questionnaire work several of our researchers also spent extensive periods of time conducting what is known in the literature as participant-observation. This meant that they lived for as long as was possible in the communities of the region, and sought to understand with the help of direct experience the nature of the economy and the problems that now beset it. These periods of participant-observation occurred between September of 1978 and August of 1979.

In addition, we relied upon the researchers for input into proposals for mitigating the negative and reinforcing the positive impacts of the pipeline project. These proposals were presented to the Department and incorporated into the Treasury Board submission.

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I.

NORTHEAST B.C.
RESOURCE INDUSTRIES &
THE PROCESS OF DEVELOPMENT

In contemplating the question of the pipeline in northeast BC, it became obvious to us that nowhere had previous discussion of such a project been had with reference to an area as extensively involved with prior development as the northeast.

This rather important observation soon became a compelling one. By probing into the background of what's going on in the region, we thought we might obtain results that would tell us altogether something about the nature of impact and something about an approach to the issues raised by the pipeline. And so we set out - not simply to measure the adaptability of the region to the pipeline project. We set out to discover the broader context of development in the region in which the pipeline might be located - and we sought a way to express what we found.

Clearly, we first had to define what it was about development that would be central. This led us to choose five sectors, ones which seemed to us fundamental to the northeast: settlement and agriculture, oil and gas, forestry, coal and hydro-electric power. These are all sectors directly involved with the extraction or conversion of resources. And these activities are what seem really to be the drive and importance of the region in economic terms.

The next consideration was of what needed to be said about the sectors we'd chosen. This led us onto a number of topics concerning the nature of these industrial sectors. In the end, one topic came to be of critical importance: the nature of the land use each sector embodies as it prosecutes its business. This is really what the maps we've prepared represent.

Land use refers to much more than the fact. It is an active term that suggests a process and a processual result. These are perhaps the two most important themes; both are what our work serves to document. The idea of process further suggests links between the character of land use and the order of decision-making; it reveals the resource-using interests at hand. In short, this work is not simply about the nature of particular kinds of production and resource use. One must also consider the organization and determinants of primary economic activity.

In preparing the maps and background information, we've drawn from a variety of documents and data prepared by parties directly involved in the primary resource industries. And in several cases we've supplemented these sources with direct interviews with those parties.

As we put together a picture of development in the northeast we realized that each sector was unique in its characteristics. Therefore, we had to devise a way to graphically represent our findings with consistency from sector to sector, but with flexibility that allowed us to reflect the particular nature of each one. We wanted to avoid point-in-time descriptions that fail to indicate underlying trends. Nor did we want to enter into project-specific considerations that narrowed the results away from the overall context.

We started by identifying the important inputs for each sector - the location of gas fields or the designation of timber supply areas, for example. We treated these as parametric data. The notion of process and result told us the dimension variables clearly had to be time and space. As such, the maps we've pre-

pared very much embody a history to development in the region in certain ways and for the present. They also depict a future: a business-as-usual case that will result from the current plans of public and private parties to the resource sectors selected. With written sectoral profiles in support, we believe that altogether an overview has been developed which yields a number of conclusions; a backdrop posed against which other conclusions of immediate and longer-term merit can be set.

We'll proceed, then, to present our findings: first, some background to settlement in the region, followed by a consideration of each sector and, finally, some concluding observations.

LAND ALIENATION I: SETTLEMENT HISTORY

Federal Control Established

The Peace River country first came into prominence as a function of the debates of Confederation, inextricably linked as they were to the extension of railway empires.

In the period to 1880, B.C. settlement patterns were very much concentrated in the south coast and Interior regions. Here was the primary development and political base of the time. The Conservative government in Ottawa was, of course, keenly interested in completing the transcontinental railway.

> "The railway was to serve as an instrument of political union...: it was to be the backbone of a 'transcontinental British nation in North America--a workable alternative to the United States' (Berton, 1974). This could not be possible without a transportation link over which Canada had territorial control..."

> "Beyond political roles, the railway was to be the tool with which exploration, settlement and exploitation of the empty country west of the Great Lakes was to be accomplished." [1]

The particular form by which this was accomplished is found in the Terms of Union, 1870. B.C. agreed to join MacDonald's national design while by its Articles, the Dominion agreed:

> "...to secure commencement simultaneously within two years from the date of Union, of the construction of a railway from the Pacific towards the Rocky Mountains, and from such point as may be selected east of the Rocky Mountains to the Pacific to connect the seaboard of British Columbia with the railway system of Canada; and further, to secure the completion of such railway within ten years from the date of Union." [2]

The province undertook to convey to the Dominion "in furtherance of the construction of the said railway,...public lands along the line of the Railway, throughout its entire length in British Columbia, not to exceed, however, twenty miles on each side of the said line..."[3] This effort provided Ottawa with a means to subsidize the rail promoters to ensure completion of their line, at little or no direct cost to a national purse already heavily drawn upon. The 40-mile strip of land B.C. turned over was to become known as the Railway Belt.

Various federal-provincial negotiations in respect of rail route and completion continued irregularly throughout the 1870's, finally culminating with B.C.'s Settlement Act of 1884. The Act conveyed to the Dominion 10.9 million acres on Vancouver Island and 3.5 million acres in the Peace River area, in addition to the Railway Belt.

The Peace River area was included in this package due to federal pressure for compensation for prior development in southern regions, and in exchange for other commitments. According to Cail,

> "Since the provincial government had alienated approximately 900,000 acres of Railway Belt lands between 1871 and 1883, it was reasonable that it should be expected to make substitution elsewhere. But the Dominion government went well beyond a reasonable expectation when it insisted that since much of the land within the Railway Belt was not of 'fair average quality,' British Columbia must convey an equivalent in good lands elsewhere." [4]

Why then did the province comply? B.C.'s Premier McBride, in 1912, laid out the rationale:

> "By the terms of the "Settlement Act' the province, tired of delays and wearied with fruitless negotiations, agreed to transfer 3,500,000 acres

> of the best land in the Peace River District in lieu of expenditures on the part of the Dominion, amounting in all to about $1,000,000. These lands, worth now, at the lowest valuation, $17,500,000, were parted with to secure a railway from Esquimault to Nanaimo, costing less than $3,000,000, which, under the Carnarvon terms, the Dominion Government, had pledged itself to build without cost to the Province. The value of such concession was not then foreseen." [5]

McBride's lament aside, what is clear is that the province had set its priorities. The Peace did not figure therein and was given over to the Dominion without conditions for northeast development. The Dominion, on the other hand, had a very real and equally political agenda in which the conveyance played an important part. By the exchange, the Dominion acquired more than the lands required to satisfy the rail promoters. For the northeast, it had obtained the relinquishment of provincial control of prime land--thereby putting the Dominion in a determining position over an area historically at the fringe of expansion on the prairies.

The Settlement Process

Despite Federal control dating from the 1880's, it was not until 1912 that settlement of the Peace River Block was undertaken in a concerted and organized effort. The isolated and somewhat transient settlement experience of the intervening years gave way to permanent residency.

The new population established an equally new regime of prevailing views--views of the land and its uses that had a great deal to do with the settlers' expectations of future rewards.

The early years of this century reflected an optimism typical of settlers at the edge of an economy which, despite manipulation by distant centres, still gave one the sense of building a future from years of deprivation and personal struggle. But even this need be put in some context.

That the Peace River country was possessed of remarkable capability for agriculture became known with the fur trade. Missionaries and traders, themselves at outposts of the then prevalent economy, were self-sufficient in vegetables and flour produced from land adjoining the forts. (This was of some real importance to the maintenance of such centres long distances from their headquarters and sources of alternate supply.) With the mobility of agents of the fur trade went news of the climate and capability of the region.

Here we can see from the very beginning an important theme in the development of the northeast: the development of public knowledge of the attributes of the hinterland. This was later to be transformed into the legitimation of new uses of the land and, very much, was to influence the expectations of the people and institutions involved.

In 1907, a Special Committee of the Canadian Senate, looking into controversy over the suitability of the Peace for settlement, found that "there is in the Peace River section of this country as much good agricultural land fit for settlement and yet unsettled as there is settled in Manitoba, Saskatchewan and Alberta today..." 6

There were others who took off from that assumption. At the turn of the century and in its early years, a multitude of rail speculators, jockeying for routes to the coast, surveyed or promised to build transport links through the Peace. Not surprisingly for the time, none were ever built. But in the emerging endorsations, all that was left was for criers of the new frontier to play their part--such as A.M. Bezanson, contemporaneously described as a "land prospector," who distributed 5,000 copies of a pamphlet containing this kind of encouragement:

> "Great as has been the influx of settlers into all Western Canada in recent years, the supply of land within easy reach from the railroads has, to date, been equal to the demand; but the time is now at hand when the landseeker must leave the railroads behind and push out into the more remote regions.

> And surely, one could not desire conditions more favourable than are to be found here. So easy is this Last West of access and so generous her rewards to those who invade her domains as to render the hardships mere child's play as compared to those experienced by the pioneers of a generation ago." 7

In 1911 the Dominion government selected lands in the Peace River Block to be targeted for release in the first wave of settlement. The regional population in that year was less than 2000. Ten years later, following a pre and post-war influx encouraged by Dominion authorities, the population was to reach 20,000, in what Kitto describes as "a rush of land seekers who invaded the district during this period:

> "A steady stream of settlers moved northerly and quickly took possession of the choicest prairie lands. Surveyors worked the year round to keep ahead of the rush. Before the outbreak of the Great War thousands of homesteads had been filed on, and several thriving villages were springing up.
>
> "Even during the war years settlement continued. Immigration from Europe having been suspended, the district received its newcomers for a time almost entirely from the older settled parts of Canada and various states of the adjoining republic. Then came many returned soldiers, certain lands having been set apart for their exclusive choice." 8

Within this development process, we can certainly see the operation of the mercantile and railroad interests of eastern Canada, as has been well documented elsewhere. But we can also discover, again applicable to current conditions, the operation of regional centres.

The fur trade in the Peace was initiated from northwestern Alberta. Alexander MacKenzie, in his voyage of discovery, travelled up the Peace from Fort Chipewyan to establish trading posts at Peace River Crossing, Fort St. John and New Caledonia (in B.C., at Forts McLeod, George, St. John and St. James).

Consistent with this establishment of a knowledge, transport and settlement corridor, this route was travelled again within later patterns of land settlement. Two avenues were in fact devised for access: from Alberta via Lesser Slave Lake and the Peace River or via Grande Prairie. The first would take one into Fort St. John, the latter into Pouce Coupe (and later Dawson Creek).

Reflecting this early integration of the two regions we have the organization of land settlement by District Offices at Peace Crossing and Grande Prairie. (It is amply evident that this was occuring at the same time as the Dominion was seeking adhesion to Treaty 8 and setting aside Indian Reserves in the northeast.9)

The Dominion Land Agencies were clearly meant to facilitate the settlement process. Local officials had the authority to dispose of all resource values on the spot--land, timber and minerals.

Very different from some of the current deliberations, the central goal of the federal authority (Dept. of Interior) was to maximize the numbers of settlers. The terms were made easy: any male the age of 18 or more, who was or intended to become a British subject, or every male head of a family, was entitled to file for a quarter section of land by tendering payment of a $10 fee. Many from the Prairies moved westward to take advantage of this feature. Resettlement of veterans, actively encouraged for the Peace country, later added to this push.

Contemporaneous with settlement was the emergence of facilitative technology. For example, meteorological records were maintained from the outset of settlement. An agricultural experimental farm was established at Beaverlodge, Alberta. The Dept. of Interior undertook soil classification surveys covering over a thousand square miles in each of the Pouce Coupe and Fort St. John areas. Sub-agencies of the land office were located in

Fort St. John (for the north Peace) and Pouce Coupe and Fort St. John (for the south Peace).

The Peace River area was already well noted for its prolific harvests. Open prairie, cultivable parkland and even bush that "can be subdued" were abundant. The limiting factor was climate: growing seasons somewhat shorter than in other regions, ranging between 95 and 115 days. Cereal crops were found or developed to meet these conditions: fast ripening, frost resistant and above average in yield. Reports to this effect circulated to potential settlers.

B.C. farmers beyond railhead carried their produce to the junction at their own expense. A 55 mile railroad bed was graded in 1916 from Spirit River to Pouce Coupe but the line was never completed. Instead, it came into use as a winter road. Likewise, for those with access, the Peace River itself became a summer highway plied by flat-bottom riverboats.

Expectations of rail connection spurred settlement especially in the Pouce Coupe area prior to 1920. But thus linking their expectations to external priorities, the settlers also linked their fates. When it became clear the rail link of 1916 was going no further, the first waves of boom quickly turned to bust. Expectations of sustained development soured to perceptions of stagnancy.

There is some indication that the Peace River area as a whole suffered a net decline in population in the first half of the 1920's. But this was not to become a permanent trend. Those that stayed continued to develop local infrastructure, clearing land, harvesting grain, and securing intraregional transportation.

The years 1926-29 reported grain crops that ranged from good to bumper-sized in magnitude. And in the years 1923-27, Peace River farmers repeatedly won prizes in recognized competitions for their wheat, oats and timothy. A story is often told of such an event at the International Live Stock and Grain and Hay Show held at Chicago in 1926. There, Peace River farmers ranked

at the top. The story is recounted for two reasons: as independent proof of the capability of the area in contrast with all others, and to indicate that the exposition of the Peace in this manner itself became a spur to settlement.

The year 1928 saw the third wave of the first settlement period. According to Kitto this area was:

> "Settled up with astonishing rapidity, particularly during 1928 and succeeding years. Before the end of 1929, homesteaders were finding their way across the Beatton River and as far north as the limit of surveyed lands. In fact, such numbers of land seekers had 'squatted' still further north that early in 1930 the Dominion Government dispatched a survey party to the scene to sub-divide additional territory." 10

During this period, also, there were changes that meant improvement of the critical transportation links to outside markets. The Edmonton, Dunvegan and B.C. Railway, completed to Hythe, was taken over by the Alberta Government in 1920 and leased to the Canadian Pacific Railway Co. for 6 years. In 1926, Alberta reasserted its control and made operating arrangements with Canadian National. Finally, in early 1929, four railways serving the Peace River area were amalgamated and rolled over into the Northern Alberta Railway Co., on July 1, 1929. The line was to be jointly owned by C.N. and C.P. With this realigned support, rail extensions to Pouce Coupe and Dawson Creek were announced, and surveys extending as far as the Montagneuse River area north of the Peace were planned. This new access and interconnections brought to the Peace grain economy a certain shift in its export centres, away from an Edmonton-`Great Lakes direction:

> "Now a large proportion of it goes by way of the C.N.R. westerly through the Yellowhead pass and thence to Vancouver. Since the Panama Canal has been opened to ocean commerce this Pacific port has become an important grain depot and Prince Rupert is following its example...More favourable rates have also been obtained on the local railways of late years so that now the Peace River grain grower is in a position to operate at a profit." 11

For a centre like Fort St. John, rail connection was linked to a road system that on an intra-regional basis was already at hand:

> "Secondary roads and wagon trails radiate westerly to Cache Creek, Halfway river and Hudson Hope; easterly to Beatton River, the Alberta boundary and Fairview; and northerly to St. John Creek, a tributary of the Beatton better known locally as the Montenay, Blueberry River and on to the Fort Nelson river system." 12

The population of the Peace River area by 1931 had risen to some 6,300, a three-fold increase over 1921. It had risen another 20% to nearly 7,600 by 1945. (This much slower rate of growth reflected a glut on the grain markets of the early 1930's and the dampening effects of the Depression).

By 1941, urban centres were permanently established. Pouce Coupe had 518 residents; Dawson Creek, 251. These centres were the hub for a more broadly distributed rural population. Five thousand people lived south of the Peace River in 1941, another 2,500 in the Fort St. John area.

Rural residents comprised 69% of the regional population. Altogether, interestingly, immigrants from the Prairies made up some 52% of the total. Nearly all had taken up residence in the Peace country between 1917 and 1931.

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LAND ALIENATION II:

CURRENT TRENDS

Agriculture

Agriculture has been the underpinning of the northeast for nearly seventy years. Its substantive beginning came around 1911, when 3 1/2 million acres inhabited by fewer than 2,000 people were thrown open to settlement by the Dominion. The agricultural sector today reflects a mature stage of growth in which the early expectations of unbounded potential realized only through pioneering effort have been transformed to a reality of rising costs, fluctuating markets and consolidated ownership.

This is not to say, of course, that the hard work of farming is no longer necessary, or that farmers do not draw satisfaction from their labours. And the frontier spirit one can trace to the agricultural pioneers still very much prevails; indeed, it has lent itself to the face of what is now an entrenched resource economy and has become commingled with the expansionist views of hinterland entrepreneurs.

None of this is to say that agriculture is insignificant in or to the northeast. Figures published by the Peace River-Liard Economic Development Commission for 1977 provide a brief sketch to this effect. 1

That year, farm product sales totalled $36 million, $22.3 million of which came from export grains. Livestock, largely sold to processors outside the region, yielded $4.1 million. The balance of income derived from forage and hay crops, much of which will have served as intermediate inputs to other agricultural production.

The Commission set cultivated acreage at 892,026 or 62.33% of stated farm acreage. Significantly, only 16,800 acres were described as newly cleared,some 3% of the land uncultivated. (A longer view would show an average of 30,000 acres cleared annually between 1961 and 1971, with the rate falling off to 8,500 acres per year between 1971 and 1977).

Federal census data comparing 1941 and 1976 show a marked expansion in the agricultural sector. [2] The land area taken up by farms rose 234% to 1.8 million acres (Table I). Improved

land acreage increased 370% to more than three-quarters of a million acres. (The census takers found somewhat more farm land, and less of it cultivated, than the Regional Commission indicated a year later).

Census data also indicate a significant shift in the size of northeast farms (Table II). In 1941, 1/2 were sized greater than 300 acres; by 1976, two-thirds were over 400 acres. Average farm size nearly quadrupled to 1,120 acres.

But what is of immediate importance, and what such large figures do not show, is that agriculture as a primary economic activity in the northeast has reached certain limits. The federal census data show that the number of farmers and total farm population were both unchanged after 35 years (Tables III and IV). Commission estimates have 4,000 people coming into the area between 1971 and 1975, but 2,000 of them went to Fort St. John, and 1,000 to other urban centres. The historic farming centres of Dawson Creek and Pouce Coupe, the Commission indicates, declined slightly in the same years.

Land now available for alienation and later cultivation is only a small proportion of the arable land base. The export grain economy, on which the sector has historically depended, occupies much of the land capable of sustaining it. Prime land, in effect, has gone from surplus to shortage: the original $10 fee for preemptors of quarter-sections has given way to land costs prohibitive to nearly all but corporate or investor buyers.

Farmers are now encouraged by provincial policy to take up adjoining lands, and to engage in substitution of high value crops (rapeseed is a relevant example) in an effort to maximize income to meet rising input costs. On land at the margin of capability, the complete substitution of livestock for grain is urged, then only to face its own market uncertainties.

All of these responses meet with reluctance or obstacles of infrastructure. And all occur in a context of changing farm operation. The proportion of farm acreage operated by owners

has dropped from 56% to 36%, a decline of one-third. Tenant farming has tripled to one-fifth of farm acreage, a trend which may have something to do with the leap in average farm capitalization from $4,000 to $153,000 in 1976 (Tables V and VI).

Perhaps the most startling trend shows up in data for off-farm labour (Tables VII and VIII). In 1941, 60% of operators worked off-farm, but 80% of those who did so worked for less than 10 weeks (usually in construction). By 1976, the proportion of operators working off-farm had dropped to slightly more than half, but nearly 30% of those who did so worked off-farm more than seven months of the year. Half of the operators taking outside work did so for more than 5 months. The proportion working less than 10 weeks had dropped from 80% to 20%. (It's worthwhile to recall here the earlier finding that the number of operators really hadn't changed much in the same period).

We find that farms today are generally larger and certainly worth a great deal more money than they used to be. Fewer farm operators own the land they work. Relatively more work at their farm year round; while those that don't do so spend much larger amounts of time away from the farm. We can expect a great proportion of these less-than-full-time farmers are involved in industrial occupations, regardless of any preference. The amount of land committed to agricultural production has increased substantially since World War II, but now reaches capability limits in historic uses. As those involved face changes in the composition of their crops or farm income, others face real barriers to entering agriculture. Farm capitalization and tenant farming have increased dramatically. The number of farms owned by non-residents doubled in proportion from 4 to 8% of all northeast farms (Table III. This is understood to have increased still further since 1976).

The meaning of all of this must now become clear: the agricultural sector in northeast B.C. is under some pressure, but having reached certain limits will decline in relative importance. To underscore this point, just one more statistic: in 1941, farm population was 69.8% of the total--by 1976, the proportion had shrunk to 11.8%.

I. Total Area of Farms

	1941		1976	
	Acreage	% of Total	Acreage	% of Total
Total	545,403		1,820,202	
Average	328		1,120	
Crop	104,832	19.22%	541,770	29.76%
Fallow	51,190	9.39%	146,253	8.03%
Pasture	2,580	4.73%	71,897	3.95%
Other	8,130	1.49%	24,221	1.33%
Unimproved	378,671	69.42%	1,036,061	56.92%

II. Farm Size

1941		1976	
0-100 ac.	2.33%	0-130 ac.	2.9%
101-299 ac.	46.08%	130-399 ac.	29.41%
300-640 ac.	39.89%	400-759 ac.	25.73%
640 ac.	11.19%	760 ac.	41.41%
Note: 88.3% of farms at less than 640 acres.		67.1% of farms at more than 400 acres.	

III. Number of Farms

	1941		1976	
	No.	%	No.	%
All farms	1734		1983	
Non resident	72	4.15%	158	8.86%
TOTAL OCCUPIED:	1662		1625	
Owner-operators	1153	69.37%	951	58.52%

IV. Population

	1941		1976	
	No.	%	No.	%
Total	7,577		44,048	
Farm	5,288	69.79%	5,203	11.81%

V. Operator of Farm Area

	1941		1976	
	Ac.	%	Ac.	%
Owner-mgr.	307,166	56.32%	657,589	36.12%
Tenant	38,107	6.50%	382,752	21.03%
Partly both	200,130	34.16%	779,861	42.84%
Owner-operator avg. acreage	266		691	
Proportion of total land area (52,821,120 ac.)		1.1%		3.45%

VI. Farm Capital

	1941	1976
Land & bldgs.	$4.570m	$184.260m
Mach. & equip.	1.075m	49.377m
Livestock	1.052m	15.097m
Total:	$6.597m	$248.734m
Avg.	$4,031	$153,046

VII. Farm Labour

	1941		1976	
	No. of Weeks	% of Total	No. Workers	% of Total
Total hired labour	7,136		1,174	
Total hired year round	1,560	21.86%	6,136	54.91%

VIII. Off-Farm Labour

(Operators)

	No. of Operators	% of occupied farms	No. of Operators	% of occupied farms
Total working off-farm	1,000	60.2%	854	52.22%
Work less than 72 days	804	80.4%	168	19.67%
Work more than 157 days	73	7.3%	446	52.2%
Work more than 229 days	40	4.0%	248	29.04%

Land Reserves and Auctions

Despite this economic situation, agricultural activity is encouraged and supported by the province. [3]

There are two obvious examples: Agricultural Land Reserve measures and the alienation of additional Crown land for agricultural purposes. The Agricultural Land Reserve of course is not specific to this area but it does indicate a continuing commitment to farming. More important is the dispensation of Crown land. The Peace River area is one of the few remaining sections of B.C. in which Crown land is available for agricultural purposes. Of 3,702,500 acres within the Agricultural Land Reserve, 1976 farm acreage comprised 48.6%.

Within the Peace River Block, virtually all prime agricultural land has been alienated, although not all has been cleared or cultivated. Nor is prime land necessary for further expansion. Proper management can make lower class lands useable for crops or livestock. The Ministry of the Environment estimates there are 250,00 acres of unalienated Crown land of Class 4 agricultural capability (ie. severe limitations) remaining in this area. Most of this land is being held in reserve until settlement plans or land studies and surveys have been completed.

In 1975 the government imposed a two year moratorium on Crown agricultural land releases pending a new Agriculture Lease Policy. The policy was released late in 1977 and, subsequently, land was prepared for auction. The new policy is designed to encourage development of privately owned arable land before alienation of additional Crown land, to release land only when it ensured the best use of that land, and to encourage consolidation of small parcels of land with existing farms.

In August of 1978 some 13,500 acres of Crown agricultural land was publicly auctioned in the Peace River area: 7,900 acres out of Fort St. John and 5,600 acres out of Dawson Creek. Parcels around Fort St. John ranged from 300 to 650 acres each. Those around Dawson Creek averaged 900 acres. This is indicative of the pattern of unalienated land in the area. Around Fort St. John, unalienated land is found only in scattered relatively small

parcels. The same is true for the Dawson Creek area except for a large parcel of land (lot 2222) previously leased to the Del Rio Corporation. (The Corporation relinquished its lease and the land is now being divided for auction. Six of these parcels were released in the August auction. Others are being surveyed for future disposition).

It can be expected that future alienation will follow the same general patterns. Studies are also taking place in the vicinity of Farrell Creek and alienation in this area can be anticipated probably within the next five years. This is dependent partly upon the construction of new access roads.

There are several factors that will soon be influential in the area. A very large section of land around Chetwynd has been under study by the Land Commission for some time. This study will outline future land alienation possibilities, bearing in mind government intentions to lift the Reserve at the earliest opportunity.

The Peace River-Liard Regional District has forged an official Settlement Plan covering a 50 mile radius around Fort St. John and is looking at proposed developments and land use over the next ten years.

For the Fort Nelson area, the federal Department of Agriculture Research Station at Beaverlodge, Alberta conducted preliminary studies in 1964-66 and assessed the potential arable acreage at between 1,000,000 and 1,500,000 acres. This land is located on river flats and floodplains, the Nelson plateau and meadows along numerous creeks in the area.

Between 1965 and 1971 approximately 12,000 acres of Crown land were alienated for agricultural purposes, mainly along the highway west of Fort Nelson. A recent estimate, however, puts only 1500-2000 acres of this land as cleared with only minimal cultivation taking place.

Recently, there has been renewed interest in farming although existing development has in no way proven that successful operations can take hold. The general opinion of agriculturalists and land managers is that the area is not ready for further development at this time. High costs of clearing, limited experimentation and lack of agricultural knowledge all contribute to this opinion.

Despite these factors, local residents are demanding more agricultural land and the politicians are responding. On a 1978 visit to Fort Nelson, Premier Bennett announced a new land policy aimed at freeing Crown land for B.C. residents. Land for homes, farms, and recreation became "a number one priority" for his government. No deadlines or details were announced but it can be assumed that the wheels are in motion and more land will be alienated in the near future especially around Fort Nelson. This action is corroborated by discussions between Ministry of Environment and Fort Nelson officials with regard to future land releases. The Agricultural Land Commission, meanwhile is studying the area with the aim of placing more land in the Agricultural Land Reserve.

The Regional District will produce an Official Settlement Plan for the Fort Nelson area as well, commencing in 1979-80. The Village of Fort Nelson is currently looking into expanding its boundaries 8-10 miles south to encompass some of the potential agricultural lots. The first land auction is understood to involve all or some of the 20 surveyed lots totalling 8760 acres around Jackfish Creek.

All land released and destined to be released for agriculture is situated along the Alaska Highway. Before additional lands situated away from this major access can be alienated for agriculture, other servicing such as roads, electricity and more accessible farm supply must take place.

REFERENCES

1. Peace-Liard Region Economic Development Commission, Peace Liard Economic Development Overview (Dawson Creek, July, 1978).

2. Census of Canada, B.C. Census Division 10, Subdivisions A, C and D (Excluding Indian Reserves).

3. Much of what follows has been drawn from interviews held with federal and provincial officials in Vancouver, Victoria, Prince George and northeast centres. All officials interviewed had responsibility for various aspects of future land alienation programmes. The interviews were conducted in 1978 and 1979.

Annex: Land Alienation Mapping

Display Map: Crown Land Alienation Selected Years

The alienation of Crown land defines the areal spread of settlement over time. Alienation here refers to the conveyance of title from the Crown to a private party by grant or leasehold, as represented on the preemptor and later map series.

The standard of title conversion is considered consonant with settlement, especially as it is a prior condition to land clearance and improvement. One might argue a portrayal of clearance and improvement would be more instructive in measuring the conversion of the land resource. From the standpoint of detailed analysis this is probably true. However, the data necessary for such an approach are not available for all years covered. Nor, do we believe, would the substantially greater effort required to produce such a regional depiction yield results significantly different than those at hand.

Taking the conversion of title, then, as the prime measure, the data were broken down to reflect land alienation for periods important to the development of primary activity:

- pre-1928 - the first waves of agricultural establishment
- 1929-41 - agricultural and urban extension prior to construction of the Alaska Highway
- 1941-52 - including and immediately following the installation of the Highway
- 1952-60 - first period following the commencement of the oil and gas play
- 1960-70 - continuation of oil and gas, introduction of rail access from BC and the first significant expansions of the forest harvest
- 1970-79 - the most recent 10 years. Continuation and maturation of the above.

Each period has been colour-coded for distinction. The sequence lends itself to analysis limited to particular epochs. Or one could take a more general view, making an overall and cumulative assessment.

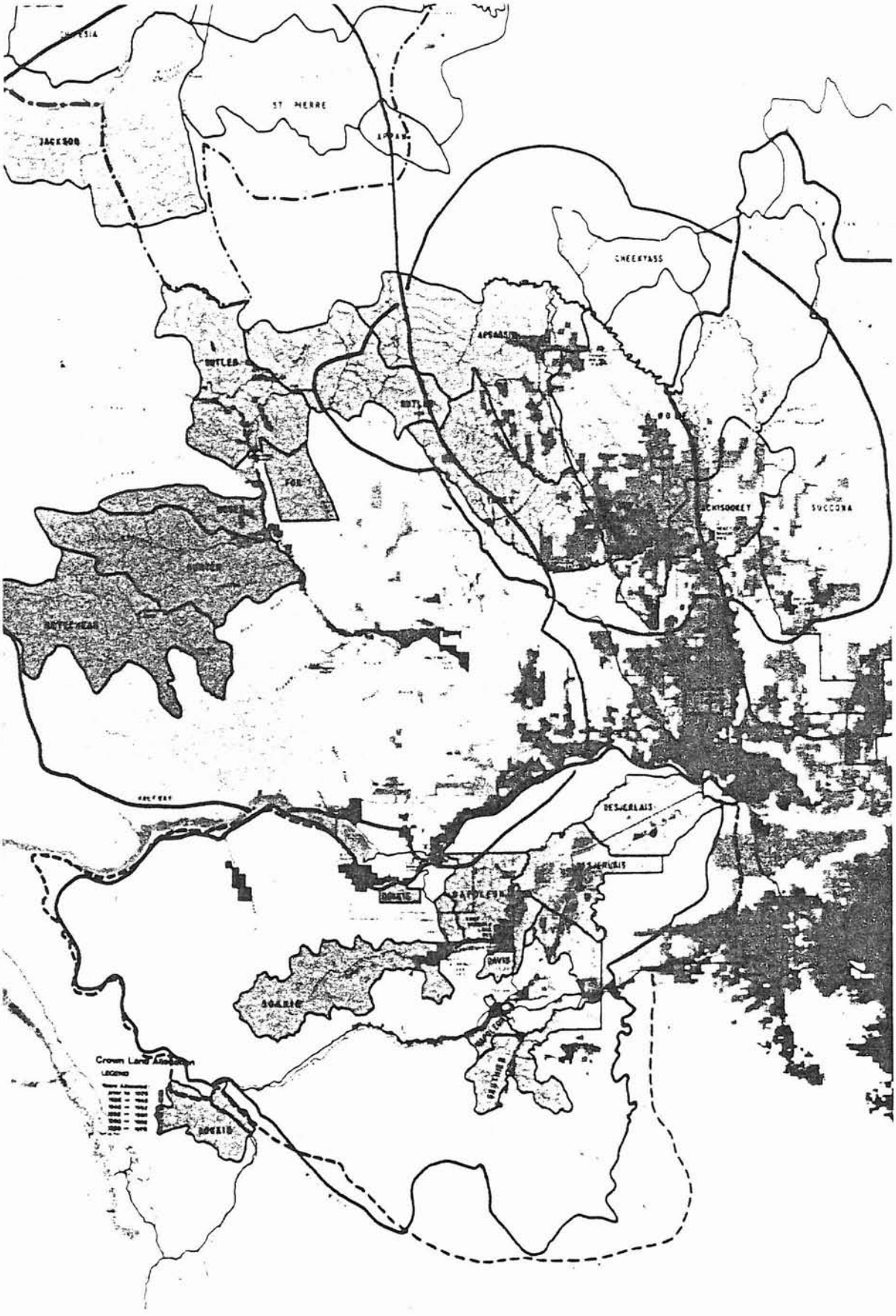
Supplementary Mapping

Several maps and supporting data were generated during the course of the research. These were produced so as to test results and trends in evidence, or to aid elaboration of tentative findings in respect of Indian land use and occupancy. These topics included:

(a) location and parcel-size distributions for upcoming releases of Crown land,

(b) demarcation of planned recreational areas near urban centres or along the Alaska Highway, and

(c) for the Blueberry, Doig and Halfway communities, the current distribution of land clearance within a 30-mile radius of the Reserves.



INDIAN TRAPLINES AND HUNTING AREAS

TRANSPORTATION CORRIDOR:

THE ALASKA HIGHWAY

As a transportation route connecting U.S. points and not without substantial impact on the region, the Alaska Highway is perhaps directly analogous to the Alaska Highway Pipeline in the development experience of the northeast.

The Highway is distinct from other sectors inasmuch as it has played a facilitative role, spurring activity of broad diversity and geographic penetration and changing the character of the northeast with some permanence. The most important functions of the Highway today are two: the first, obviously, being a central communication device. In this case, the distributional, transportation and tourist industries flourish. But the Highway also has a critical role as an intraregional facility in the harvest of resources. Its presence allows access to exploitable areas, at zero cost to private and public users. Such access was without precedent prior to 1941 and has proved pivotal. George L. McMahon made the point directly in his recollection that

> "...if it hadn't been for the Alaska Highway the development of this huge area would have been retarded for years. Without this highway, we would have found it almost impossible to move our drilling rigs; without the highway, I seriously doubt if today's major gas fields would have been discovered yet, and without the highway, the pipeline might never have been built." 1

McMahon, of course, was referring to the first years of the oil and gas play in northeast B.C. - an epoch that was to immediately follow the opening of the Alaska Highway to non-military use.

The reputation of the Alaska Highway - and it continues today - is of a massive construction effort marshalled by the military in a time of need and international interest. It is meant to convey a profound sense of military capability, exemplary of North American technology and

organization but fraught with untold engineering challenges all met with success. Construction of the Highway was the first inflow of organized labour and capital on a mega-scale and in a minimal time-frame. In this dimension, too, the experience of the Highway reminds one of the promises of the pipeline today.

But it should also be recalled that the military rationale was never the first goal of the decision-makers involved. During the 1930's there were repeated moves in the U.S. Congress to establish a road corridor connecting the lower 48 States with Alaska. A 1933 Congressional Commission of Inquiry, for example, pointed out these reasons, from the U.S. standpoint:

(a) the development of Alaska as a result of highway accessibility;

(b) a contribution to the welfare of Americans living in Alaska through physical connection with the continental highway system;

(c) the opening of new country giving opportunity for settlement and investment of capital and employment;

(d) the connection of the Alaska highway network with that of the continental United States, providing new and valuable areas for exploration, recreation and business;

(e) assistance in air commerce 'along the most practicable flying route to the interior of the territory and to Asia;'

(f) the promotion of friendly relations between citizens of the United States and Canada." 2

The essentially commercial drives in the U.S. focussed on a corridor not dissimilar to the now established Stewart-Cassiar Highway. These pushes commonly had the blessing of the U.S. President of the day, but met with mixed reaction in Canada. B.C.'s Premier McBride was very much interested in establishing a corridor. First he sought to borrow construction funding from the U.S. government. And in the late 1930's he strongly urged Prime Minister Mackenzie King, instead, to establish a Canadian process of inquiry parallel to the one in the United States.

Having said all of this, one might wonder how the commercial project became a military enterprise. In fact, throughout the 1930's, it would appear the U.S. military was uninterested in any such connection. But the emerging geopolitical context created its own urgencies.

In 1939 the Canadian government commissioned the Northwest Staging Route, a system of airfields stretching from western Alberta to Alaska and including bases at Dawson Creek, Fort St. John and Fort Nelson. The U.S., meanwhile, had developed war plans which forecast the fall of Britain and France and so set out to provide for the defence of North America. Complementing this approach, the U.S. had initiated a lend-lease programme for U.S. military aircraft with the Soviet Union. The delivery route, of course, was the Canadian Northwest system.

The Canada-U.S. Joint Permanent Board of Defence established by the Roosevelt and King administrations in 1940 very quickly perceived the military value of the Northwest Staging Corridor. The entry of Japan into war provided the compelling argument: Alaskan defences needed strengthening; the Northwest system needed land servicing. Thus, the final decision to build the Alaska Highway on its present route was a military one. It was a decision largely made in the U.S. in direct protection of its interests.

Canada, simply, gave its permission to this invasion on the basis of military arguments deemed compelling in the changed geopolitical conditions of the 1940's.

Of least concern in the military thinking were the changes to be wrought in the areas to be visited with this military conclusion. It is well known, for example, that construction of the Highway was carried out by the U.S. military in conjunction with American contractors retained by the U.S. government. Overnight, literally, they landed themselves at Dawson Creek and changed that small agricultural centre into a burgeoning staging ground. Its population leapt from the hundreds to the thousands. Local capability to meet the demands imposed was quickly outstripped, leaving the permanent civilians to fend for themselves.

The U.S. contractors' demands for construction labour found a supply in the residual pool of Canadian unemployed. Workers and sub-contractors were drawn from a wide area, including both the northeast and the Prairies. The wages offered were tremendous when compared to prevailing rates in the region. Labour shifted away from historic occupations while both goods and services faced a labour and price squeeze. (One might also note some real evidence of wage discrimination between American and Canadian workers hired by the U.S. contractors.)

The contrast even found root in the divergence of views that, for a period, dominated the northeast. The metropolitan military planners had perceived a military gap, the filling in of which could be accomplished by pouring as much men and equipment into it as were needed to get the job done in the shortest period of time. When that gap was eliminated, there were new priorities to be met. This was completely at odds with the principles of frugality, efficiency and long-term consolidation inherent in the agricultural settlement of the northeast at the time.

The dissimilarities of these approaches is perhaps best reflected in the events following October, 1942. The U.S. construction troops had been ordered to withdraw. An inventory and redeployment of redundant equipment was to be effected. But it was completely impossible, given the scale of the project. And rather than see a distribution or auction to local residents, the northeast looked on in astonishment as tons of material were burned or dumped along the Highway. 3

To be sure, one would hope that project management has advanced beyond the Highway experience of the 1940's. But the origins, prosecution and problems associated with the Highway then very much resemble the prospects of the pipeline proposed today. The parallels are indeed striking.

RESOURCE HARVEST:
THE FOREST SECTOR

The forest industry in its beginning was very much an extension of agricultural settlement in terms both of land occupancy and the level of economic activity. Small, portable sawmills took advantage of the conifers downed in the process of land clearing to supply the needs of the farms and the towns which serviced them. In the early thirties some of the better spruce stands were exported to the U.S. through the Northern Alberta Railway terminal at Dawson Creek. But many of the better stands of timber were further to the west on the more moist soils of the Rocky Mountain foothills.

It was not until the Pacific Great Eastern (P.G.E.), now British Columbia Railway (B.C.R.), provided access to the North American rail market for lumber that timber harvesting took off on a large scale in the region. The B.C.R. was extended to Chetwynd and Fort St. John in the late 1950's. A line to Fort Nelson was delayed until the early 1970's. Sawmilling companies, following the rail into prime timber areas, found in place a well located log haul road in the Alaska Highway. This primary system, together with the very cheap winter road and ice bridge secondary system, enabled the industry to establish itself with very little investment in logging infrastructure.

The Industry

The forest industry in the northeast is a producer of intermediate products sent to production centres outside of the region. The primary product, lumber, is sold on the rail market mainly to the middle and eastern U.S.; the veneer from Fort Nelson is sent to Vancouver to be made up into plywood; the byproduct woodchips go to pulp mills in Prince George, Mackenzie and Grande Cache, Alberta. The B.C.R. connection effectively made the southern half of the region a hinterland for the rapidly expanding northern interior sawmilling and pulp industry centered in Prince George.

Railway access and new high production sawmill technology precipitated the tremendous expansion of logging in the region in the last decade. In 1968 the total regional cut was 750,000 cunits. In Fort Nelson the expansion was even more dramatic; industrial timber harvesting was non-existant in 1968, but following the completion of the B.C.R. extension in 1971, the

cutting rate took off. By 1977, 235,000 cunits a year were being taken around Fort Nelson, some 31 per cent of the regional total.

The region easily divides into a northern and southern zone, not only by the timing of the industrial development but also by the nature of the forest itself and the problems associated with its harvest.

Southern Zone

Five companies control the forest industry in the Peace River area. They are:

	Mill Centre
Swanson Lumber	Fort St. John
Peace Wood Products	Taylor
Northwest Wood Preservers	Dawson Creek
Canadian Forest Products	Chetwynd
Chetwynd Forest Industries	Chetwynd

Three of these are beneficially owned in the U.S., one in Vancouver and one, the smallest of the five, is locally owned. Altogether over 1000 workers are employed in the mills and the attendant logging operations.

The Ministry of Forests is the provincial agency with responsibility for allocating and managing Crown timber. With Forest Service acquiescence the companies have organized their harvesting activities into more or less mutually exclusive areas known as chart areas. Logging is planned within the chart areas with each area accommodating several years of harvest. The location of the cut blocks is subject to a further approval by the Forest Service.

The Forest Service is charged with the management of the forest within two principal criteria: that timber yield be on sustained basis, and that harvesting is but one of a number of forest uses and must be designed to accommodate the others. However, in most areas of B.C., the Forest Service does not

have the data to determine a harvesting rate that will permit an economically viable sustained yield.

In the Southern Zone the primary constraints are the low-value high-elevation stands which are included in the cut calculation but are not profitable to log. Most industry people are unable to show where timber will be logged beyond 20 years.

Northern Zone

Here there are two larger companies and one smaller one. All are based in Fort Nelson. They are Tackama Forest Products, Fort Nelson Forest Industries and Omineca Enterprises. The Forest Service miscalculation of annual timber yield for these companies was dramatically illustrated in early 1979 when the first of the timber supply analyses demanded by the new Forest Act was completed for Fort Nelson.

Only the prime white spruce stands on the valley bottoms are being logged. The aspen and the smaller, black spruce on the plateau are being left, as they are insufficiently profitable. These stands were, however, included in the original cut calculations. Last year's more realistic revision found that on an economic basis there are less than 20 years' cut remaining. Unless the industry can absorb significantly increased costs in the near future our own calculations put the viable timber supply at about 10 years.

This timber shortage has serious implications for other users of the forest. As supplies of profitable timber get tighter and tighter, pressure on areas reserved for wildlife habitat, unstable soils, poor regeneration sites and parks becomes subject to intense political pressure for release to logging. In Fort Nelson, sawmill operators have shown themselves adept at the art of playing off their employees' jobs for political privileges. They have, for example, secured well over $100 million in provincial government subsidies for the B.C.R. Fort Nelson extension--a line that virtually exclusively serves their mills. The Mackenzie Royal Commission into the B.C.R. commented that without the subsidy through the railway, the Fort Nelson forest industry would be uneconomic.

Annex: Forest Sector Mapping

Display Map: Logging Activity

Purpose - to show present extent of industrial forest use.

Legend - chart areas with each company shown by a different colour.

-cut blocks

-proposed cut blocks

-haul roads

-sawmill locations

Process shown -

1) Logging - clearcut stands of mature spruce and pine that occur as islands within forests of undesirable or immature types.

2) Chart areas - enable companies to establish infrastructure by giving them exclusive cutting rights for a number of years. Shown on this map are the chart areas for the current five year plans--most expire in 1982-83.

3) Roads - shown is the branch network feeding into the main roads which in turn join the Alaska Highway.

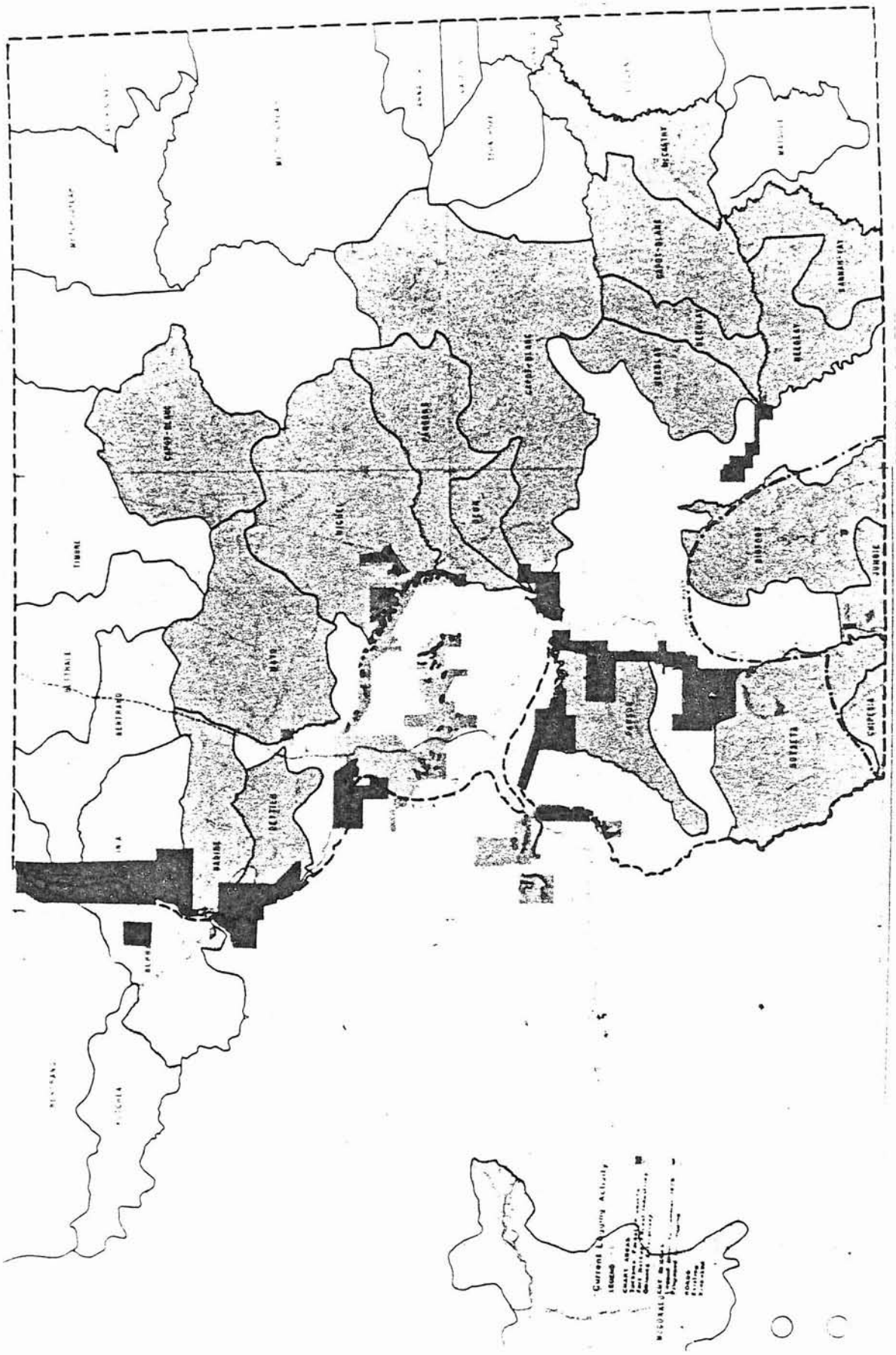
Display Map: Economic Forest

Purpose - To generally show the likely limits to profitable logging activity, based on current assumptions as to what constitutes economic logging.

Legend - mature timber

- better growing sites

Process shown - the mature timber types are those that could be logged in next 20 years, while the better growing sites indicate the long term capability of the land to grow a substantial yield of merchantable trees.



RESOURCE HARVEST:

THE ENERGY SUPPLY SECTORS

I. HYDROELECTRIC DEVELOPMENT

Pulp mills demand large amounts of energy. Indeed, it might be said that the primary raw material of pulp and paper is not wood fibre but heat and mechanical energy. The north-east region of the province has assumed the role of energy supplier both for oil and gas and for hydroelectricity. Neither the dramatic growth of the pulp industry nor the mining and smelting industry would have been possible without the availability of those cheap energy supplies.

The Peace River was first dammed in the mid-sixties to power the expansion of the interior resource industries. The more southern tributaries of the Columbia were developed for export. The Bennett Dam and the Shrum generating station provide 2100 megawatts capacity--about 30 per cent of the provincial total. Some 14 miles downstream a run of the river dam at Site One is now coming on stream to provide an additional 700 megawatts.

Consistent with B.C. Hydro's policy of developing the power potential of each river completely before moving on to the next, we have the recently announced decision regarding Site C on the Peace River. The 240 foot earth-filled dam just downstream of the confluence of the Moberly River would flood the Peace Valley for 50 miles, back to the toe of the Site One Dam. The proposed Site C reservoir will flood 18,260 acres of land including 19 per cent of all Class I and Class II agricultural land in B.C.

Further down the road might be development of Site E close to the Alberta border. This would complete the damming of the Peace.

The development of the Peace in the 1960's was made possible by technology permitting economic transmission of high voltage power over long distances. More recent advances allow line voltages to be raised from the present 500 kV to 750 kV and even 1000 kV. This brings the far northern rivers within economic reach of the B.C. electrical grid. Thus dams on the Liard, northwest of Fort Nelson, and on the Stikine River become real prospects.

This new transmission technology not only allows northern rivers to power B.C. industry but now also permits its economical export to the Pacific Northwest states. Testifying before the provincial legislature's Crown Corporation Reporting Committee in 1978, B.C. Hydro Chairman, Robert Bonner, in pressing for electricity exports, specifically mentioned the Liard and the Iskut/Stikine as possible generating sites.

Many critics of B.C. Hydro contend that dams currently being constructed by the Power Authority are in reality being built to serve export needs. In December, 1979 Hydro attempted to persuade the National Energy Board to allow an export licence for an annual 10,000 million kilowatt/hours of B.C. power to the U.S. This compares with the 1,600 million kilowatt/hour average annual export for the last five years.

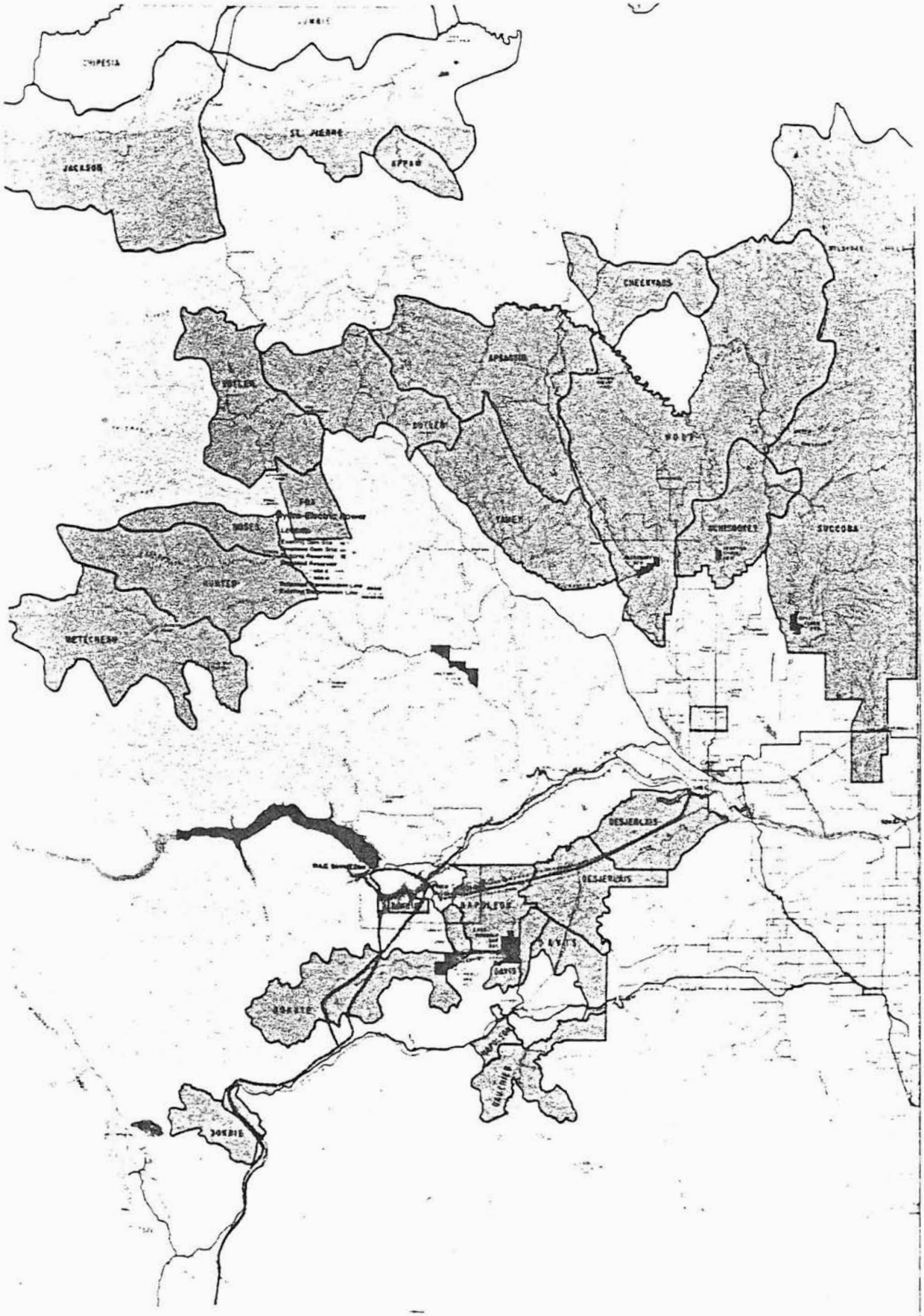
Annex: Energy Supply Mapping

Display Map: Hydroelectric Power

Purpose - to show location of dams, reservoirs and transmission lines resulting from the hydroelectric development of the Peace River.

Legend - reservoirs
- dams
- transmission lines, both local and 138 kV and long distance 500 kV.

Both existing and proposed developments are shown. The exception is the transmission corridor from the proposed Liard project. Published descriptions of this route are too vague to be meaningfully shown on the map.



INDIAN TRAPLINES

II. OIL AND GAS DEVELOPMENT

The northeast in the last 25 years has been seized by the oil and gas industry. Against an historic backdrop of agricultural and fur trade activity, the economic fate of the region has come to especially fluctuate with the investment decisions of the exploration, production, and transmission companies, and with the variations in market demand or government policy.

The oil and gas play initially took off with the first discovery well drilled in the Fort St. John area around 1950. By 1960, Fort St. John-centered fields were connected to southern markets and the gas (only) play around Fort Nelson was just getting underway on a major scale. As such the industry is still a recent visitation on the region, some 30 years old in the southern zone and 20 years old around Fort Nelson. One might contemplate its pervasiveness and the changes it has wrought bearing this point in mind.

We have focussed here on the natural gas industry for several reasons. Northeast B.C. is a gas-prone area and the search and production for gas is really what spurs the activity of the sector. Since 1974, natural gas has played an increasingly important role in the policies and economic base of the province. These two factors together underscore the significance of a third--it is the drive for natural gas that creates a wide and somewhat unpredictable penetration on the land.

The pattern of land use by the industry is really a phased incursion. Each level of the process is consonant with a particular form of tenure and is distinctive in its result on the land. Seismic and other exploration techniques will generate the knowledge to justify test drilling. Sufficient production will warrant, normally within 4 years, the installation of field gathering lines and local process facilities for carriage of sales gas through various trunk systems to regional centres. Ultimately, major facilities will separate by-products and transmit provincial production southward to export or retail buyers. Meanwhile, in the field, more wells continue to be drilled to extend and fully develop production in discovered areas. The limits of knowledge continue to be pressed outward in exploration for new zones that will extend the process.

Supply

The known B.C. gas fields appear to be collectively nearing their peak of production. Recent forecasts before the National Energy Board indicate the commencement of a long-run decline in the mid-1980's.

Reserve additions, therefore, will rise in relative importance, more than doubling their share of total supply to provide nearly one-half by the 1990's. (Tables I and II). This serves to underscore the process of land use described above and to indicate its significance for areas not yet delineated. Drilling activity is expected in the near and medium term to maintain the unprecedented levels of the recent past (some 300 new wells per year).

Government Interests

Critical to future production will be the role of the province. In the last 5 years, government has shown its influence in redefining the terms of transmission and manipulating field and wholesale prices. Government has, too, a central role as the resource landlord, releasing land to industry in commencement of the production process.

Both functions have come to be of tremendous significance not just to the economic base of the region. Provincial returns from economic rents, one direct measure, have leapt greatly in magnitude since 1974, reflecting measures in the resource value and the heightened stakes of private hegemony received over Crown acreage (Tables III and IV). Altogether, the province has received, by virtue of its direct rent instruments, in excess of $1.5 billion since 1974 (excluding royalties on oil production of some 40,000 barrels per day).

In the last few years government has also entered the oil and gas play through the active participation of Crown-sponsored corporations. We have already noted the financial importance of the B.C. Petroleum Corporation as a means to collecting economic rents. To this we must now include Petro-Canada and the B.C. Resources Investment Corporation as well.

Petro-Canada acquired ownership of Pacific Petroleums Ltd. in a 1979 transaction valued at more than $1 billion. Pacific was the first to participate in the B.C. oil and gas industry and has retained a leading position as producer and refiner ever since. Reflecting its dominance, Pacific has also held since

the 1950's a controlling interest in Westcoast Transmission Co., the natural gas transmission company for B.C.

The B.C. Resources Investment Corporation

The B.C.R.I.C. is a Crown holding corporation created by the present provincial administration in 1977 and incorporated in 1978. The company was vested with the province's holdings in three forest companies, Westcoast Transmission (a 10.3% interest) and 2.3 million acres of oil and gas exploration licences in northeast B.C. In exchange, the province received all the issued shares of the B.C.R.I.C. and a promissory note for $151.5 million--the market value of the assets transferred. A majority of these shares were distributed to the general public in 1979, which subscription provided the Corporation with cash reserves in excess of $400 million.

At the time of the asset transfer, it was well publicized that the oil and gas rights included were meant as a "sweetener" to financeability: they are valuable holdings in choice locations. The release of the lands to industry is beyond the direct control of the government and occurs as appropriate to the Corporations's strategic plan. By the end of 1979, the nearly two dozen parcels of B.C.R.I.C. lands were completely farmed out to private partners on development agreements ranging to 1983. Seismic activity and four wells were completed in 1978-79. Twelve new wells are scheduled for the coming year. B.C.R.I.C. must convert its exploration rights to producing tenure by 1988, and will rely on these joint ventures for results on which to make appropriate selections of acreage. The Corporation meanwhile, has undertaken further acquisitions of exploration acreage for its own account.

Future Prospects

Three gas fields--the Junior-Sierra, Silver-Dahl and Grizzly-Sukunka represent some 68% of Westcoast Transmission's estimated supply presently available and needing connection. The latter two have been recently joined to market and Junior-Sierra, near Fort Nelson, is slated for pipeline connection in the near future. As such, the areas served might be well expected to be the location of significant drilling activity in the near and medium term.

Over the same period, we may also look for intensive activity to Canadian Hunter Ltd.'s exploration acreage now under a $150 million farm-out agreement with Imperial Oil. This of course, refers to Deep Basin-Elmworth trend in the southeastern zone of the region.

The area west of the Alaska Highway, comparatively underdeveloped, is further slated for exploration and drilling efforts. Not only does B.C.R.I.C. hold substantial acreage in the Rocky Mountain foothills, but Westcoast Transmission also contemplates at least 2 gas treatment plants in the area north of the Peace and south of Sikkani Chief. Through all of this, with lucrative financial rewards and still growing economic importance, we can expect the gas play to receive continued support from the province, the only level of government with relevant authority in the region. Unbridled penetration, from cut lines to wellside access roads to pipeline rights-of-way, will remain the experience.

TABLE I

AVAILABLE GAS FORECASTS
1978-2000
(Bcf)

	BC DEPT OF MINES		BC PC	WESTCOAST TRANSMISSION	
YEAR	1977 ESTIMATE	1978 ESTIMATE	1978 ESTIMATE	1977 ESTIMATE	1978 ESTIMATE
1978	320	319.3	302.6	344	389
1880	372	393.8	350.1	372	488
1981	375	387.1	401.0	365	521
1982	387	392.1	412.1	357	524
1983	381	406.8	414.2	350	523
1984	377	412	424.1	348	525
1985	374	408.1	425.6	341	518
1990	378	406.7	N/A	336	490
1995	370	408.2	N/A	332	459
2000	340	400.7	N/A	N/A	N/A

Sources: 1977 Data - 1977 Petroleum and Natural Gas Price and Incentives Hearing Report of Energy Commission, Vancouver, B.C.

1978 Data - Submissions to N.E.B. from B.C. Government (Table II) and Westcoast Transmission Co. (Tab. 4, Table II).

TABLE II

TREND GAS ADDITIONS

FORECASTS OF AVAILABLE SUPPLY

1978-2000
(Bcf)

	MINES DEPT				WESTCOAST TRANSMISSION			
YEAR	1977		1978		1977		1978	
	VOL	% OF TOTAL	VOL	% OF TOTAL	VOL	% OF TOTAL	VOL	% OF TOTAL
1978	-	-	-	-	-	-	-	-
1980	-	-	19.6	4.98	-	-	-	-
1985	80	21.39	96.9	23.74	109	31.96	104	20.07
1990	160	42.32	182.3	44.82	177	52.67	211	43.06
1995	236	63.78	263.8	64.62	217	65.36	269	41.39
2000	264	77.64	320.6	80	N/A	N/A	N/A	N/A

Sources: 1977 Data - 1977 Petroleum and Natural Gas Price and Price and Incentives Hearing Report of BCEC.

1978 Data - Submissions to N.E.B. of B.C. government (Appendix I, Tables 4 and 10) and of Westcoast Transmission Co. (Tab. 4, Table II).

TABLE III

PROVINCIAL DISPOSITION OF
PETROLEUM & NATURAL GAS RIGHTS

REVENUES (1974 - 79)

1974		$ 22,955,334
1975		12,749,247
1976		43,226,441
1977		125,467,724
1978		177,459,647
1979		191,041,606
	TOTAL:	$572,899,999

TABLE IV

B.C. PETROLEUM CORPORATION

DISPOSITION OF INCOME AFTER EXPENSES

(Fiscal Years, $000)

	1973*	1974	1975	1976	1977	1978	1979**
Change in Retained Earnings	19,144	66,555	(66,066)	11,207	10,340	18,629	(29,678)
Transfers to Provincial Treasury	----	26,000	198,950	149,500	170,800	164,250	230,000
Annual Return	19,144	92,555	138,884	160,707	181,140	182,879	200,322

Total All Years: $972,630,000

*five months' results
**nine months' results

Source: B.C. Petroleum Corp. (Annual Reports)
Quarterly Reports
B.C. Min. of Finance

Annex: Energy Supply Mapping

Display Map: Oil and Gas Fields

Purpose: to locate oil and gas fields, as officially declared at 31 December 1978, and to indicate the extension of these fields over time

to locate BCRIC acreage

Legend: Natural Gas Fields - at 1960
- at 1978

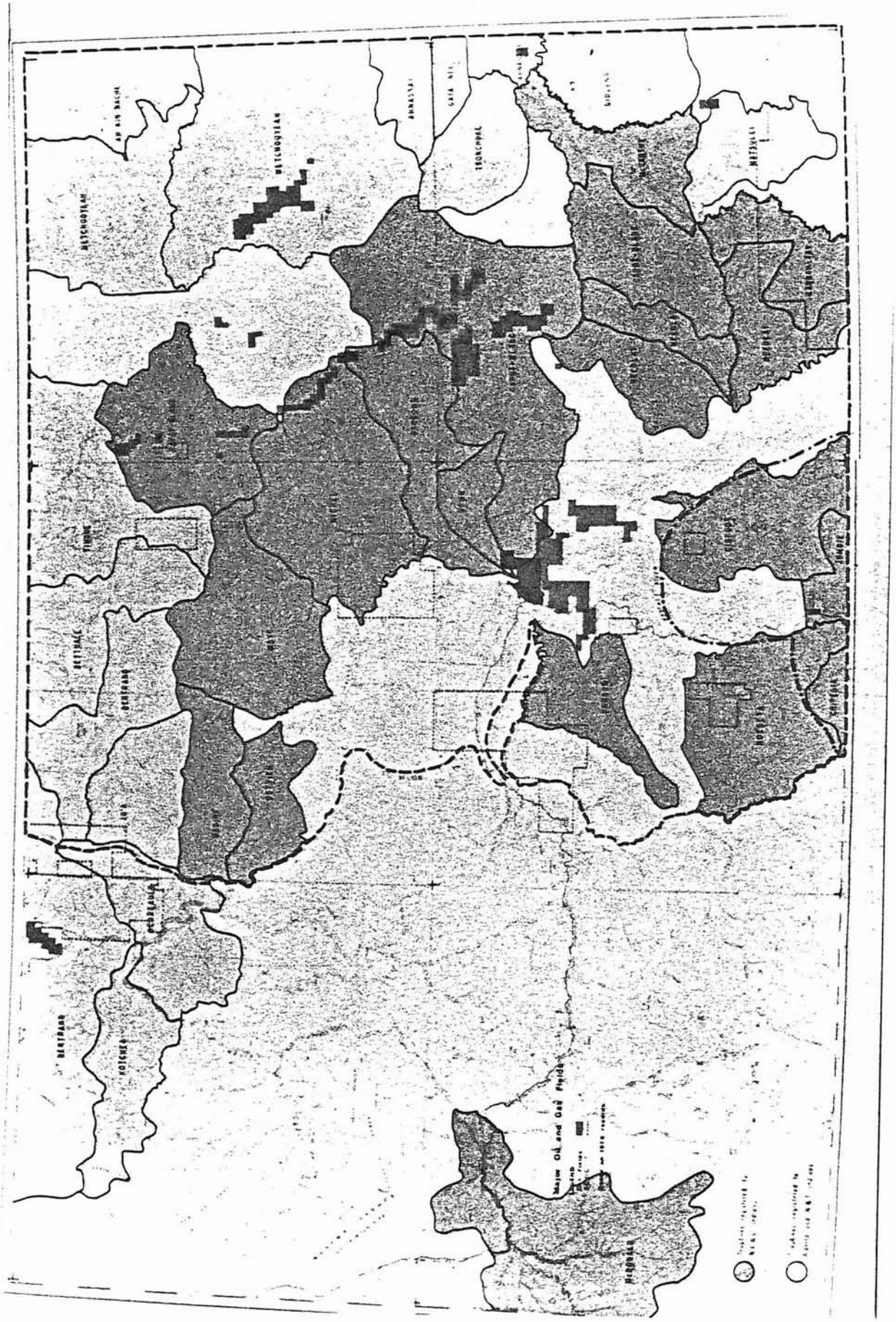
Oil Fields - at 1960
- at 1978

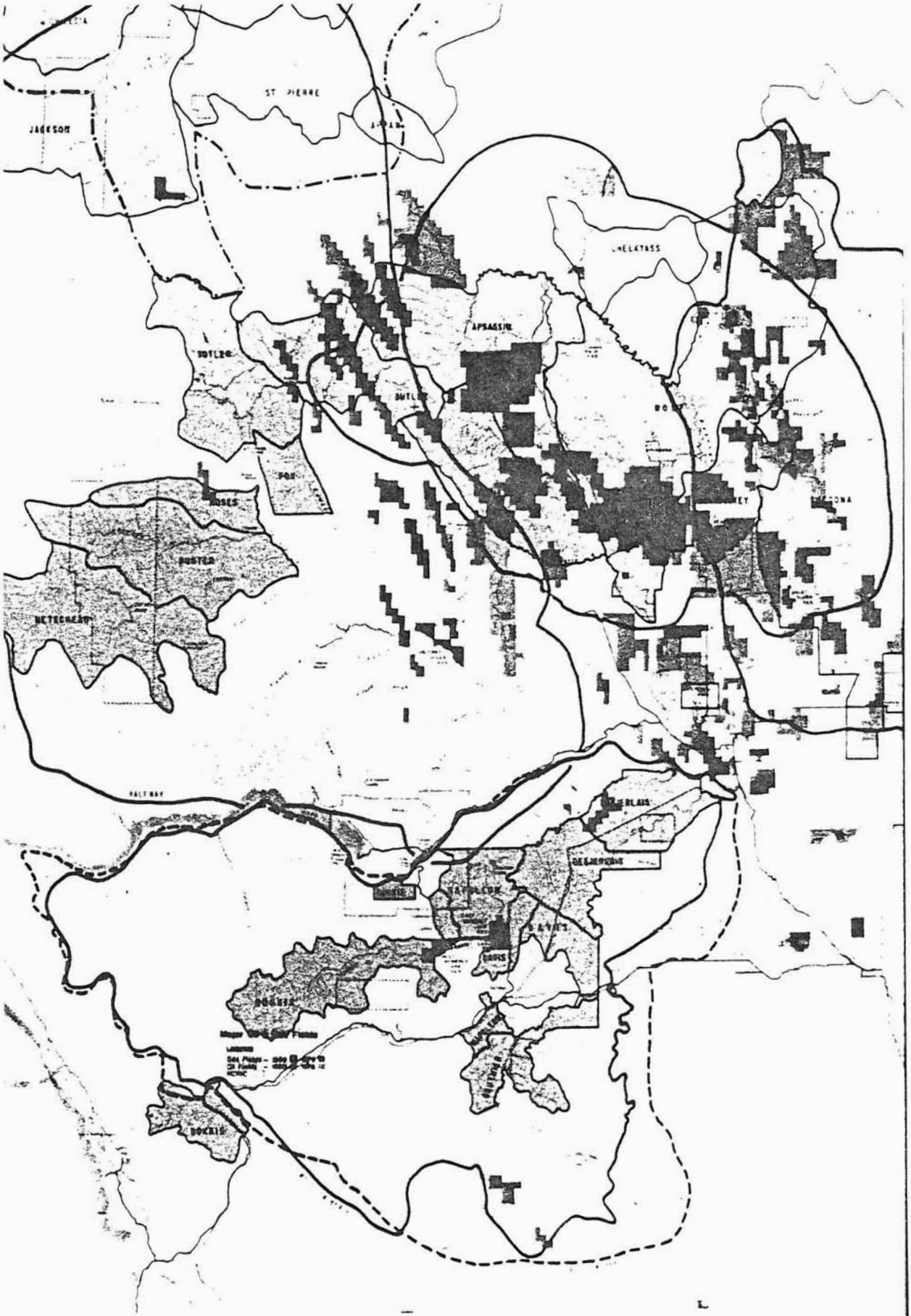
BCRIC acreage parcels

Fields are somewhat arbitrary with respect to delimiting of their boundaries. Provincial definitions of same were adopted. The fields marked make no distinction as to depth of production zone.

What this map does allow, however, is a statement of concentrated development activity in cumulative terms. The contrast of field extensions at selected years portrays the continuance of activity and, importantly, underscores the point that initial commercial development in no way concludes the penetration in any one area that can be expected.

BCRIC acreage parcels represent special zones of exploration and development activity targeted and scheduled as a result of a political, rather than commercial, decision. As such, they represent a unique case of some immediate concern.


Major Oil and Gas Fields



INDIAN TRAPLINES AND HUNTING AREAS

Annex: Energy Supply Mapping

Display Map: Pipelines and Well Locations

Purpose: to locate major pipelines connecting fields to process centres and joining those centres to extra-regional markets

to portray the proposed facilities of the Alaska Highway Pipeline

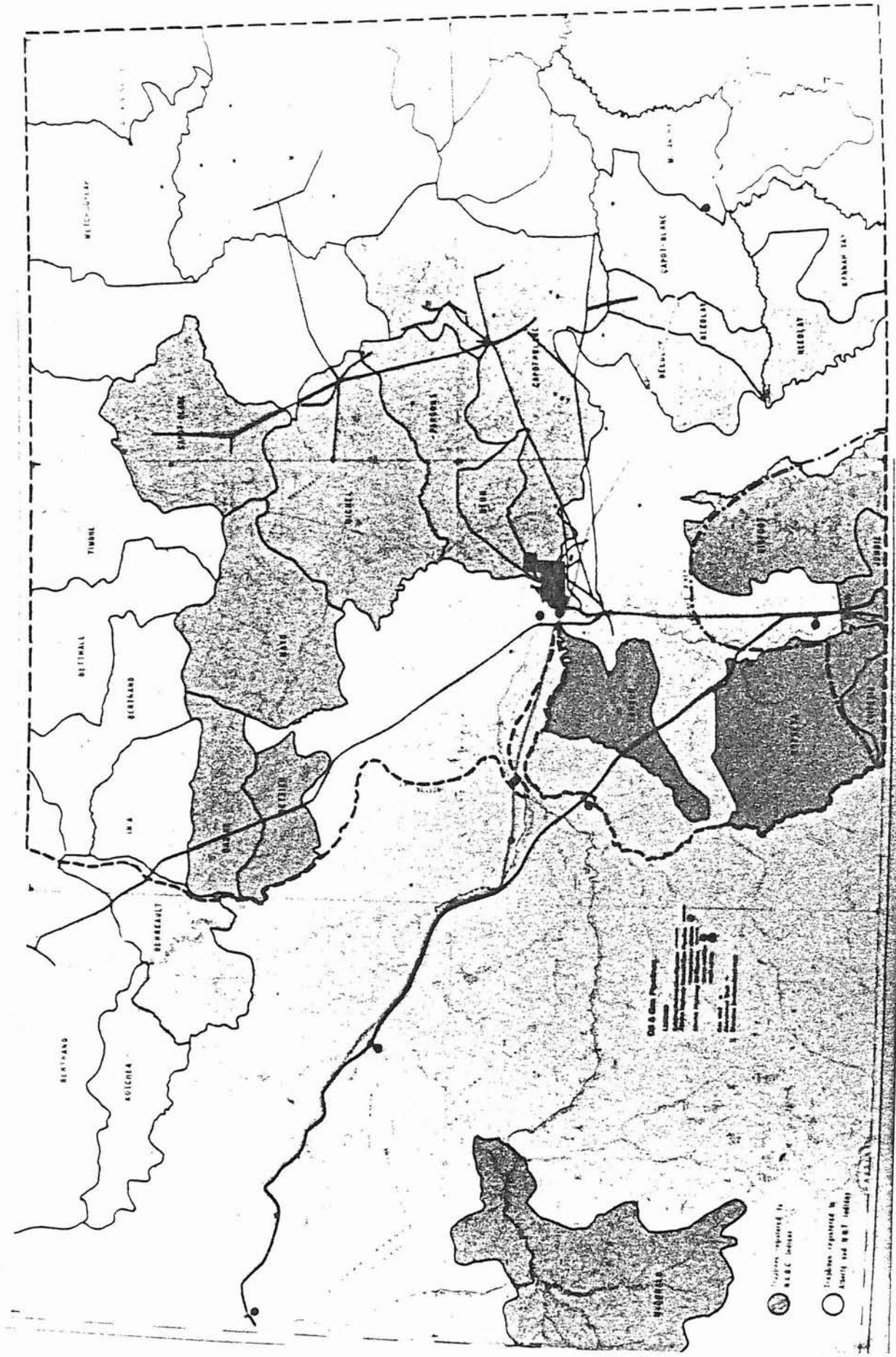
to locate drilling rig sites for the 1978-79 winter drilling season (September to April)

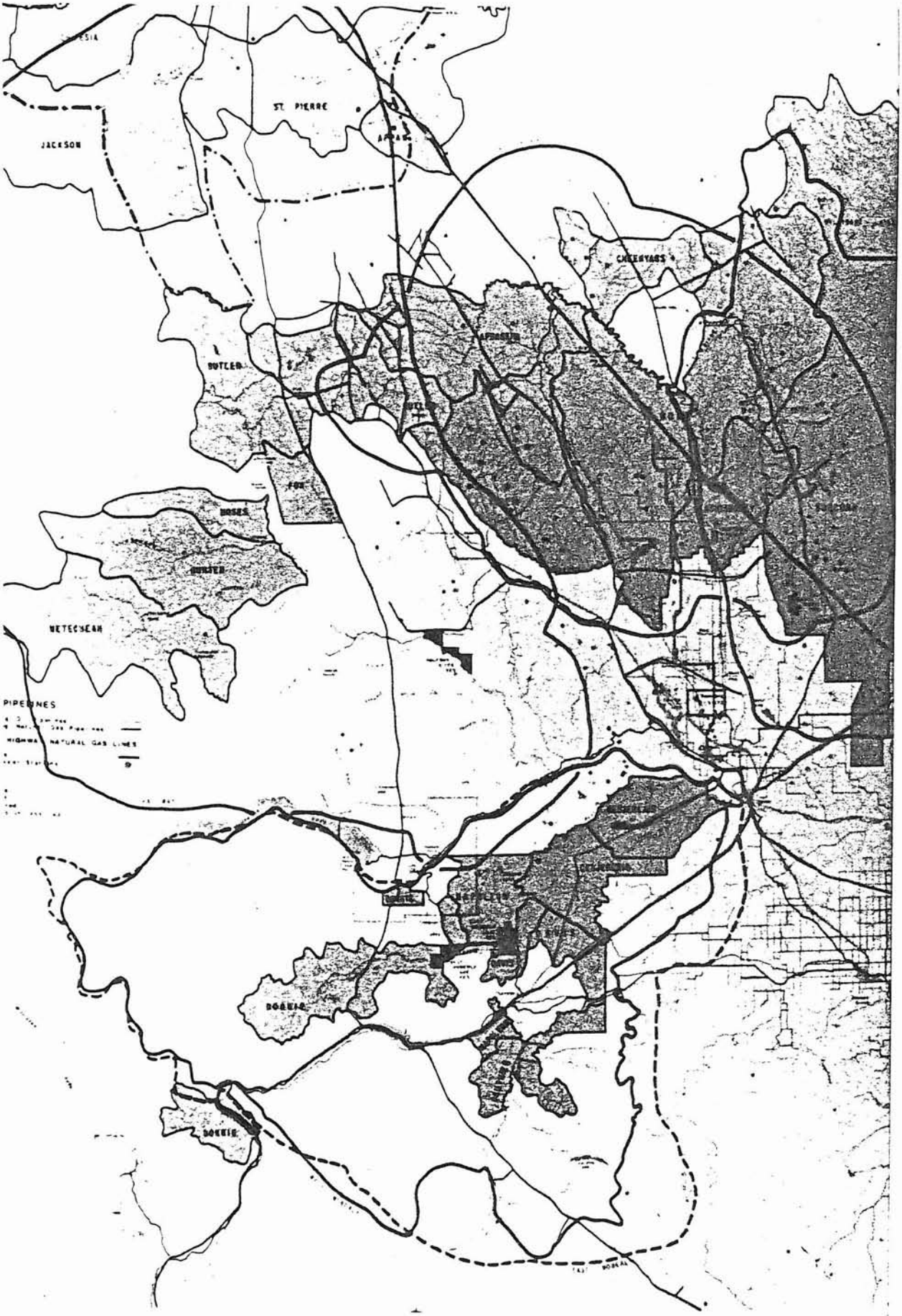
Legend: gas pipelines
oil pipelines
rig locations - oil, gas, abandoned

The line locations indicate major existing rights-of-way, themselves former scenes of pipeline installation work. Overlain with the field map, they indicate by their remainder the areas in which pipeline location may be still required. Together with the fields, they complete the relation that starts with seismic work and ends with market supply.

Well locations in every case represent on ground road access. As such, they infer the scope of new access created in a single season by virtue of industry activity. When overlain with the field map, the location of rigs will indicate areas outside mature development, where more intensive experience can be expected to follow. Similarly, rig locations in or near existing fields reiterate the process of continuous field extension.

The Alaska Highway line, as presently contemplated by Foothills, is shown for information purposes, in the context of current industry presence. Compressor stations, marshalling yards and access routes are specified in addition to the right-of-way itself.





INDIAN TRAPLINES AND HUNTING AREAS

III. COAL DEVELOPMENT

The resource sectors so far discussed are to a greater or lesser extent already developed. Waiting in the wings to be exploited are 7.7 billion tons of metallurgical coal. They lie with a formation of rock extending southeast of the Williston Reservoir and parallel to the Rocky Mountains. When mining starts, a whole new industry - a whole new dimension - will be added to the northeast B.C. development impact.

In the past there have been several small mines along the Peace and Pine Rivers. The last of these closed in 1964. When the metallurgical coal mines in the southeast part of the province began exporting to the Japanese steel industry in the late 1960's interest in Peace River coals was renewed.

Over the last decade, announcements of imminent northeast coal development have occurred yearly. The industry clearly was to have played a major role in the current provincial government's dreams for northern development.

Within the coal formations there are four mines scheduled for initial development. First will be the Sukunka deposit owned by the Teck Corporation. Start-up mining rate will be 1 million tons per year. This will be followed by the Bullmoose property, owned by Brameda Resources and the BP oil company, and by the Babcock and Wolverine deposits owned by Denison Mines and the Exxon Corp. At the northern end of the productive coal measures, Utah Mines' Carbon Creek deposit is at an advanced stage of exploration.

Government study of the environmental and social consequences of the coal development has been thorough. Many of the conflicts brought out have not been adequately resolved, however. Existing agreements between the federal and provincial governments provide some $15 million for evaluation costs.

The provincial government has promised more than $200 million in infrastructure for the mines, including:

(a) a new townsite at Tumbler Ridge for 10,000 people,

(b) new highway construction and upgrading south of Chetwynd to link the mines with the Hart Highway, and

(c) new rail connections either to the B.C.R. at Chetwynd or, less likely, to the C.N.R. to the west through the Monkman Pass.

The timing of these related projects depends on the timing and rate of development of the mines. For example, the initial workforce at Sukunka will be housed in Chetwynd. Tumbler Ridge will only be built if and when other mines come on stream. Timing overall will be very much a function of Far Eastern steel markets, which are seen as the major customers for northeast coal.

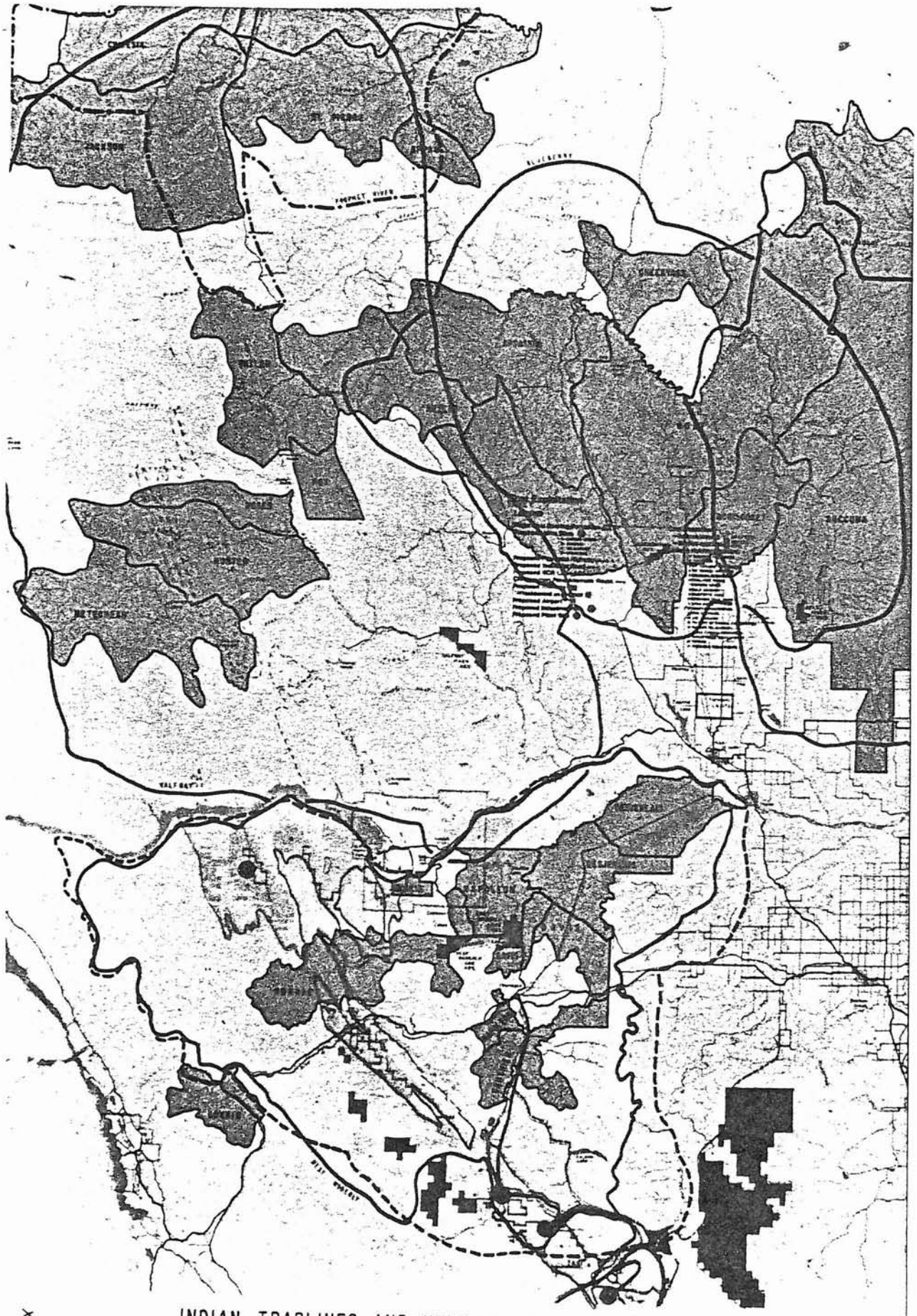
Annex: Energy Supply Mapping

Display Map: Coal Developments

Purpose: to map the surface expression of the coal development, together with the necessary infrastructure

Legend: coal formations
coal licences
mine sites
roads (existing and contemplated)
rail extensions
townsites

The relevant geological formations are first shown, with the sites of proven mine reserves located within them. Mining leases and exploration licences covering the resource limits are outlined and coded by number for identification of companies holding same. Proposed infrastructure is shown. In the case of uncertain transportation routes, the known alternatives are indicated. The map distinguishes between the coal-related transport systems already in place for exploration and those proposed.



INDIAN TRAPLINES AND HUNTING AREAS

THE PROCESS OF DEVELOPMENT:

CONCLUDING REMARKS

Having now been through this work, it's perhaps worthwhile to make some general statements about where it has brought us.

If you compare the northeast to the Lower Mainland, and measure that comparison with the conventional views about resource supply areas, you'll likely conclude that the northeast is really pretty empty. At best, you might typically be aware from the media of a booming oil and gas sector.

But we'd suggest that these conclusions really stem from widely held views of land and resources that have their context in at least prevailing economic thinking, if not much more. That the land is wild and can be subdued, that the resources of the northeast can be harvested and harnessed to yield great rewards: these are notions embodied in the history of this region going right back to the fur trade; these are notions embodied in the process of development shown by the maps we've produced.

What earlier appeared to be big empty spaces are now taken up in prime areas by settlement and rapidly growing towns; they're targeted for supplies to an established forest industry; they're dotted with drilling rigs and they're laced with transportation corridors of all kinds and scale. In short, some of those empty spaces have already been opened up throughout the northeast, and have been so, remarkably, only in the last 20 or 30 years.

We should point out that this is a continuing experience. From the standpoint of penetration on the land, it's an experience generally limited by the distribution of resources and it's an experience constrained primarily by considerations of technology, markets and operating costs alone. Nowhere in this development process is there evidence that government has significantly restrained this penetration - in fact, there is much evidence to the contrary.

Looking at the history of this experience, we find two striking trends. First, industrial development has occurred as a succession of waves of activity - each wave the introduction of a new primary sector having a distinct character of land use. Here we refer to the influxes of settlement, the commencement of the oil and gas play, the take-off in forest harvest in the last 10 years, and the boom and bust of large construction efforts, like the W.A.C. Bennett Dam or the Alaska Highway. For the future, we can look to the coal fields of the Sukunka, the construction of the Site C dam or the construction of the Alaska Highway Pipeline, all in this light.

Each of these waves has, in effect, been layered onto the ones that preceded it - a layering that occurs on the land and in the towns. And within this succession, we can detect a marked shift - a fundamental change in the focus of land penetration from the settlement and agricultural expansion of the first half of this century - to what we have now, a continually expanding industry of resource harvest on quite a large scale. The cast of characters on the land has changed considerably, and so have the purposes to which the land is put.

The second major dimension has to do with the role that transportation has played - and continues to play. Here, we cite the importance of the Peace River and the Northern Alberta Railway in early settlement, of the B.C. Railway since the late 1950's, and the corridors for long-range transmission of energy product, be it oil, gas or electricity. All of these elements have been critical to maintaining and perhaps extending the patterns of land use that are shown on the maps. And each of these has been a particular development in its own right.

Perhaps most important in this respect is the system of roads. The system has its origins in organized settlement, in making organized settlement viable. It plays that same function on a much broader scale and for many more purposes today.

The Alaska Highway was constructed for military reasons in the early 1940's. Its presence stands as a major achievement of military might and engineering endeavour even today. What is less commonly known is that pressure for just such a highway had been strenuously exerted by commercial and political interests in the United States and B.C. for some ten years before the Highway ever became a military necessity.

In all of this, whichever rationale you choose, the goal was identical: to make an essential and continuing link between the lower 48 States and the State of Alaska. In all of this, the northeast was nothing but a part of the most desirable corridor.

The Alaska Highway, of course, has now come to mean much more. It certainly does serve to be the link for which it was designed. But it's also become a central spur to access, access to what has been generally perceived as a storehouse of resources and industrial potentials.

The Highway now serves a second role no less important: it serves as a trunkline, a primary access route itself, to which is connected a far-reaching system of secondary access. These roads typically are put in by the very parties who seek to tap the resources of previously inaccessible areas. But again, once in, they are at the disposal of many, including parties from another industrial sector of land use.

Reflecting on this interrelatedness of land use, and the cumulation of development, we'd like to report a startling discovery make while putting together our maps. It's a discovery that is especially startling given the incumbency of the Pipeline in the northeast, and it's simply this: no provincial agency has ever prepared a similar mapping overview of resource use by these sectors. True, the agencies had data relevant to their particular jurisdictions, but there was no place where these data were being put together in answer to questions about what has gone on or will go on in this region in a cumulative sense or in relation to the pipeline project.

We suspect that may be because no one with the province has asked the overall question - and that's where our discovery stops being surprising, and becomes not a little disturbing.

With regard to the future, we'd make one final point. From the work we've done, it seems clear to us that these patterns of extension in the northeast are likely to continue unabated in the next 5 years (the initial period relevant to Pipeline construction). We've already mentioned the prospects of the Site C dam and the opening of several coal mines - all quite massive undertakings in their own right and not without some considerable impact on the region. Both of these are now slated to begin in the early to mid-1980's. At the same time, we've been able to indicate the stated intentions of the forest industry - these will generally hold into the early to mid-1980's. And finally we can expect that the gas play, in particular, will continue at high rates of activity similar to the recent experience, perhaps penetrating into areas comparatively undeveloped now.

These are all things that are in motion in this region already. From present indications, the northeast is in for continuing boom, at least in the short and medium term. In economic terms, the northeast in the 1980's runs the risk of what is called overheating - too rapid expansion that distorts long-term stability and, in the short or medium term, brings serious problems on more than the economic plane alone. If we add on the Alaska Highway Pipeline to what we can already forecast, we run the risk of adding a mega-project in a region of mega-projects. This must bring the development context sharply into focus now - but not to leave behind the less visible and cumulative results of penetration on the land.

We submit that to ignore all these aspects would be to invite severe and perhaps long-lasting impacts in this region. And with that prospect, it becomes clearly compelling to bear the development context firmly in mind.

II.

THE INDIAN SYSTEM OF LAND USE

THE SYSTEM OF LAND USE

i. INTRODUCTION

The land use maps and the questionnaire results demonstrate the extent of the Indian interest in the land, as well as the economic importance of resource havesting. Behind land use statistics, however, there is a complex and sophisticated system. This system, developed over innumerable generations, involves patterns of movement at different times of year, shifts from one kind of resource harvesting to another, and a richness of knowledge about the land and its animals that is hard for non-Indian people to comprehend. It is impossible to do justice in these presentations to the richness and complexity of the system and all it involves, but the impact of industrial projects on Indian hunting and trapping can be evaluated only if we have at least a general idea about the Indian system of land use in this region.

But there is a special difficulty that arises when we wish to consider the Indian system. Most of us are far more familiar with the operation of a cash/industrial/

agricultural economy than with the needs of a community that operates with a domestic economy. In looking at the northeast B.C. Indian economy it is easy for us to focus on trapping, because trapping generates a cash flow. Furs become cash for personal use. That is an equation that is far more familiar than those of the hunting side of the economy, where meat rather than cash is produced -- and where the meat, rather than being the property of the hunter, is distributed through a network of family exchange for community use. The trapping/cash equation is a seductive focus for concerns of pipeline impacts because it conveniently fits our conception of what economic life is about.

This difficulty has been even further magnified by the time of year the community hearings into Terms and Conditions were held. This may seem strange -- that the season of the hearings would influence peoples' concerns. My own experience has shown, however, that northern Indian hunters/trappers, when talking about animals and their resource economy, have a very strong tendency to concentrate on the current harvest activity in their seasonal cycle. Now, the community hearings took place at the start of the winter trapping season. For this reason the main concern voiced in the Indian community hearings was over impacts

on trapping. If the hearings had been held in the late summer, the main emphasis would have been impacts on moose hunting and berry picking. Similarly, if the hearings had been held in spring the principal concerns would have centered on beaver hunting and harvesting of aquatic animals. This is just one example of the need to think beyond our normal limits. To understand the impacts of industrial developments on a hunting/trapping/fishing economy we have to shift gears in our thinking, and try to look at another economy from the inside.

From the point of view of production, the Indian economy has to do primarily with meat. Since the advent of the fur trade, however, the traditional system has been characterized as a quest for furs and food, with the emphasis on the furs. Because of this the quest for meat does not ring as loud in the public imagination as does the fur harvest. However, the prime consideration of Indian hunters/trappers has been providing meat to feed their families. The pre-fur trade economy was modified to emphasize harvesting the pelts of fur bearing mammals, but the meat requirements of the Bands did not diminish.

This dependence on wild meat is perhaps the fundamental difference between hunting and all other economies. Another important difference, however, is the kind of control that the hunters have over their resource base. While farmers and ranchers have a large degree of control over their crops and herds (within the uncertainties of weather, of course), hunters and trappers have to conform to the natural production of the land and to intrinsic animal cycles and seasonal migrations. This is not to say that hunters and trappers have no control over their environment, or that choice does not operate within their economy. Rather, in strategizing and making key decisions, native hunter/trappers remain within the constraints of the natural animal populations. In the recent past, some techniques (such as fire) were used to increase the productivity of particular areas for preferred animal species. But generally hunters and trappers have had to conform to the natural productivity that exists on their hunting lands.

With these points in mind, I would now like to turn to the northeast Bands' seasonal round of movements and animal harvests.

ii. THE SEASONAL ROUND

A) The Model Year

The seasonal arrangement we are most familiar with divides the year into four parts. The northeast Indian year, on the other hand, is a five season year, (Fig. I). For convenience we can call these seasons: -- the dry meat hunt, early winter hunting and trapping, late winter hunting and trapping, the spring beaver hunt, and summer slack. Each of these five seasons is defined by a different set of harvest activities and land use. The seasons approximate our system, but the timing is different. This seasonal model fits both the recent past as well as the present. The model provides the framework for understanding the annual round of movement and harvests prior to the settlement of the Bands on Reserves. It also describes the basis of the hunting year that is presently operated from the fixed base-camp or permanent camp sites that reserve housing represents.

b) The Seasonal Round Prior to 1960

If we use the basic diagram for the seasonal year, but lay on top of it a representation of land use that formed the basics of the system prior to the 1960's, prior, that is, to the establishment of settlement, it

THE INDIAN YEAR

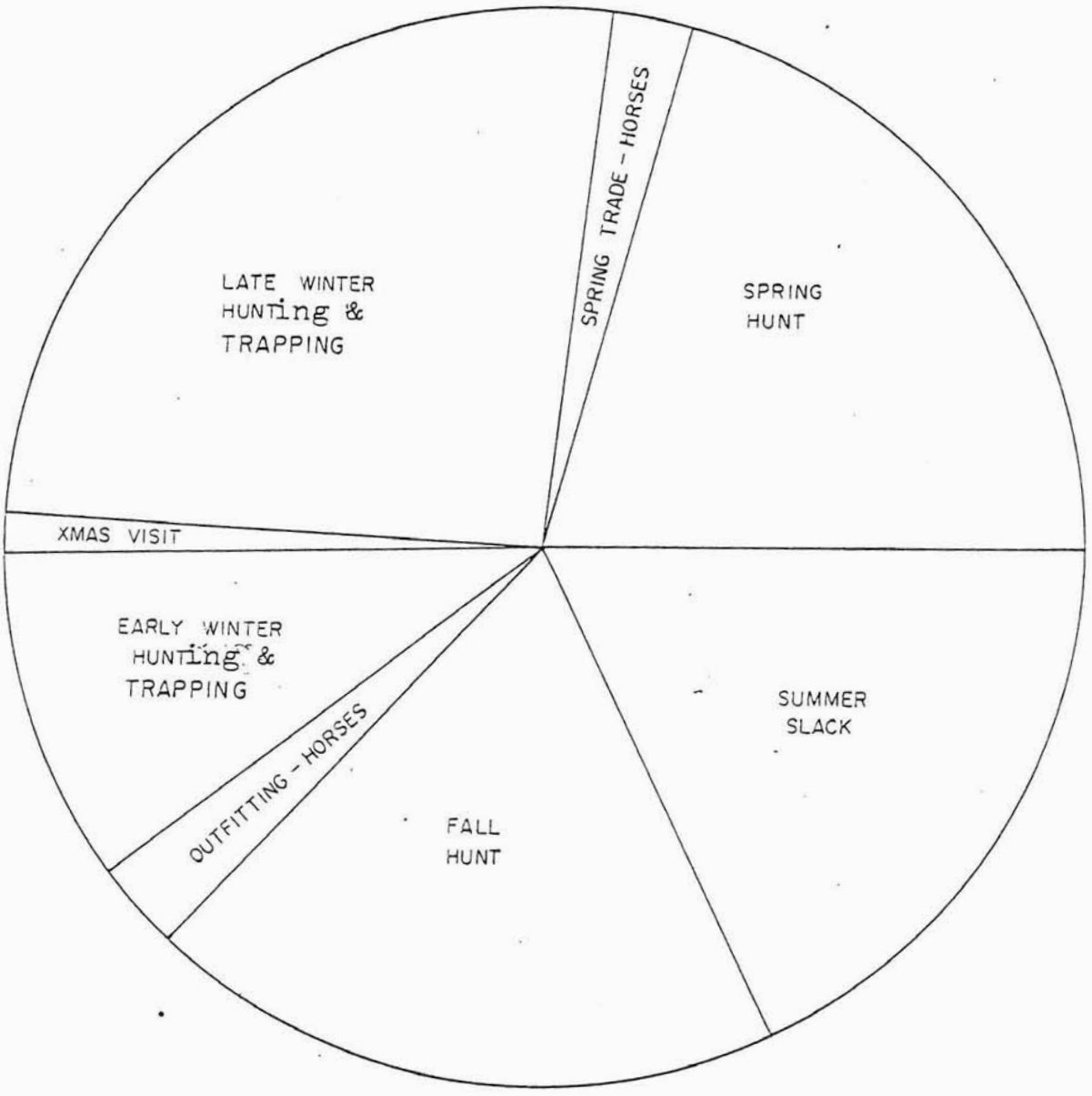


Fig. I

is possible to get an idea of the hunting and trapping year. (Fig. II)

The figure shows the pre-1960's harvest cycle and the residency pattern. The circle at the center represents the Bands' summer meeting place, and the circles on the radiating lines represent the trapline cabins of the Bands' hunting groups. The arrows indicate movement. Back and forth arrows on the same line indicate short-term hunting trips, with a return to the Band meeting place. The principal resources used at each season are indicated on the outside; and times for trading furs, outfitting, and wintering horses, etc., are indicated by lines radiating out to the edge of the circle. Our four seasons are marked by the heavy lines that cut through the circle.

What we have done in this figure is to add another dimension to the Indian year -- namely movement. The principal animal species of the northeast economy tend to be dispersed -- like moose; as opposed to concentrated like flocks of geese. For this reason quite a bit of travel is necessary in the operation of this particular economy. In their roamings, the hunters are either following the seasonal movement of animals, or travelling to particular areas where habitats support an abundance of key species.

SEASONAL HARVEST CYCLE AND RESIDENCY PATTERN - PRE 1960

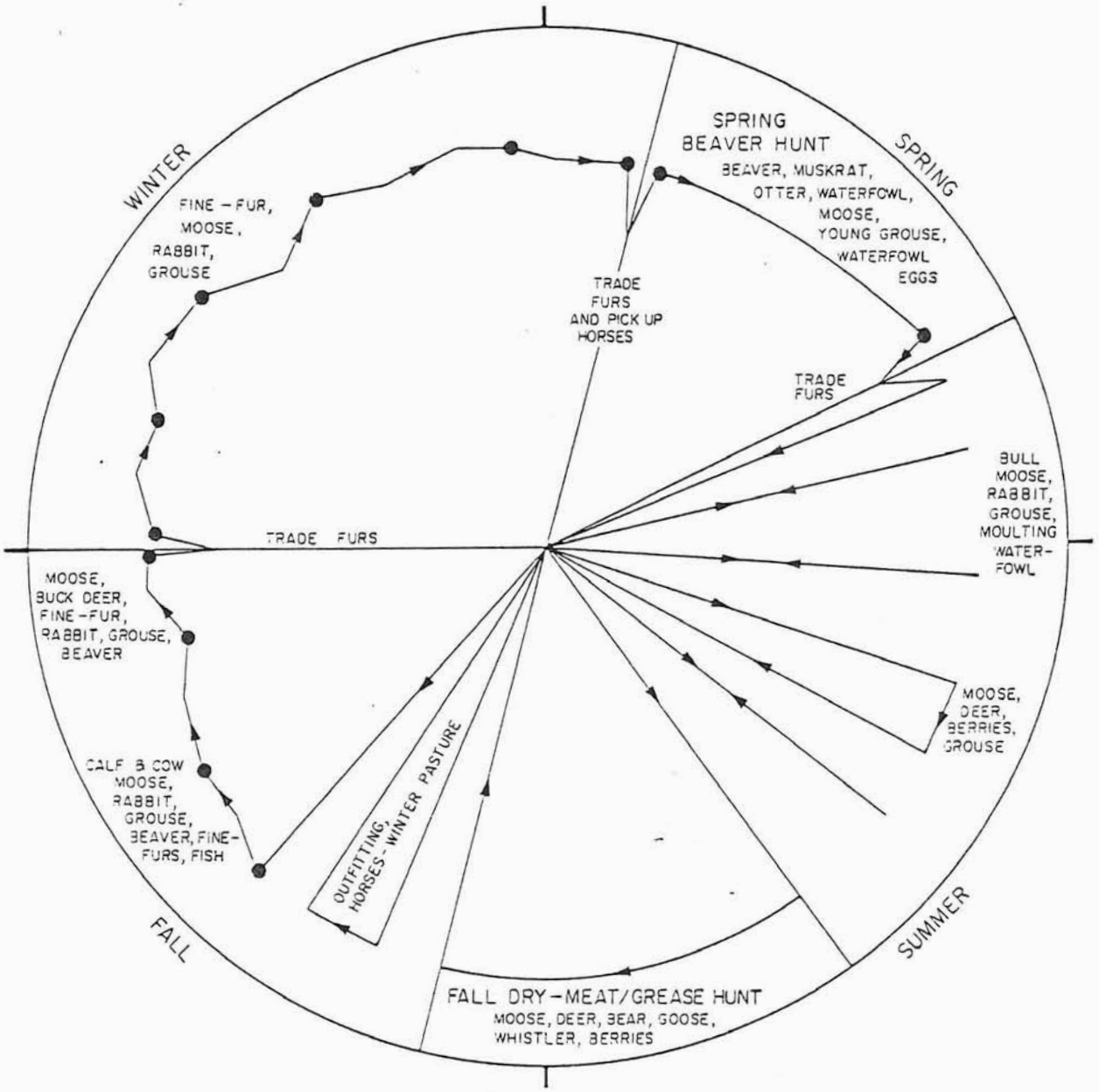


Fig. II

But let's try and follow the year's movements. In late summer and early fall the dry-meat and grease hunt was a period of dispersal. The Bands would split into smaller hunting groups. The groups would then travel to camps in areas which, according to people's more general knowledge of animal behaviour and distribution, and more specific understanding of the current status of the populations of the major resource species, would provide for their needs. The main need at this time was for dry-meat and grease --to get the hunting groups through the early winter months.

The Prophet River People, for example, would travel by horse to fall hunting camps on the Minnaker River, near Trutch, and on the Prophet River. Some of the Blueberry hunting groups would travel the trails along the Blueberry River or Aitken Creek to hunting camps near the headwaters of the Blueberry (near Mile 118 on the Alaska Highway). The Halfway River groups would travel along their trails up the valleys, deeper into the foothills, to the headwaters regions of the streams which flow into the Halfway. Similarly some of the Doig hunting groups would ride north to the Milligan Hills, while other Doig groups would travel to the Clear Hills in Alberta.

It would be exhausting to compile a list of all the areas Bands used in the course of the fall hunt. The use of these areas depended on the Bands' estimation of animal population densities. When game was low, travel was often to more distant locations. At times of great need, when game populations were low, the foothills Bands would undergo more distant travels to areas known for their resident populations of mountain goats, mountain sheep and caribou. For example, the Halfway people used the head-waters region of the Sekanni Chief River as an emergency fall-back reservoir when game was scarce on their regular hunting areas.

At all these locations, however, moose and deer were the main animals hunted -- though this depended on what other animals were abundant. Where possible or necessary, fish, whistler (hoary marmot), montane ungulates, bear, goose, and caribou would be added to the shopping list.

Following this hunt, the groups returned to the main Band campsite with their stock of dry-meat and grease. The women would often remain there while the men travelled to one of a variety of trading posts for an outfit of basic store-bought food staples (flour, sugar, tea, baking powder, etc.), and the tools of trapping (snarewire,

traps, twine, etc.). The first trading posts were along the larger rivers, which were the trade transportation corridors -- at Fort St. John, Hudson's Hope, and Fort Nelson. Later posts were opened on Nig Creek on the upper Beatton; Fish Creek on the lower Beatton; at Chetwynd (first called Bob's Prairie and then Little Prairie); in the middle reaches of the Sikanni Chief River; and on a variety of ranches on the Halfway River.

In October some of the Halfway People would travel by horse to the Hudson's Hope trading post down the Halfway River and across Butler Ridge to get their winter trapping supplies -- a journey of 2 or 3 days. At a later date they got their outfit at one of the nearby settler's stores. At this point there would for some people be a change-over in the Bands' mode of travel -- from horses to dogs or foot. Part of the activities at this time of year were seeing to winter pasturage for the horses. The Fort St. John Band (that is the present Doig and Blueberry Bands) would leave their horses on the old Reserve at Montney.

In the 1940's and 50's the Prophet River men would travel to the Hudson Bay Company's trading post on the Sikanni Chief River, southeast of the present Reserve.

Some of the men would take the horses at this point and travel the old Fort Nelson-Fort St. John trail down to Montney (near Fort St. John), where the Band's horses were boarded for the winter with local farmers. The trail, which is still marked on some government maps, was as much as 50 miles east of the present Alaska Highway route. The men then walked back the 150 mile distance with pack dogs.

After the men returned from the post the family hunting groups would disperse to their winter hunting and trapping areas. At this time the round of winter trapping for the mix of fur-bearing mammals would begin. Although the main beaver hunt took place in spring, some beaver would be snared and trapped under the light ice cover of early winter. As the thickness of the ice cover on the streams and ponds increased the trappers shifted to the predatory species -- the main-stays of late winter trapping (marten, lynx, fox, squirrel, fisher, and wolverine). The trappers worked a 'line' out from a main winter campsite, frequently following streambeds in a circuit back to camp. In following the frozen creek beds for their travel and trapping circuit, they often followed, in turn, the routes of the predatory fur-mammals. Christmas and New Years sometimes meant travel to the trading post for some trade, a visit, and

mid-winter festivities.

The diagram (Fig.II), is very formal and understates some of the complexities of movement. There were undoubtedly break-ups and reformations of hunting-trapping groups. There were shifts to grounds that hadn't been used in some time in the hope of encountering richer areas; and there were movements to allow other areas to rebuild their animal populations.

The next major movement comes in early spring. As the days warmed, the hunting groups travelled their trails to trade furs and collect their horses from winter pastures. After trading and visiting for several days, they moved to their beaver hunting areas. In some cases these were close to the winter trapping areas, in other cases they were entirely different.

During the spring beaver hunt, when the ground was still moist, fires were selectively set to manage preferred habitats on the hunting grounds. These fires had a number of functions. They encouraged new plant growth for grazing ungulates. They warmed the soil, and in effect extended the plant growth season. They also cleared deadfalls from paths and trails and provided pasturage for horses. This practice of spring burning for habitat

management continued until fairly recently in areas of northeastern B.C. and adjacent Alberta. It ceased as a result of conflict with the fire suppression policies of forest managers.

The Spring hunt, as well as being the time for beaver hunting, is also the occasion for going out on the hunting lands and seeing the changes the year and the winter, in particular, have brought. A process of assessing the carrying capacity of particular areas, or inventorying, goes on at all times as part of the seasonal round. People who live off the bush watch animal signs throughout the year. This, with the help of skinning and butchering, gives them a good sense of the status of different animal populations and the general state of health within the populations. But spring is a particularly important time for the inventory process. For many of the animals it is a period of recovery from the time of low feed at the end of winter. Their condition after the rigors of late winter provides crucial information. On the basis of such information it is possible to assess the prospects for hunting success during the coming season.

Following the spring beaver hunt, the hunting groups travelled to the trading posts, once again to trace their furs. This brings us to June. At this time the groups

would often rejoin, and the resulting Bands would move to summering sites. Some of these locations are present-day Reserves. Prior to the construction of permanent housing this was one of the functions of the Reserves -- as summer meeting and camping places on the seasonal round. During the summer people would periodically travel out to nearby hunting, fishing, and berry-picking areas for short-term or day trips. Early August was (and still is) the time for local rodeos -- events that many Indian people travelled to, and incorporated into the seasonal round.

Then, towards the end of summer, the dry-meat hunt once again got underway. And the round began again. This is the traditional pattern of seasonal movements and land use followed by most of the northeast B.C. Indian Bands. And it is the pattern which has been modified to fit into the Bands' more sedentary residency pattern that exists today.

c) The Seasonal Round-Post 1960's

Most of the Bands moved into permanent housing on the Reserves in the early 1960's. At this time the Bands' residency pattern changed from a semi-nomadic to semi-sedentary one. The traditional round of movement

was thus modified, so that people could continue to carry out their hunting and trapping from a single base camp. The animals harvested and the seasonality of the harvests -- the Indian Year -- have stayed the same. At the same time the economy has become a mixed harvest/wage labour economy. For some of the Bands, this has meant an extension of the pattern of occasional and seasonal wage labour that has been part of the economic mix since the early fur trade. For other groups, notably some of the Moberly Lake and Fort Nelson people, this has meant a more regular commitment to wage labour, with food and fur harvesting carried out during non-working hours and by other family members.

Figure III represents the seasonal harvest cycle and residency pattern since the 1960's. The year is broken into the five Indian harvest seasons and, once again, our four seasons are shown by the heavy line cutting through the circle. The circle at the centre of the figure represents the Reserve and the circles on the radiating lines are trapline cabins. The lines with double arrows represent shorter-term hunting and trapping trips, back and forth from the Reserve. The broken lines indicate a mixture of longer and shorter term bush activites. That is, at these seasons some of the groups are away from the Reserve for extensive

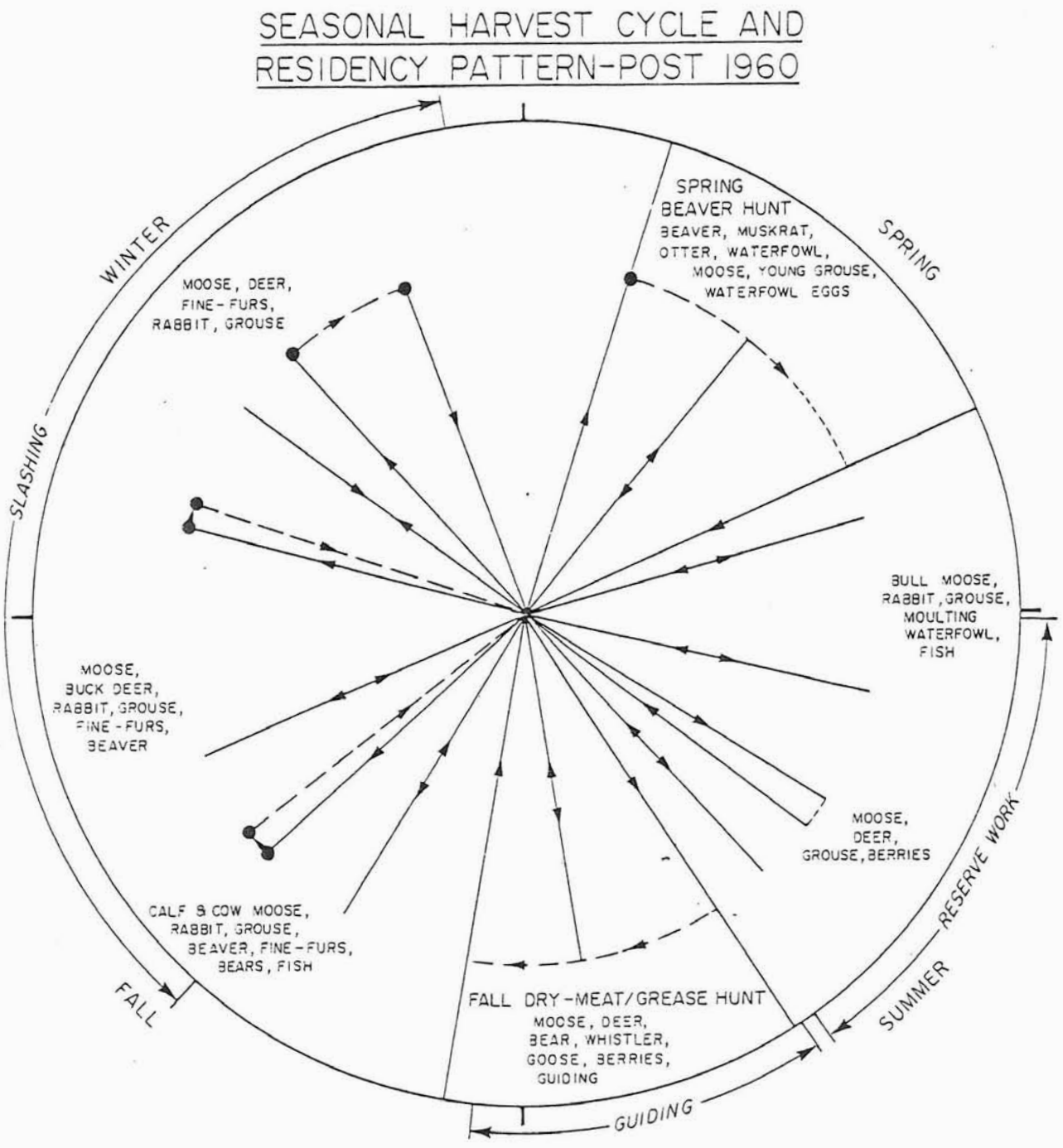

SEASONAL HARVEST CYCLE AND
RESIDENCY PATTERN-POST 1960
WINTER
SPRING
SUMMER
FALL
SLASHING
RESERVE WORK
GUIDING
SPRING
BEAVER HUNT
BEAVER, MUSKRAT,
OTTER, WATERFOWL,
MOOSE, YOUNG GROUSE,
WATERFOWL EGGS
MOOSE, DEER,
FINE-FURS,
RABBIT, GROUSE
BULL MOOSE,
RABBIT, GROUSE,
MOULTING
WATERFOWL,
FISH
MOOSE,
BUCK DEER,
RABBIT, GROUSE,
FINE-FURS,
BEAVER
MOOSE,
DEER,
GROUSE, BERRIES
CALF & COW MOOSE,
RABBIT, GROUSE,
BEAVER, FINE-FURS,
BEARS, FISH
FALL DRY-MEAT/GREASE HUNT
MOOSE, DEER,
BEAR, WHISTLER,
GOOSE, BERRIES,
GUIDING

Fig. III

periods, other groups for shorter periods, and some people carry on these seasonal activities through day trips between the Reserves and the bush. Seasonal wage labour activities are indicated on the outside of the circle.

You will notice that late summer and early fall are still the seasons for dry-meat preparation. The hunting focus is therefore on moose and deer. In the present day system there is, at this time, a complicated division of time between residency on Reserve and use of bush hunting camps. The Blueberry people, for example, hunt out of camps on several family traplines, off the Mile 73 Road, in the Blueberry Creek, Aitken Creek and Nig Creek areas. But the road is actively used by people as they join the camps, or by others bringing meat back to the village. Thus there is both back and forth travel between bush and Reserve, and long term use of bush camps. On the other hand, some Halfway hunters travel by horse from the Reserve to the Band's traditional hunting areas at Stoney. They hunt up the valleys higher into the Rocky Mountain Foothills, only returning to the Reserve in mid-Spetember. Until several years ago some of the Doig hunting groups continued to travel by wagons into the Clear Hills of Alberta, hunting and camping as they travelled. Other Doig groups travel into

Milligan Hills. But the Fall hunt in the Clear Hills has not been done in the last few years. The Fall hunting activities of this group have been modified. The main camps have become the travel camps on the former route, and the hunt concentrates on lands to the east of the Reserve, on the B.C. side of the Alberta-B.C. boundary. As in the case of Blueberry, this means that there is much back and forth movement between hunting camps and the Reserve. Fall is also the guiding season -- from late August until October or even November, a number of the men are away from their communities, working as guides for sports hunting outfitters.

As the Fall progresses, and the hunting groups and guides return to the Reserves, hunting concentrates on the lands close to the Reserves. This is an important time of year for small game harvests. Rabbit are snared and small game is hunted around the reserve. At the same time there are more distant trips done on a back and forth basis. Until fairly recently this was a time that nets were set on some of the larger lakes, to take fall spawning fish. However, there have been a variety of conflicts, and though some families may still set nets, it is not done as regularly as it once was. The trapping season officially opens on November 15th. Beaver trapping and early fine-fur harvesting are usually

conducted on a short-term day trip basis, although some of the trappers move to their trapline cabins at this time. This is one of the times when our model of the Reserve as a hunting/trapping base camp breaks down. The daily trapping system works for Bands whose Reserves lie on or close to their traplines. For some of the Bands, however, most or all of the traplines are too distant for short-term trips.

Slashing is an important wage labour component of this season, and for late winter.

In late winter, after New Year's, although much of the trapping is still done by back-and-forth travel between set snares and the Reserves, trips tend to be longer. More of the trappers stay at their trapline cabins for several days or weeks. Much hunting at this time of the year is done close to the Reserves, especially for moose.

The spring beaver hunt continues in its traditional importance. Here again there is a mixture of longer and shorter term trips out from the Reserve. The Doig people walk the streams and Rivers on their traplines. The Fort Nelson hunters travel by boat and foot along the Muskwa,

Fort Nelson, and Fontas Rivers, as well as the smaller feeder streams. Halfway groups travel by horse to their traditional areas, and hunt the streams and ponds that drain into the Halfway River.

Summer for many of the Bands is a season of mixed hunting and seasonal wage labour. Much of this wage labour is on Reserve. It includes work on Band run ranching and farming operations, and construction and renovation of Band housing. For some of the Fort Nelson people it also includes work on the B.C.R. Hunting and fishing trips are primarily on a short term basis in early summer, out from the Reserve onto adjacent lands and back again. Summer is also rodeo time.

iii. THE ANIMAL RESOURCE ECONOMY

We now turn to the animal resource economy itself. Although we now have some sense of the spatial and seasonal operation of the economy, we have not approached the question of how it relates to the biology of the resource animals. A number of questions need to be addressed: What are hunting economies about? How do they work? What kinds of considerations go into their operation?; and what are the special features of the economy in north-eastern B.C.?

Northeastern British Columbia is part of the Canadian Boreal Forest Region. This is the largest forest region in Canada. It sweeps across northern Canada south of the tundra from the Atlantic coast of Labrador, through northern Quebec, Ontario, and the Prairie Provinces, into northeastern B.C. and the Rocky Mountain Foothills and into the Yukon. Within the forest, northeastern B.C. is a land of transition. In the eastern areas, the Peace River is a boreal forest transition from the grasslands of the Great Plains. On the west the forest grades into the Alpine tundra areas of the Rocky Mountains. Throughout the mid-Canada Boreal forest the distribution of animals is remarkably uniform -- the major species are found throughout. This is true of the fur-mammal species, the small game animals (snowshoe hare, porcupine, and grouse), big game (moose, black bear, and woodland caribou) and a variety of fish and ducks and geese. All of these animals have a place in northern Indian hunting economies. What varies from place to place, however, is their relative importance.

What makes the northeast a distinct region with a greater species diversity is the added mixture of mountain and western species, and in the past the animals of the prairie. So what we do is add Mountain goat, sheep, grizzly bear, the hoary marmot (or whistler as they are

locally called) and mule deer among the mammals, and greyling, Dolly Varden, and rainbow trout among the fishes. In the past, the prairie-forest transition lands supported large populations of bison. There are also populations of elk and, more recently, white-tail deer have expanded their range into the northeast.

Most striking about the species mix in this region is the rich variety of ungulates. Alexander MacKenzie, during his explorations in the late 18th century, commented repeatedly on this richness of ungulate populations along the Peace River. He noted in his 1793 exploration journals: "the river displayed a succession of the most beautiful scenery I had every beheld...groves of poplars in every shape vary the scene; and their intervals are enlivened with vast herds of elks and buffaloes..."

a) Some General Considerations of Northern Indian Hunting Economies

Now let's turn back to the Indian economies. However rich the area may have seemed to outsiders, Indian hunters and trappers have always had to adapt their system to the relative abundance of different species in different places and at different times. Some of these adaptations are self evident -- in areas with many lakes and streams,

aquatic animals dominate the food harvest, whereas in areas with few waterways there is necessarily a much heavier reliance on terrestrial mammals. But other strategies are much more complicated, and relate to complex biological processes. The boreal forest is an area notorious for major changes in the size of its animal populations. On the one hand some animals move into and out of particular areas seasonally. Caribou, moose, and waterfowl migrate. With caribou and moose the shift may simply be to other areas within the hunting grounds, or onto adjacent lands. Indian hunters are very familiar with the major shifts of these animals and make use of this knowledge in managing their harvest strategies. With waterfowl, when they are gone they are outside the hunting areas.

On the other hand, some animals of the forest go through dramatic population changes over longer periods of time. Perhaps the most intriguing example of this is to be found in the case of the snowshoe hare population. This goes through an eight to eleven year cycle. At the peak of this cycle population densities can reach 3,000 hare per square mile; at the low point of the cycle, the population drops to about 35 hare per square mile.

Along with migration patterns and population cycles,

there is a third type of change, seemingly more random and unpredictable than the other two. This is the major long term decline or increase in the populations of some species. A dramatic example of this is the disappearance of the original herds of buffalo. But there are more recent, and more subtle changes that have affected Indian harvesters in northeast B.C. In the course of the past 50 years, the red fox and porcupine have become rare; moose and beaver have declined; and then recovered; and the white tailed deer has extended its range into the region.

Changes and variations of this kind mean that Indian hunters and trappers have to be flexible in their patterns of harvesting. It also means that they have a dependence that is broadly based. The importance of having access to a variety of animal species is not simply for variety in the diet. It concerns the reliability of the economy over time. In general, within any of the Indian economies -- the northeast's included-- the need is to pick and choose. Animals shift and populations go up and down, but what remains constant are the food needs of the people. When one of the principal resource species is scarce, people have to make up their food needs by more intense hunting of other animals, or by turning to store bought foods.

If people who are dependent on harvests from naturally occurring animal populations do not have access to a variety of resource species, then during times when one of the major species is going through population decline the Bands are economically vulnerable.

There are two other consequences or corollaries of this harvesting system. Hunters generally do not pursue scarce species. When the hare population is down, for example, hunters generally ignore them as a food animal. Here, though, the relative efficiency of the food harvest comes into play. Animals that will provide hundreds of pounds of food per kill are considered differently than those, such as grouse or hare, that provide only 1 or 2 pounds. The efficiency of obtaining your food from different types of animals depends on a number of factors. Among these factors are: the relative abundance of the animal, their concentration or dispersal, the hunting technique used, and the amount of food the animal will provide.

Among the Cree of central Quebec, however, it has been found that moose hunting is by far the most efficient strategy. It provides over 5 times as much nutrition per man day as beaver hunting; 10 times as much as fishing; and over 30 times as much nutrition

as hunting for small game. (ie. 100,000 kilo calories to 20,000 to 10,000 to 3,000 respectively). These figures may not be directly applicable to the northeast. The seasonality and harvest techniques of the two Indian groups differ, as do the population densities of the animals. Nonetheless, the Quebec figures serve as a guide to the relative efficiency of different species harvest strategies. What the figures underscore is the critical importance of moose in areas where they are abundant.

The second consequence of the hunting system is a concern with management of animals. It is not only inefficient to hunt rare species, it is also irrational in a long term sense. Many hunters emphasize the importance of leaving rare species to propagate in the hopes that in future years the Band might have more of them in the hunting areas. One example of just such an incident was related to us by an Elder at Halfway, who takes credit for re-establishing caribou and beaver in the northern Halfway River watershed. The same thing is now being done with elk on the upper Halway. The few elk in that area now, aren't being hunted by the Band in the hope that a herd will result.

There are, however, limits to people's ability to manage or preserve populations. When hunters are thin with hunger, these concerns fall behind those for their families. Similarly, when they feel that their conservation efforts will be thwarted by other land users who operate outside of their systems, and who aren't concerned with maintaining animal populations on particular lands, these efforts then don't make sense.

b) The Indian Economy in Northeastern British Columbia

These are general features common to northern hunting economies. The question then is: What are the special features of the northeast B.C. Indian Hunting Economy?

First of all there is the species mix. This economy is based on a large variety of animal species. We can recognize about 62 species as having had a place in this economy. These include 8 species of ungulates, two bears, four small game animals, 4 grouse, thirteen types of fur mammals, thirteen ducks, two geese, one swan, and fifteen species of fish. Some of the species are only of occasional importance and some of them have been more

important in the past than at present. In terms of the major resource species, however, we can characterize the northeast economy as a big game/small game/fur mammal economy. Other animals such as fish and waterfowl play a role in the economy, but this varies within the region from Band to Band. Moose, deer, beaver, snowshoe hare, and grouse are the staple of the meat side of the economy, while marten, squirrel, lynx, and beaver are the staples of the fur-cash side of the economy.

One of the distinctive features of this hunting economy is that the main animal species tend to be dispersed. At first glance the northeast economy seems simple. There is no major seasonal shifting between resource species, if only because many of the main animals are hunted year-round. The simplicity, however, is deceptive.

The key to the region's hunting system has been its richness in ungulates, both historically and at present. The large ungulates have always been at the heart of the hunt for the people: two hundred years ago it was the bison and the moose; today it's the moose and deer. Some of the species, however, are generally limited to particular and very special habitats (e.g. goat

and sheep); and other species -- caribou and elk-- have quite a low productivity within the area, at least at the present time. The moose and to a lesser extent mule deer, on the other hand, are broadly distributed throughout the region. And at the same time northeast B.C. is recognized for the relatively high productivity of its moose populations.

Moose hunting, when the animals are abundant, is a very efficient way of providing food needs. But moose are not animals that move in large herds. Rather, they are part of a dispersed resource base: they are scattered individually or in very small groups over large areas. It is this single fact that lies behind much of the seasonal mobility. It also lies behind the very great emphasis that is placed by the region's Indian cultures on tracking and trails. Hunters must follow the moose.

Moose do not have a pattern of latitudinal herd movements. They do not have clear and predictable migrations. Rather, according to Indian hunters, there is a general shift of moose populations to progressively higher ground in summer. Conversely they move down to the more sheltered and more snow free lower valley bottoms and side hills in winter.

For the moose populations in the hunting areas of the foothill Bands, these movements need no further elaboration. In the Peace River lowlands to the east of the Alaska Highway, however, moose move onto higher grounds near the headwaters of the rivers and feeder -- streams during the summer. The lowlands to the north of the Peace River -- here I am referring to the lands north of the river and to the east of the Alaska Highway -- are topographically shaped like a trough, sloping down to the Peace. Here the general movement is into the headwaters region of the Beatton and Blueberry Rivers to the west; into the headwaters of Milligan Creek and the Milligan Hills to the north; and into the headwaters of the Doig River and the Clear Hills in Alberta in the east.

What also needs to be said is that these movements are a general rule. There are major exceptions and these are critical to the economy. Some moose may be found on lands close to the Reserves throughout the year. There are two times of the year, however, when hunting concentrates on these lands: during the winter and in early summer. In winter moose are found on nearby lands because they have moved down the valleys into the more protected lowland areas, where the Reserves are located. In spring and early summer, the cows are the first to

shift -- to stream-sides and ponds to have their calves, and then into the hills. Bulls tend to stay around the lowland areas close to the Reserves for longer periods. Generally, the bulk of the population may be at higher elevations at this time, but some of the animals remain in the lower areas. At other times of the year more distant travels, following the movements of the animals into the hills, is necessary for efficient harvesting.

A hunting economy that depends on large ungulates is lovely when it works. But even those who depend on them very heavily must always be prepared to switch their activities to the more abundant small species.

If you get a moose, your food needs may be satisfied for several days. But if you miss, and have no other food as a standby, you have only a small number of days to get one until you are too weakened by hunger to hunt effectively. In the past that was the logic of much of the hunting system; today there are of course, foods to be bought in the stores. But in the past and present alike, the economy cannot be based on a single species.

This is where the resource mix comes in. Traditional economies are not based on single species. The small game animals and fish are staples in the sense that while less efficient in providing food needs, there are more of them than there are large game animals. The problem with small game, however, is that the more abundant species, such as hare and some of the grouse, cannot be considered a year by year staple because of their intrinsic population cycles.

Fish tend to be a more reliable 'fail-safe' than hares or grouse. A good fishing location is often one of the criteria in people's choice of campsites. Fish can be caught with little effort by untended hooks or nets. They can provide a fairly predictable harvest while people are busy with other tasks. Although the northeast doesn't have the abundance of larger water-bodies of some areas in the north, there are a number of lakes that have been noted for their fish populations: Among them, Moberley Lake, Charlie Lake, the Klua Lakes, Maxamish Lake, along with a number of alpine lakes. Each of these have been important camping and fishing sites in the seasonal rounds of particular northeast Bands.

For all intents and purposes the lakes have been lost to northeast Indians as fishing sites -- some because of conflicts with recreational users and the extent of settlement around the lakes, and others due to conflicts with commercial users. Where in the past fish operated as one of the reliable 'fail-safes' for some of the Bands' economies, with a few possible exceptions, they don't anymore. This has caused a heavier reliance on other species.

One of the unique features of the northeast economies has been the role of the montane ungulates. Generally in the past when animal populations were low the response was wide wanderings in search of game. For the Bands hunting in the foothills region, (Halfway, East and West Moberley, and Prophet River) this at times meant travelling deeper into the mountains, to areas known for their resident population of the montane animals. During times of scarcity of game there was probably a much greater dependence on sheep, goat, caribou, whistler and the fish of the alphine lakes. In some cases (in times of extraordinary needs) the roamings even took hunting groups into fringe areas, that is, more distant areas not generally considered within the band's hunting lands.

Since the fur trade has been important for so long, many decisions, and the operation of many aspects of the system, turn on fur mammals. Although beaver, muskrat and lynx are all eaten, the other fur mammals are snared, trapped, or shot exclusively for their pelts. Of the species that are not eaten, marten and squirrel are the most important. This reliance on marten and squirrel will be raised later, in the context of the impact of logging on the trapping economy.

When we add the importance of these fur mammals to the need for a widely based and flexible meat harvest, it becomes clear that the northeast hunting/trapping system requires a diversity of habitat. In order to operate their system, hunters have to be able to move between different areas, take advantage of habitat variety, and switch their activities from species to species. At the heart of the system is the moose, but the complexity and richness of the system as a whole are bound up with the diversity by which it is finally underpinned.

III.

NORTHEAST B.C.: THE REGION AND THE STUDY

i. Introduction to the Region

When you consider the industrial context within which the Indian economy has had its place or tried to have its place, it sometimes becomes almost oppressive. One begins to feel that really there is no prospect at all for the Indian economy. Indeed, as you examine the elaboration of industrial development in this region, it's hard to imagine, in some ways, how an Indian economy could have survived at all.

It's quite a widely held notion in the Fort St. John region that the Indian economy indeed has not survived. It may be useful, therefore, to think of our Land Use and Occupancy Study as addressing the simple question, "In what way and to what extent is there still an Indian economy in this region?"

In order to begin to answer this question, the research project looks to baseline data, to studies that already existed. Since the North has been saturated by social scientists and has spawned more Ph.D. theses than perhaps any other part of North America, one would imagine that to find baseline data would be a matter of simply going to the library.

When you go to the library, however, you find that when it comes to Northeast B.C., there is virtually nothing. People pass through here on their way to more exotic fields. This region was dismissed early by social scientists and by institutes engaged in social scientific research in northern parts of Canada. The reasons for this exclusion are partly because

topographically it is not very interesting, people think, and because it is well known also that it's an area with a very long history of white presence and, therefore, it's accordingly difficult to find the uncontaminated aboriginal.

We are faced then, when doing our Land Use and Occupancy Study, with a startling dirth of basic information. In many ways we had to begin at the very beginning. One possible exception to this is archaeological work within the last few years, which has taken place both around Fort St. John and in the Fort Nelson and Yukon border areas.

The Fort St. John area is turning out to be among the most important archaeologically in North America. This is simply because the ice-free corridor through which the original inhabitants of North America passed on their way from Asia went right through this area. It's not known really exactly where it went, but this is the general area.

That means that in spite of the Ice Age or along with ice sheets being present in North America which barred people's occupancy of many areas, people nonetheless could travel through here. For that one reason, archaeologically, the Fort St. John region is of great importance.

The second reason, which is of course, closely related to the first, lies simply in the fact that the continuous occupation of this area has been something like 10,000 years for certain. Artifactual evidence demonstrates that there have been Paleo Indians or some kind of hunting culture present in this region for at least 10,000 years.

Moreover, this area seems to have been the heartland for Athabascan culture. Athabascan culture is the most important

of the northern hunting cultures simply because it spreads across such a vast area. It occupies the entire Interior regions of Alaska, the Yukon and a large proportion of the Northwest Territories. Tribal versions of the Athabascan culture are also found through Northeast B.C., Northern Alberta and the northern provinces, and there are outposts of Athabascan culture as far as the Southwest United States.

It's quite possible that this area will turn out to have been the cradle of Athabascan culture from which all the other Athabascan areas were progressively populated. This area really is archaeologically an exciting centre.

Moreover, the archaeological evidence doesn't suggest some haphazard presence of hunting people. It's not just a matter of chance that for 10,000 years hunting societies have existed in this area. It's because of the remarkable advantages that the area offered to hunting economies. Large mammals have probably always (in the relevant historical period) been here in considerable numbers. Moreover, the ecological variety of this region helps hunting cultures greatly. We have a mixture of the northern muskeg, eastern foothills country and then the boreal extension of the Great Plains of the Prairies. This meant that the ecological variety had in turn given rise to a great variety of animal life which was the basis for very effective and probably very successful successions of hunting people.

Nor should we forget, when we think about the importance of the area as the cultural centre, that the great Peace River valleys were part of the buffalo migration area and were probably periodically densely populated with buffalo which, of course, supported very successful hunting cultures wherever they were to be found.

This area is, then, not just a frontier. It's exciting, it's interesting and it's important. The Indian cultures that were encountered by the first whites who arrived in this area were Athabascan. Three principal tribes probably ought to be mentioned. The Sikanni, the Slave and the Beaver. They are closely related and they all speak dialects that are close to being mutually intelligible.

The Slave were always in the northern edge of this region, in the muskeg country. The Sikanni were in the foothills of the Rockies and along the Peace, and the Beaver were scattered along the Peace and to the north of the Peace river. At about the time of the first white contact (which is approximately in the 1790's), Cree people moved into this area. It's very unclear and it's a matter of much speculation exactly when the first Cree came into Northeast B.C.

Very often when you hear people talking about this area, they speak as if Cree were the only language spoken here, and the Cree culture the only real culture. The earliest record I have been able to find of Cree in Northeast B.C. is 1821, in a record in a Hudson Bay Trader's Journal, and it refers to the Saulteau Band at Fort St. John. But according to local tradition--and there is supporting evidence of local tradition in this regard--Cree also came in the wake of the Riel Rebellion in the latter part of the 19th Century, spreading in from Saskatchewan and Alberta and gradually occupying parts of this region.

Also, throughout the fur trade, from the beginning of the 1800's right through to the late part of the 19th Century and possibly the early 1900's, Cree were widely used as guides and servants by factors and travellers for the fur trade. This caused them to spread gradually westward towards the Rockies, and it was in association with the fur trade as well as in the

wake of the Riel Rebellion that Cree established themselves in Northeast B.C.

Cree culture is not an Athabascan culture. It belongs to the Algonquin family of languages, and the difference between Cree and Beaver is certainly no less than the difference between English and Hungarian. They are different structures and come from completely different linguistic stock. However, the hunting techniques that the Cree used in this area are very much the same as those used by the Athabascans who were already here. This may be as a result of the process of adaptation or a process whereby the Cree adopted the efficient techniques that were well developed by the Beaver and Slave of this region. When it comes to many cultural matters, including the important matter of medicine and spiritual beliefs, though, the Cree and Athabascans have significant differences. But because of the basic similarity in hunting techniques, it is safe to say that the Cree relationship to the land in this region is very much the same as the Beaver and Slave realtionship to the land.

This point can be made more specifically by pointing to a hunting technique that relied essentially on small Bands roaming over wide areas, shifting as the resource base required that they shift. Given this fundamental similarity in hunting technique and in relationship to the land, our presentation does not distinguish between Cree patterns of use and Beaver patterns of use or between those two patterns of use and Slave patterns of use.

However rich the archaeological findings might be, however intriguing the history of the cultures, none of that information speaks to the relationship between the people today and the industrial development process or even the settlement process that has been taking place here for such a long time.

We need a different kind of data and that's the kind that is missing. Two studies have been written in recent years about the Indian people of this region. One is by Professor Robin Riddington of the University of British Columbia, a study based on field work carried out in the Prophet River, Doig and Halfway Reserves in the 1950's and '60's and another study by the late Professor Honigmann which is a study of the Slave at Fort Nelson.

Both these studies are extremely important in the history of northern anthropology and the Riddington study is among perhaps the most fascinating accounts of Indian spiritual life that has ever been produced.

However, neither of these studies contains a picture of the economic system as it actually operates on the land. Still less do we get an idea from either of these studies about the vulnerabilities of the system in relation to white presence. There are some observations in their work, and in the case of Riddington, there are some interesting implications which are largely to do with the conceptual arrangement he uses, but there is not a body of data.

The only author who has written anything in which we might reasonably expect to find the kind of data we need was Hawthorne, who first did a report on the Indians of Canada, and then one on the Indians of British Columbia. Those reports, published in the late 1960's, are comprehensive and ambitious. They seek to detail the basis of economic, social and other aspects of life in every Indian community in Canada.

However, for reasons that Hawthorne and his colleagues explain in the volume on British Columbia, the northeast region

is not included. They chose not to have data from Northeast B.C. in that study for quite interesting and plausible reasons. In the study of the Indians of Canada, the Fort St. John Band which is the old name for the Doig and Blueberry Bands, does figure in a number of tables, so there are some statistics, some basic data to be gleaned from Hawthorne's study of the Indians of Canada.

However, in his notes and references, Hawthorne reveals that he was unable to get any firsthand or direct information on the Fort St. John Band and therefore depended entirely on information he received in the form of correspondence, information he received from a local Indian agent. These notes of Hawthorne's explain why it is that the data he does provide on the Fort St. John Band are thin and extremely unplausible.

ii. The Land Use and Occupancy Study Technique

When it came to our study, we really did have to begin at the beginning and we decided to use the land use and occupancy study technique that had been devised in other parts of this country. These studies were pioneered in the 1970's in the Northwest Territories very much under the auspices of Doctor Milton Freeman. They were subsequently refined and adapted as a body of techniques, sophisticated and used in other places.

Since the early study of the Inuit of the Northwest Territories, the study that tends now to known as the Land Use and Occupancy Study, there have been analogous studies of Inuit in Labrador; of Indians of the Ungava Peninsula; the Yukon; two Reserves in Northwest Ontario and the Mackenzie Valley.

These studies are very variable in the way they have approached the problem. They have obviously had to change their techniques because of a different resource base and the different cultural and historical circumstances to which they were addressed. But all of them rely on one basic method and this method is known as the map biography.

The map biography method is very simply this: for every community or region that you want to study, you ask as many individuals as you possibly can, (you aim for a one hundred percent sample of persons over the age of eighteen) to draw maps of their lifetime land use. That is to say, you sit down with each person and with various kinds of maps and instructions and techniques; you have the person draw a map of his fishing areas, his berry picking areas, his trapping locations, his hunting areas for moose or beaver or caribou or polar bear or whatever is the appropriate resource base.

Sometimes these studies have gone into great detail. For example, the Inuit studies of the Northwest Territories distinguish between four kinds of berries and had separate maps for each of these species of berries. In other studies, distinctions have been made between many kinds of waterfowl, so in Labrador map biographies included detailed depictions of hunting of different species of ducks. But the map biography is the basis of all the studies, and by the time you have finished the map biography process, you should if things have gone well, end up with a map for a large proportion of the residents on which is shown all their land use activities in their lifetime.

In some cases, these studies sought to distinguish between different historical periods so you would have successions of maps. In the Northwest Territories Inuit Study

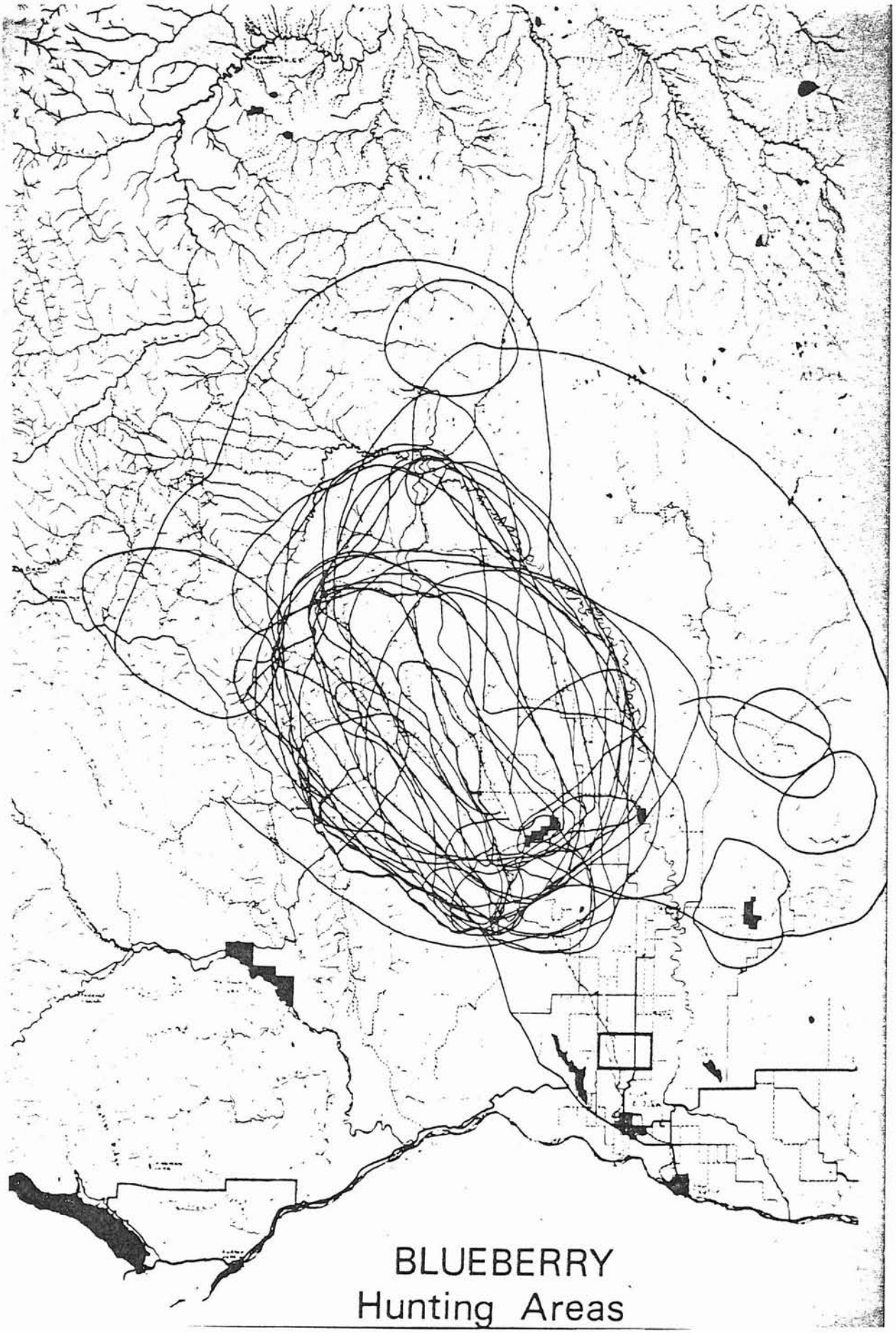
for example, each hunter did a map of his land use prior to the establishment of a fur trading post in the area for all the species ever harvested, and then a second set of maps for all the species he had harvested between the period of the establishment of the fur trade post and his coming to live in a settled community, and then a third set of maps for all the species showing his land use since settlement in the community.

In other studies, time distinctions of this kind broke down. People didn't find it was manageable or it transpired that there were so few significant differences over time that the effort wasn't worth the results.

Once you have your land use biography maps, there is the possibility for doing all kinds of interesting combinations and correlations. You can see, for example, all the fishing places for any one community; or you can take any one species of key animal, like moose, and show all the places moose have been hunted in any one region; or you can take respondents of different ages and compare the maps of people aged forty and above. You can also aggregate maps, putting together general hunting territories of each community or all the communities in any one general area.

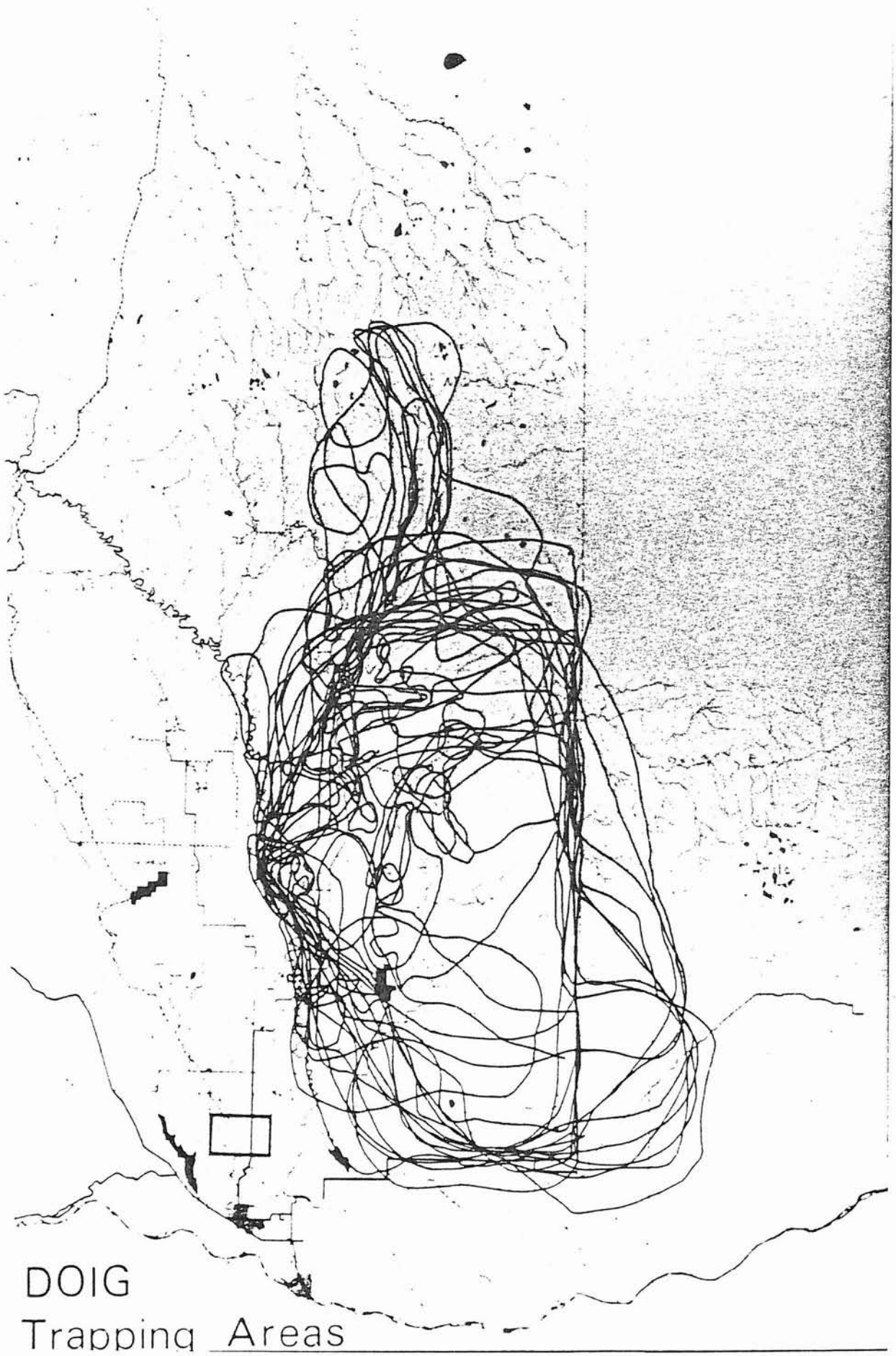
The social scientific possibility of the map biography is therefore extremely rich. In each of the studies where it has been carried out it has produced impressive and often quite unexpected and startling results. In northeast B.C. we proceeded with map biographies in the fairly traditional manner and aggregated the maps in a number of different ways. But we sought to arrive in the end at a statement of hunting and trapping areas.

The sample maps which follow illustrate some of the aggregated maps for the communities where the study was conducted.



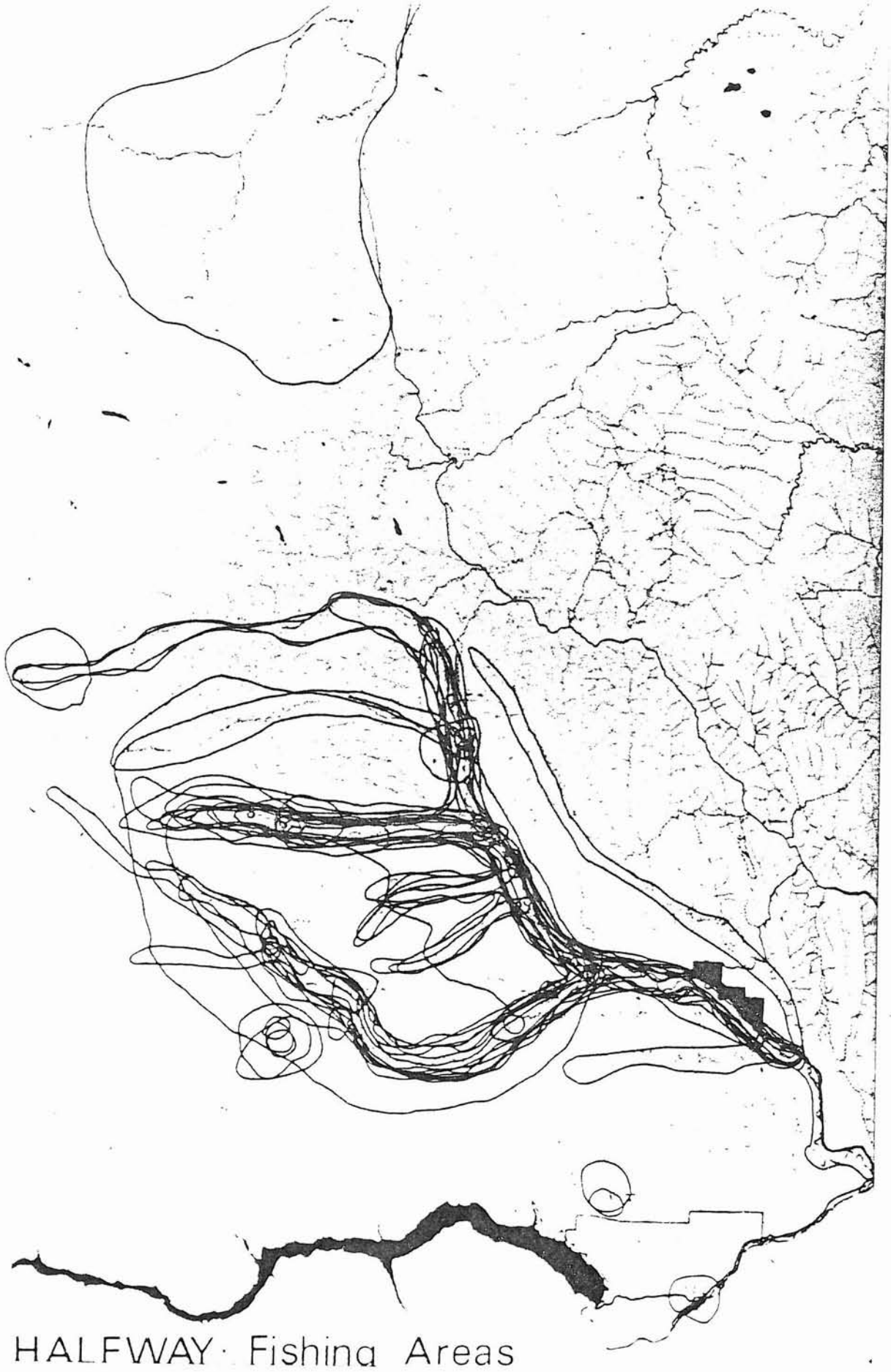
A composite map showing hunting areas indicated on individual Blueberry map biographies.

The Peace River makes up the southern portion of the map; Fort St. John is in the lower right hand corner and Indian Reserves are represented by blocked in black areas.



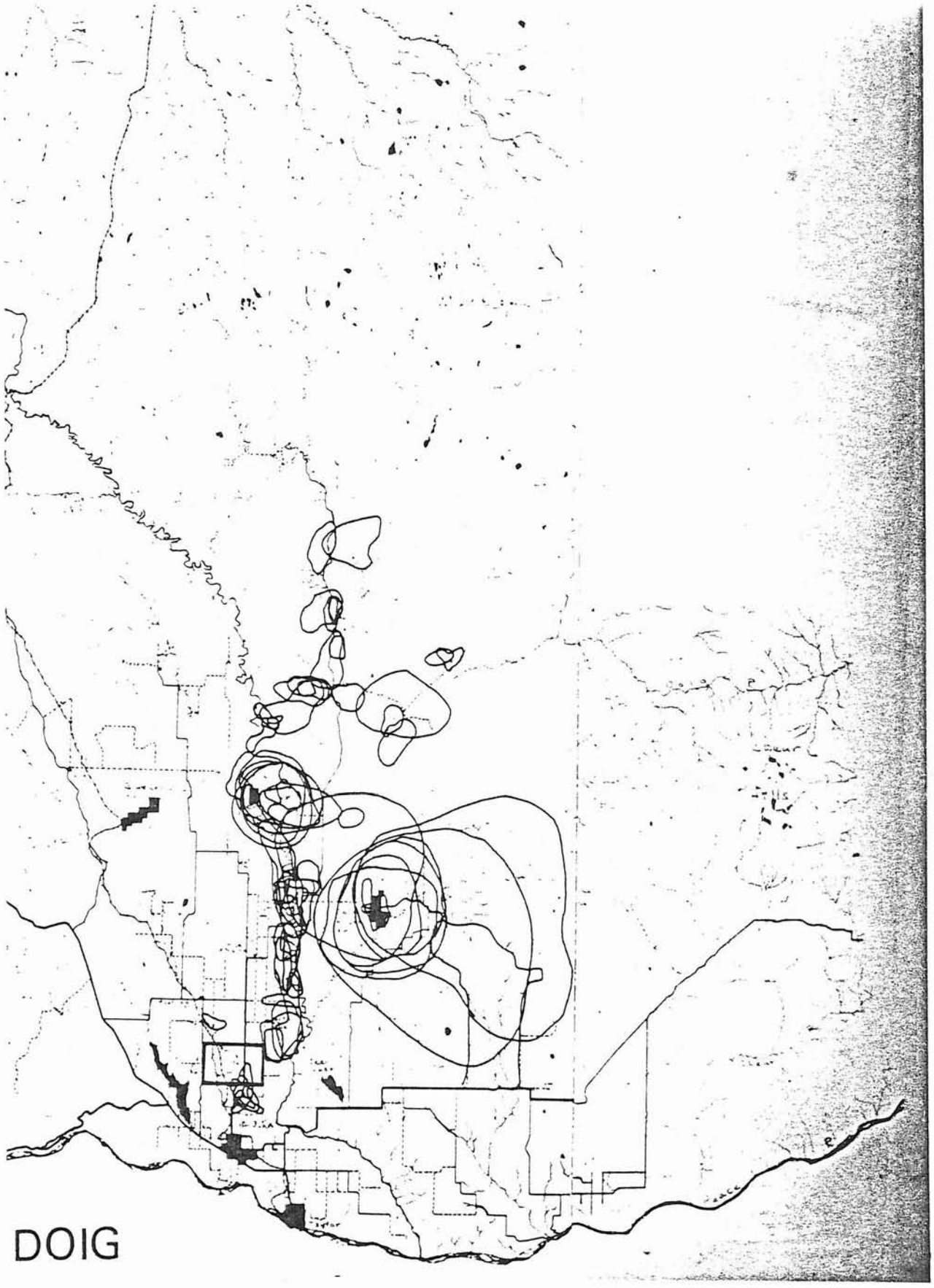
A composite map showing trapping areas indicated on individual Doig map biographies.

The Peace River makes up the southern portion of the map; Fort St. John is at the bottom of the map. Indian Reserves are represented by blocked in black areas.



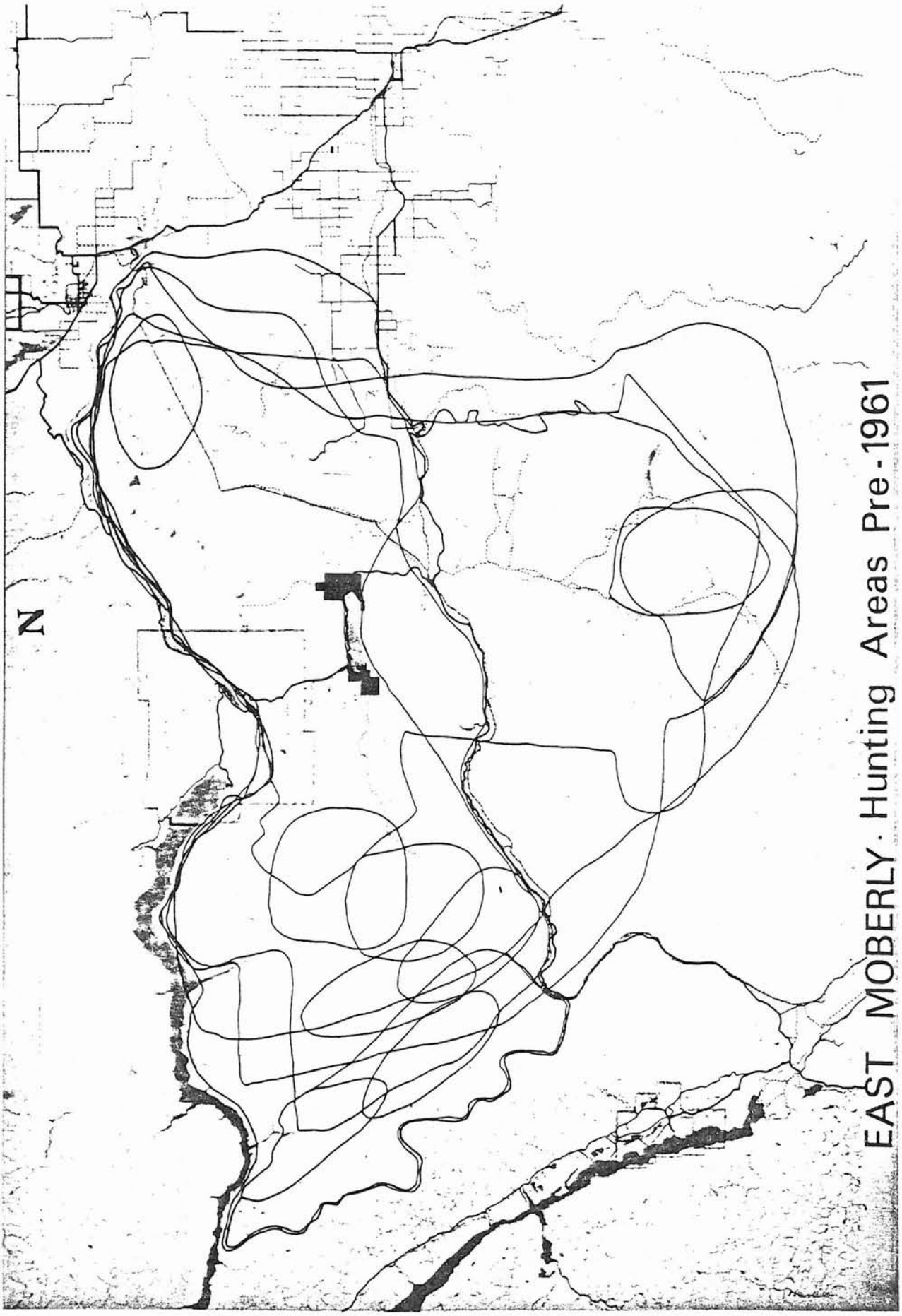
A composite map showing fishing areas indicated on individual Halfway map biographies.

Williston Reservoir and the Peace River make up the southern border of the map. Dawson Creek is located in the lower right hand sector.



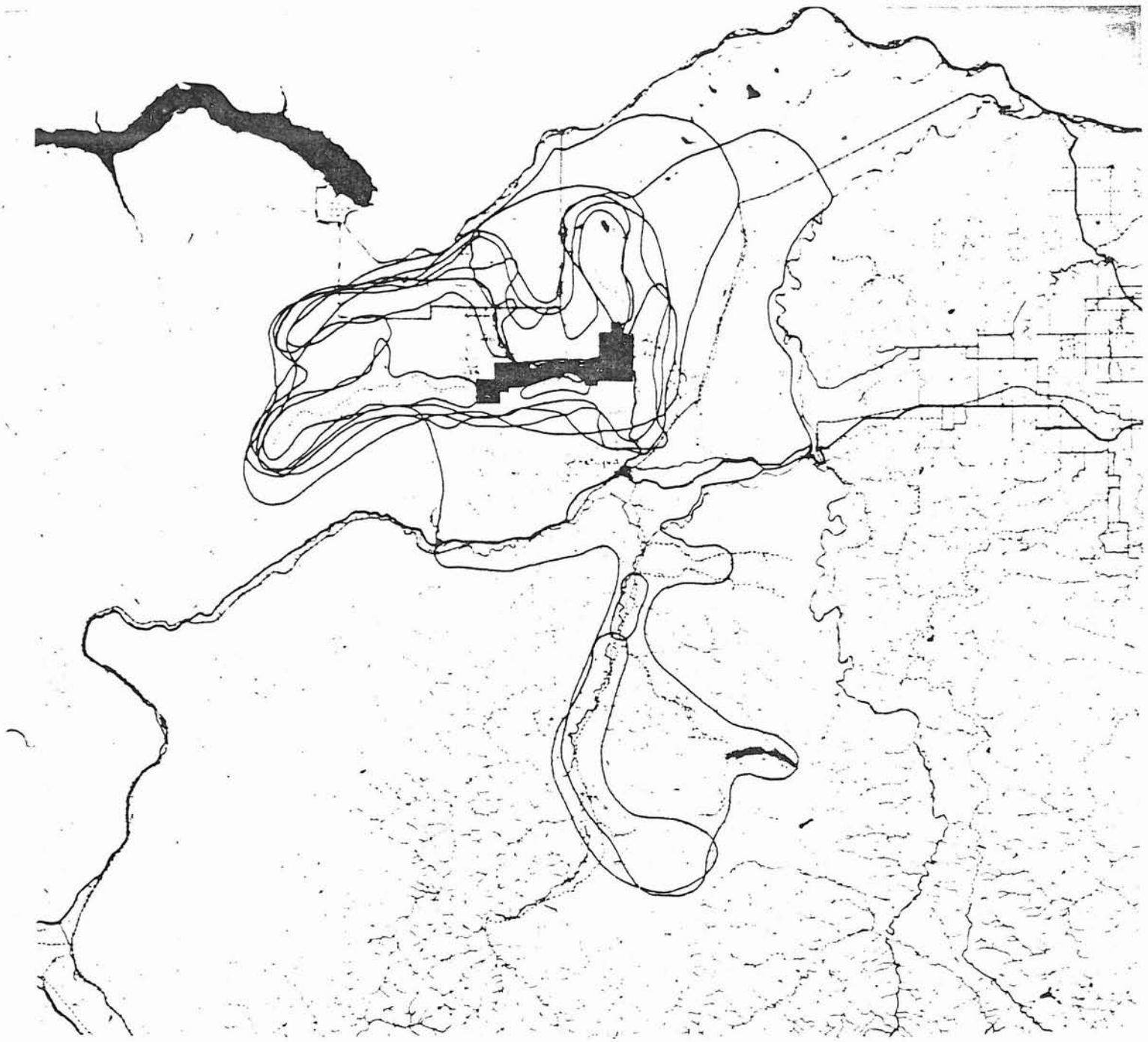
A composite map showing berry picking areas indicated on individual Doig map biographies.

Peace River is at the bottom of the map. British Columbia/Alberta border is indicated by the broken vertical line on the right. Fort St. John is in the lower left-hand corner. Indian Reserves are represented by the blocked in black area.



A composite map showing hunting areas prior to 1961, as indicated on individual map biographies of East Moberley Band members.

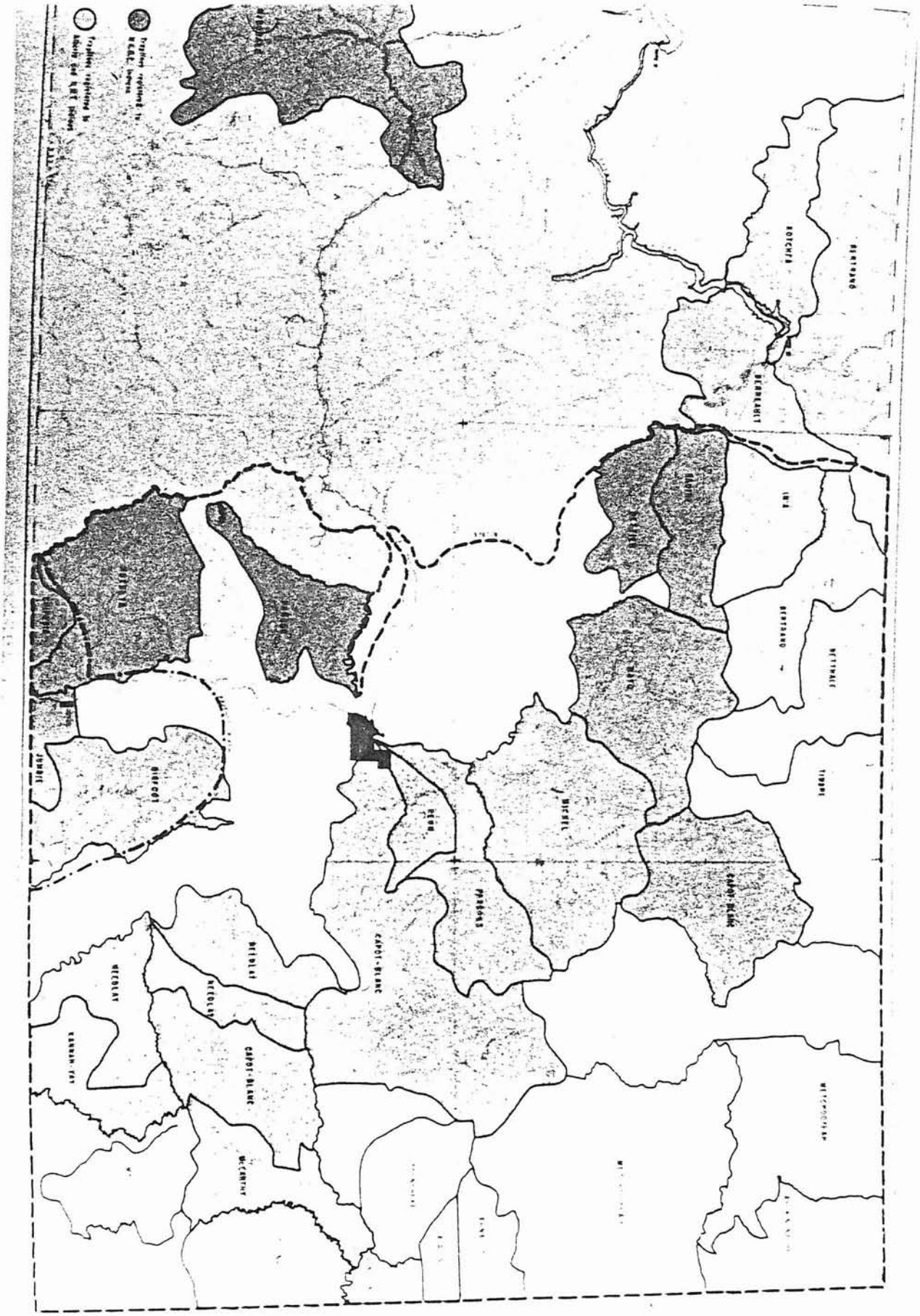
Williston Reservoir and the Peace River are located at the top of the figure. The John Hart Highway to Dawson Creek runs through the center of the figure.



EAST MOBERLY · Hunting Areas Post-1961

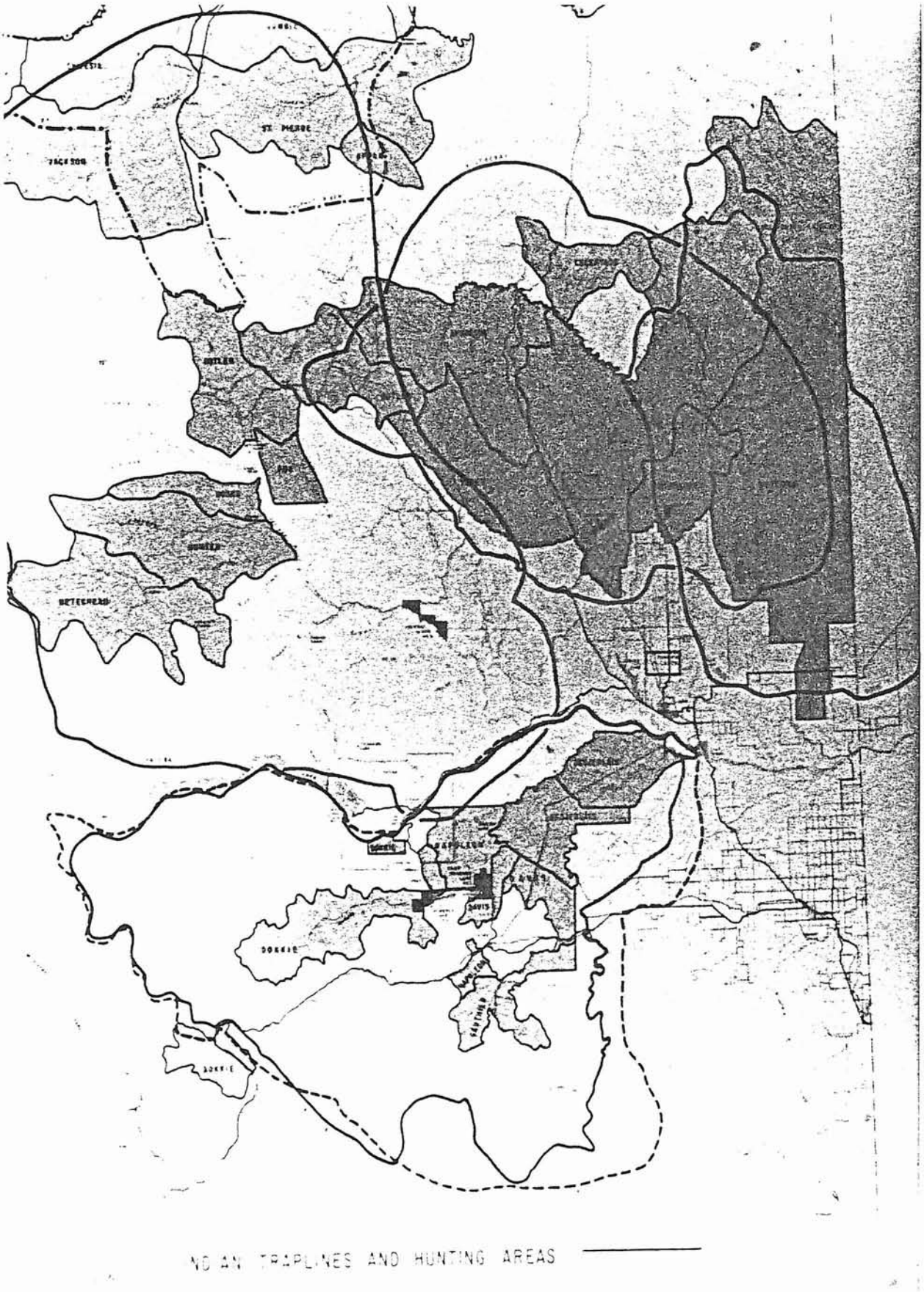
A composite map showing hunting areas in the period since 1961, as indicated on individual map biographies of East Moberley Band members.

Williston Reservoir and the Peace River mark the northern boundary; the John Hart Highway cuts through the middle of the figure; East and West Moberley Reserves are the blocked in areas in black in the upper left half of the figure.



A map showing Indian traplines and hunting areas in the Fort Nelson region. Areas in dark gray are traplines presently registered to B.C. Indians. Areas in light gray are traplines registered to Alberta and Northwest Territory Indians. Fort Nelson Reserve is located in the central right of the map.

The dashed lines indicate Indian hunting territories for Fort Nelson and Prophet River Bands. This information is provisional only, since it is compiled from a limited data base.



NO AN TRAPLINES AND HUNTING AREAS

A map showing Indian traplines and hunting areas in the Fort St. John region.

Areas in gray are traplines presently registered to Indians. Solid black and broken lines indicate Indian hunting areas as indicated from information on each of the Band's map biographies.

The hunting areas of the Prophet River Band, indicated by the dashed and dotted line is provisional only, since it was compiled from a limited data base.

IV.

THE QUESTIONNAIRE RESULTS

The Questionnaire Results

Questionnaires constitute about the most difficult thing anyone can try to do in this kind of research. They are difficult largely because the respondents tend to be highly resistant to answering them, and they tend to be difficult because the respondents tend to have very good reasons for being resistant.

There are many kinds of information that Indian people don't want others to know too much about and one of the key areas of sensitive information is, of course, harvest levels. Information about harvest levels can easily be used against people and can easily be misrepresented and it's for that reason, probably above all other reasons, that most land use and occupancy studies have elected not to try and administer a questionnaire.

There are a few areas where they have been attempted, usually with not great success. We decided that it was essential that we have a questionnaire, but we also decided that we should not confine the questionnaire to harvest studies. In other words, we extended the questionnaire to be more like a sectoral analysis of the economy: we would look at all earnings, all income from all sources, not just from the bush. The advantage of doing this is that from the very outset, we refused to minimize the wage labour and cash earnings factors, both of which are now integral to the Indian system.

We designed a very simple questionnaire with six components to get a sectoral analysis of the economy. The components attempted to document the meat harvest; the fur harvest; earnings from wage employment; transfer payments; time spent away from home (camping in the bush or cabins);

and perceptions of impediments to resource harvest. The following discussion will address only the economic components of the research.

The questionnaire was administered on three Reserves, Blueberry, Doig and East Moberly. These were chosen for a number of reasons, the most important of which is that we sought to cover the whole spectrum of relationship to resource harvesting but not get a distortion effect from having an extreme of either end in our sample.

With the small numbers of questionnaires--and they are necessarily small, given the size of the population bases--if you have an extreme end of your spectrum, you tend to distort the results. For this reason we don't have results for communities like Kahntah or Fontas, places where life is almost entirely in the bush. Nor are we using the results from West Moberly, a community where the majority of people are full-time wage earners.

The advantage of using East Moberly is that it is a community that has an important component of wage earners. The advantage of using Blueberry is that it has only a small compoent of wage earners. Our questionnaire communities are centered in the middle of a spectrum which on the one end has a high dependence on the bush, and at the other end has maximum dependence on wage labour.

When you are processing results, there are dozens of methodological trip wires you have to avoid. There are adjustments of figures and projections of figures from the sample onto the population that can be very complicated indeed. I am leaving out all those methodological problems and will focus simply on the results.

Let me start with meat and let me start putting together the meat harvest by taking the beaver, the bear, the moose and the deer harvest. We find that at East Moberly each hunter gets about 1,700 pounds of meat per annum in the form of bear, moose and deer. For Doig the figure is slightly higher; it is just under 1,900 pounds of meat per annum for each Doig hunter. For Blueberry, the figure is very high indeed, it's slightly over 3,000 pounds of meat per annum per hunter of bear, moose and deer.

Now, bear, moose and deer are only one sector of the meat economy and if you want to get a total picture, you have to add in beaver which in this region is very important. The beaver harvest at East Moberly is 130 pounds; Doig, 280; Blueberry 230 pounds of edible meat per hunter per annum.

To these major species (bear, moose and deer, plus beaver) we must add minor species harvest. Minor species present the most difficult problems, partly because there is a very great dependence on hare, which have a very complicated cycle alternating between abundance and scarcity.

Another problem with minor species (hare, grouse and fish) is that the numbers can be so large that hunters really can't recall them. They can only give very impressionistic statements. Based on the answers we do have, and on what we know about the hunting economy in the region, we decided to allot 300 pounds of meat from minor species of all kinds (rabbits, birds and fish) per household per annum in each of the Reserves.

If you total up all these sources, the major species, the beaver and the minor species, you find that at East Moberly, each household is getting about 2,200 pounds of meat off the land per annum. For Doig, the figure is 2,400 and for Blueberry it is 3,500 pounds.

This can be converted into diet in the form of pounds of meat eaten or available for consumption per capita per day and we find that at East Moberly, this comes out at about a pound of meat a day per capita. For Doig, the figure is 1.13 pounds and for Blueberry, 2.24 pounds of meat per capita per day.

In fact, there are reasons for thinking that those figures are too high. Some wastage occurs. No one would pretend that it doesn't. In particular, there is wastage of bear meat. There are many people in this region who prefer not to eat bear meat nowadays for various reasons, and they hunt principally for their furs. Consequently, where our questionnaire was finding a bear harvest, it could be that the bear harvest is properly represented as a component of the fur economy and not the meat economy.

Another area where our figures may be wrong is with regards to beaver. Beaver hunting takes place most importantly in the spring, at which time beaver are relatively easy to get and are hunted principally for their fur. This means that hunters kill more than they need to eat, and where they are hunting in camps too distant from the village for the meat to be returned to the households, there is some wastage.

We have calculated a percentage deduction factor by assuming that no bear at all is eaten and only fifty percent of the beaver meat. In this way we seek to err on the conservative side. After these adjustments are made, what we find is that at East Moberly, just under one pound of meat is available for consumption per capita per day; Doug comes out at 1.1 pounds and Blueberry at just over two pounds. These figures compare interestingly with figures generated from studies of a similar kind in other parts of the country.

In the Mackenzie Delta, in the more traditional communities, the amount of meat available for consumption per day is about fifty percent higher than our figures. Among the James Bay Cree, however, who are thought of as a very traditional community, the figures are somewhat lower than ours. Our figures appear to fit fairly neatly into the middle of the range of figures that have been generated by this kind of study.

Having established the quantity of meat available for consumption per person per day, it is important to situate that kind of information in an economic analysis. All the other parts of the economy are in straight dollar terms and in order to compare the harvest from the land with the other aspects of the economy, we have to find a way of converting the meat into dollar terms. This is a very tricky matter nad a subject of much contention in the literature.

There are two crucial problems that centre on trying to do a conversion: the first is that in trying to do it at all, one can give the misleading impression that there is a replacement value for such meat, that somehow it can be costed out in dollars. That gives credence to the idea that the hunting economy is compensatable in dollar terms if destroyed, which, of course, it is not. No dollar terms can do justice to the cultural significance of the harvest, and whatever replacement costs we establish can never do anything more than provide us with an analytical device for assembling tables of figures. They will not tell us about ways of overcoming loss or dealing with the problems of damage to the traditional economy.

The second problem is that no one can ever agree on what the replacement costs should be. The prevailing line of thought in this area is roughly as follows: Meat from the land is higher in protein than store-bought meat; therefore, the proper

replacement cost is the price Indian hunters and trappers would gave to pay for the meat if they had to buy meat of equivalent quality in the local store.

Meat of equivalent quality in the local store, would, of course, cost an enormous amount. Even if you average the figures down on the grounds that some of the meat harvested is not prime protein, you are still left with very very high replacement costs indeed. Replacement costs have been used, particularly in the Western Arctic where figures of between $3 and $5.00 a pound have been established as suitable replacement costs.

After much deliberation with these figures, we decided to opt against that way of calculating replacement costs. In the interest of again erring on the conservative side, we contacted a meat mart in Vancouver and asked them what they would charge to deliver meat in bulk to Doig Reserve and they quoted $1.85 for bulk sides of beef, $2.00 for pork and $2.39 for lamb.

Those are very low prices for meat by local store standards, but we decided to use the pork and beef bulk values and calculate the economic value of the meat harvest by reckoning that each hunter at the very best would get away with replacing his meat at between $1.85 and $2.00 a pound.

We decided also to calculate moose, deer and bear at $1.85 a pound and beaver at $2.00 a pound. There is no scientific reason at all for that choice. It's simply that people like a variety of meat in their diet and if they were to buy only one kind of meat to replace a variety of meats, they would probably not be doing justice to their needs, and would therefore vary their bulk buying, regardless of price.

When we convert the meat using these replacement dollar values, we find that the income accruing to each household in replacement dollars per month from country food is $300 a month per household for East Moberly; $350 a month per household for Doig; and a little over $500 per month per household for Blueberry.

That, using replacement costs, is the income derived from the bush in the form of meat. To complete the returns to the more traditional sector of the economy we need to add handicrafts. Handicrafts are a by-product of resource harvesting, and they are turned straight into cash. Handicrafts work out for East Moberly at about $3.80 per household per month; for Doig, about $8.00 per household per month and for Blueberry, just under $16.00 per household per month.

To these figures must be added the earnings from furs. The fur harvest was broken down for purposes of this analysis into two components, beaver and others. On the basis of our findings, the earnings in straight dollars per household per month from furs are for East Moberly, $67.00; for Doig, $146.000; for Blueberry, $306.00.

Using these figures for the major species meat, the beaver meat, the minor species, the fur and handicrafts, we can total up the earnings accruing to the resource harvesting economic sector. The total value of this sector in dollars per household per month comes to $368.00 for East Moberly; $503.00 for Doig; and $830.00 for Blueberry.

The questionnaire allows us to compare that side of the economy with earnings from wage employment and transfer payments. The wage employment sector of the economy is principally made up of on-reserve employment in the form of farm work, house building and maintenance work, and some salaries related to

the Band office.

Off-reserve wages are mostly to do with slashing and some jobs in town, particularly in Chetwynd in the logging industry. On top of these come Unemployment Insurance benefits and then there are transfer payments of other kinds, pensions and child allowance and welfare. Those are the main sources of regular or reliable cash earnings.

There's another component in the economy that presents some special difficulties and that is guiding. Guiding is of great economic importance to many of the Reserves in this region, and it raises a very interesting question, "Is it a traditional activity or is it part of the modern wage economy?" In fact, guiding goes back to the early days of the fur trade and therefore has been a part of economic life for a very long while in the region. On the other hand, guiding does not require the combined work of a family, nor does it have spin-off benefits in the form of food or pelts. In that sense, it's not part of the domestic mode of production and, therefore, might not properly be considered a component in the traditional economy.

In fact, the distinction between traditional and non-traditional components of the economy is a false and mistaken distinction, if that distinction rests on the division between wage employment and other forms of earning or income. The people of this region, like Indian and Inuit people throughout the country, have a mixed economic system and when they speak of their traditional life, they speak about an economic system in which some components are to do with generation of cash and other components are to do with food. There is no distinction built into the notion of a traditional economy between cash earnings on one hand and bush activities on the other. The two are very intimately intertwined.

If we now add together all the economic sectors so far mentioned, that is the meat, the furs, the handicrafts, the guiding, transfer payments and wage employment, we get a figure that represents the annual per capita income for people of this region. It is a per capita income figure in which part of the dollar value is straight cash earnings and another part, of course, is in the form of replacement dollars, so it should be treated with some caution as a figure. That difficulty notwithstanding, the figures are extremely interesting. The average per capita income per month for East Moberly is $308; for Doig is $286; and for Blueberry $387. The Canadian average per capita income per month is approximately $550.

It is useful to contrast dollars earned from wage employment, guiding and transfer payments on the one hand with dollars earned from the resource harvesting sectors of the economy (furs and meat) on the other. For every dollar earned from wage employment, the value of the resource harvesting economy in East Moberly is 66 cents. For every dollar earned in wage employment and transfer payments at Doig, the dollar value for the resource harvesting economy is $1.41. For every dollar earned at Blueberry from wage employment, earnings from the resource harvesting economy are $2.49.

The kind of place that the resource harvesting economy has in the overall picture of these economies should be clear from these figures. Before leaving the numbers, we will present the results we get if we do not err on the conservative side but err on the other side. If we take bear as consumed; beaver as all consumed; make a less conservative estimate for minor species; use high store prices for meat; and generally wherever there is adjustment to be made in the figures, opt away from the conservative side, the figures are startling indeed.

We find, then, that for every dollar earned in East Moberly from the wage employment economy, about eighty-seven cents are earned in the renewable resource economy. For Doig, for every dollar earned in the wage employment economy, $2.86 comes from the renewable resource economy, and for Blueberry, for every dollar from wage employment, about $5.90 comes from the renewable resource economy.

Northeast B.C. is widely thought of as a place where the Indian economy is in dire difficulties, yet these figures suggest that whatever the difficulties may have been, they have not been fatal to the most important parts of Indian economic life.

These figures, together with the land use maps, substantiate that there is a surprisingly strong Indian economy in northeast B.C.

The one study of the Indian economy that could possibly provide any useful data to compare with our figures was Hawthorne's 1960's survey of the Indians of Canada in which there are data for the Fort St. John Band.

In Hawthorne's table of figures, he aggregates just about all the sectors we have dealt with. He puts together the earnings from guiding, farming, fishing and trapping and puts the figure of $50 a year per person on the total earnings from all those components. Compare this with our figures of $300 or so accruing to the same economic sector per household per month. Hawthorne, like many before him and many since him, have had to rely on hearsay evidence, and we have to make do with the best that we can get. The point is that the Indian economy is a hidden economy, an economy one can't get at,

one can't know about without a great deal of co-operation with the people, a great deal of faith on the part of the people that the results are not going to be used against their interests. Since by and large, those favourable conditions were met in the northeast, we were able to get some idea of the hidden economy.

The questionnaire results presented so far don't really give an idea of the kind of harvest that occurs when hunting is at its best or most intensive. In the spring I had occasion to measure the total returns of two families during the spring beaver hunt: returns from beaver hunting, moose hunting, deer hunting and other less major activities. When those returns are all aggregated and worked out as an amount of meat per capita per day, it comes to over five pounds of meat per man, woman and child per day, across just over a three week period. That's an indication of the harvest level when hunting is going well and when people are actually living and hunting full-time in a bush camp.

Figures of that kind will startle people, will irritate people, and many, undoubtedly, will simply write them off as advocacy or just incredible. On the basis of all our work we think those figures are fairly reliable statistics. Moreover, they conform to the fact that meat is available in large quantities very often--the fact that most people in most households substantially depend upon meat from the land, even those persons who spend a large part of their time in wage employment.

Northeast B.C. Indian Reserves are very poor when viewed through southern eyes. Houses don't have much furniture, they are not always in a very good state of repair. People don't own good cars or many fancy consumer goods and there is a

tendency, as a result of the impression that this material poverty leaves in the mind, to declare many of the households and many of the communities disaster zones--places where there are intolerable and monstrous levels of poverty.

There is poverty and in some households it is monstrous but in many of the households, what we do when we see them as poor and destitute, is fail completely to take into account the hidden economy. Somebody once said that the most striking thing about Inuit households is that they are poor people with piles of meat. There is a great truth to that. There's a very big difference between a poor household into which meat is pouring reliably and in considerable quantity and households which experience what can best be termed remorseless and debilitating urban poverty.

There's another implication from these questionnaire results that needs be addressed. Earnings from cash are not spent in the way social workers and Indian agents and others in similar positions are pleased about. Earnings from cash are often spent in spree buying, often spent on partying, and this shocks us. Why is it that people go out and spend their money on things they don't need, things that might actually be bad for them when they haven't got anything; when their families are hungry at home?

Well, if our questionnaire results mean anything, most of the families are not hungry at home. What the spending patterns are to do with is not disregard for family or indifference to the pitiful hungry cries of a child. They are to do with the confidence and security that comes with knowing that there is food and there always has been food and all things being well, there always will be food and it's in the people's own power to get and process. It also has to do

with a well established relative indifference to consumer durables and that form of conspicuous consumption.

The questionnaire findings, vulnerable as they may be to methodological problems, imprecise as they no doubt are when viewed with statistical precision in mind, finally consolidate what the land use maps suggest, and that is the living reality of the Indian economy throughout the region.

V.

THE SCIENTIFIC STATUS OF THE FINDINGS

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i. Maps & Mapping

Serious questions can and no doubt will be asked about the realiability or scientific status of the Land Use Maps and findings. Such questions were raised about other land use and occupancy studies carried out among Native people in this country. And however refined the methodology of such studies might now be, we must not be blind to possible distortions in the data themselves, or misapprehensions as to what land use maps are in truth demonstrating. Some of these questions should be raised and, to the extent possible, dealt with.

When we look at the individual map biographies it is immediately evident that lines used to indicate hunting and other activities are remarkably straight. This, when considered along side the topography of the land, suggests that the areas indicated are approximations at best. In only a few instances do hunters' and trappers' markings follow the river valleys or hillsides or trails that in

fact are crucial to the system of land use itself. To this evident observation can be added a fact about the manner in which the maps were often drawn. Although many individuals on the reserve had some difficulty in locating themselves on the map, and spent much time seeking out features which they could recognize (in particular rivers with which they were familiar), once they knew where they were the mapping proceeded very quickly indeed. In fact, there were occasions when the speed seemed little short of haste, and the researchers were inclined to suspect that very rough approximations indeed were being marked up. In some cases, the rapid and approximate circle presents no real difficulty; when a mapper wished to show a particular lake or particular stream was important as a fishing area, a quick circle obviously suffices. One glance at the circle shows the area that is meant. But when the circles are hunting or trapping areas, that one glance can leave us with a certain skepticism.

Moreover, it can always be said that land use and occupancy research is political. The contexts in which such studies have taken place have often been as much to do with land claims, litigation, or inquiries into potentially dangerous industrial development, as they have been to do with pure social-scientific research.

And if we are seeing results generated by an advocacy process, should we not therefore suspect that they will be accordingly distorted? This is to say that the men who did the maps can be seen as keenly interested parties, whose interest will be reflected in exaggerations or distortions. It will be said that surely such a research process is incompatible with the aims of scientific work, and at odds with the very important need for purely objective data.

And even if advocacy or self interest is not a reason for skepticism, the sheer difficulty of the task might well be. How can we be sure that these maps are accurate, given vast areas involved, the many years of use that they include, and the unfamiliarity of the people with maps and mapping? Is everybody really able to recollect in detail all the uses of the land? Is no one going to mislead, albeit unwittingly? Might not the questions that go into the mapping project themselves appear peculiar, and cause a negative reaction that will reveal itself in distorted mapping results? Is the process not something akin to asking an office worker to indicate all the routes he has taken when walking between desks and doorways over a period of ten years? And if not peculiar, might the whole objective in truth be completely unmanageable; might it,

for instance, be a little like asking a lawyer to summarize all the memoranda he has written in the course of his career?

The questions thus far indicated caused us to examine our results with as skeptical and critical an eye as is possible. Not all these questions can be answered satisfactorily, just as no research data can finally be said to be the absolute truth. However, there are answers to some of the questions, and indications as to the validity of the nature of the findings that come from the research project itself.

Anthropologists and others have often pointed out the remarkable preoccupation among hunting peoples with literal truth. Precision and accuracy in all aspects of land use have obviously been integral to such people's survival. In such cultures therefore, it is not surprising that we find great hostility towards any unrealiability in relation to resource harvesting activities. It is striking that in some hunting peoples' languages there is no conceptualized distinction between the notion of making an error of judgement and the notion of telling a lie. In a society where information about the land and its animals can make the difference between life and death, there cannot be much tolerance for errors of judgement.

This quite simple anthropological fact helps us to have some primary confidence in the methods devised for land use and occupancy research.

To this observation can be added a finding, albeit in another part of the North American hunting culture areas. The first explorers to have dealings with Arctic peoples relied heavily on Native maps. These maps were at times drawn by men who had never seen a map, nor even a piece of paper. In a recent study of Inuit map making, these aboriginal maps were compared both with contemporary European maps, and with present day maps of the same places. The detail and accuracy, including the matter of relative distances, of the Inuit maps is truly extra-ordinary. It emerges that where the mappers charted areas over which they customarily travelled, their efforts were considerably superior to European maps of the day, and compare favourably with modern cartographic achievement. These findings show what is in truth evident enough: people who depend upon their ability to locate themselves in space carry in their heads very complex and detailed spacial schemes. That spacial schemes of this order are also a feature of Beaver Indian culture has been shown by the work of Riddington. The metaphysical religious ideas of the Beaver established a close connection between the

movements of the sun, both from dawn to dusk and as between the winter and summer solstices, and the movement of the hunters on the land. A sense of space and geography is at the very heart of Beaver culture. And anyone who has travelled with the Indians of this region in the bush, be they Beaver or Cree or Slavey, will have marvelled at the ability to judge distance, direction and terrain in apparently impossible circumstances. These are reasons for expecting maps to be accurate, so long as that is the intention of the mapper. (It should also be added here that the incredibly detailed knowledge that hunters have of the features of the land means that in so far as they can find those features on a map sheet, their indications of land use will be correspondingly precise).

Yet such considerations do not deal with the problem of advocacy or interest. It can be said that in other areas where research was done as a part of a statement of claim, hunters and trappers evidently did not discernibly tailor their data. This was checked in the case of the N.W.T. Inuit Study by virtue of internally corresponding evidence. Some tests of truth can be built into the studies directly, and this was done in the case of the findings in this region.

A considerable number of different individuals did map biographies. If these map biographies are superimposed one upon the other, certain striking correspondences immediately present themselves. There are lines that again and again appear in the same places. There are whole circles that neatly sit one on top of the other. Such coincidences on maps strongly suggest that either everyone is telling the same lie or the same truth. Since we have no reason for thinking there was a conspiracy to distort data, correspondence of this kind constitutes strong evidence of reliability of some of the data. Another example of a striking correspondence is to be found in the cabins and camp sites. Again, if we overlay the individual maps, we can see clusters of cabins that represent major coincidences of mapping. Indeed, by thus overlaying the cabins and camp sites it is possible to observe patterns of use that distinguish one family area of primary activity from another's. Since such patterns correspond with topographical features of the land, in particular with the river systems that are the heart of traditional land use, there is good reason for thinking these land use maps are basically accurate.

But the most important test comes when we place one community's aggregated land use along side another's. If individuals have much exaggerated their areas of use, then we would expect to find one community's territory over-lapping with another's. In fact, given the high degree of mobility of hunters and the incidence of inter-community marriage, we might expect such overlapping in any event. It is all the more striking to see, therefore, that a composite of community hunting and trapping areas shows very distinct patterns. Once again, there is an important correspondence between the results and the terrain: the Doig Community's hunting and trapping area is centered on a particular system of streams and rivers; so also is that of Halfway; and the Moberleys. Between them the community areas cover most of the available ground: Yet, separately they do not impinge on one another. Let me emphasize that these maps were done community by community, and there was never any collaboration between the mappers of one reserve and the mappers of another. The highly systematic pattern that emerges is thus a reflection of reality, and a reflection, accordingly, of the probable truthfulness of the men and women who drew their maps. Certainly, it does not seem that there has been much in the way of exaggeration. Advocacy and self-interest appear not to have affected the data.

Of course there are inaccuracies, and some of the lines are approximations, but the internal evidence suggests that they are rather good approximations. Certainly there are over statements -- caused in particular by virtue of some individuals having very extensive and elaborate hunting areas which may cause distortion to our findings. This distortion can, however, readily be adjusted: by concentrating on collective ideas of land use, it is possible to minimize the part played by exceptional individuals.

One further methodological observation should be added: in many instances men who did maps had a very strong and detailed idea of the area that comprised the resource base (or perhaps it is better called a territory) that they consider to be theirs by right as well as by virtue of active use. It is not necessarily the case that all these men have themselves hunted, fished, gathered berries, camped, or trapped in every part of this territory. What it does mean, however, is that the entire area is perceived as a resource base: it is the land in virtue of which it is possible to be effective as an Indian. By and large the areas marked on the maps are those that have been and still are used by those who did the maps.

There are, in addition, areas which may appear to be exaggerations that stem from advocacy, but that in truth constitute an assessment of territory or resource base. This needs to be made clear if only in order to establish the nature of the truth that is conveyed in these maps.

There is another recurrent challenge to validity of this form of research which relates to the question of Indian sterotypes. In this and other regions there is an argument that asserts the progressive and inevitable decline of Indian traditional life. In relation to the evidence presented, this stereotype constitutes a simple challenge: the maps may represent a reality, but it is a thing of the past. Moreover, the proponents of this challenge might also like to say that excessive emphasis on traditional matters jeapordizes the Indian interest, for it fossilizes and thereby limits Indian possibilities for development in the future. As everyone knows, this argument is often vociferous and even insulting, and proponents of the Indian point of view are therefore inclined to write it off without much consideration. But we must recognize that it is a position that need not be vociferous, but can be and has been quite carefully stated by some eminent social scientists. Indeed, it lurks

not far below the surface of much mainstream social scientific thinking -- especially of the culture contact and acculturation schools that dominated the subject in the United States for some twenty or thirty years.

When we did land use maps in this region, it often and strikingly emerged that use and ownership (if that is not altogether the wrong word) are collective. This was revealed in the course of individual map biography interviews. When one elderly Halfway resident was interviewed, the Band mapper, a young man in his twenties, acted as interpreter. We began the mapping with the mapper asking the old man to indicate the places he has hunted for moose. The young mapper, however, did not bother to ask the questions in Beaver, but assumed -- rightly, I think -- that it was in any case understood. And the young man himself answered his question, saying "We boys hunt here and here...", indicating as he spoke the places on the map that he regarded the old man's moose hunting area. I proceeded to urge him to ask the old man to mark the places himself. This was done, but the young interpreter insisted throughout the remainder of the mapping on answering questions on areas of land use by reference to "we boys", and the places "we" go.

This almost automatic identification between the mapper and the hunters whose land use he was mapping happened often. And it is an indication of the degree to which people feel that this system entails the collective use of the land. With the possible exception of trapping the furs on registered trapping areas, land is not used in an individualistic manner. People feel an identity of interest at every level. A person can go where he thinks is best, and is happy to be accompanied by others. A corollary of this is that kills are shared, and therefore the success of a hunt is a matter of a communal concern: the resource, taken with a hunting technique that relies fundamentally on individual exercise of skill, is brought back to the families of the hunters and then spread through the community. In a system of this kind, questions or research methods that are based on our society's understanding of individual activity and individual and even nuclear family interest, do not do justice to the reality.

It is also of great importance to understand that when the young interpreter used the words "we boys" he was thinking of the young men who are today's most active hunters. These are the men of the reserve between 20 and 50 years of age. Older men are referred to as "old-timers", and are credited with special knowledge

and skills -- with, for example, an appreciation of dreaming and the related metaphysical. Old men are also credited with reliability in the bush that transcends more every day excellencies (for that is what it is) of the "boys". The point is: old timers have special knowledge and more competence -- but in relation to the same activities, the same sphere of competence, the same economic interests, as "the boys". Moreover, and this may be the crux of the matter, "the boys" are <u>better</u> in the bush in one critical regard: the young and fit and strong, they are the ones who make most of the kills. "Old timers" must be listened to, respected, helped, but in the end it is "us boys" who do the harvesting.

The importance of the younger and stronger hunter is revealed in the hierarchy of the activity. When men proceed in the bush, they do so in single file. A person's place in this file, however, is not arbitrary. At the front is the man who is depended upon for reading the tracks, the terrain, and -- unless he chooses to consult with others -- for making key decisions: he selects the route taken by the tracked animal. Those behind are free to decline to follow, and may take their

own direction. But often the leader is followed for a long way, even for the entire course of the hunt. The man who leads is the admitted best -- and this is not a matter of age. Old men will not lead, because they are not confident of being able to keep up the pace or distance expected. The leader is usually, therefore, one of the "boys". At Halfway Reserve, there are two men whom I often noticed took and were granted the position. They are 27 and 42 years of age. Another man who was often a leader is 28 years old. On many occasions I noticed that one or other of these three led men in their forties or fifties. Also, men in their teens and early twenties frequently would go their own way, and were confidently expected to have no difficulty either with competent tracking or finding their way back to the camp through difficult terrain or harsh conditions. Moreover, younger hunters often include boys of fourteen or fifteen. It is assumed that a boy even in his young teens is able to conduct himself with discipline and competence in virtue of which he can be trusted in the bush.

All this is remarkable for many reasons, and offers all kinds of insight into the system or culture that exists in the region. But in the present context it

demonstrates one most important matter: land use and all the resource harvesting that make up land use are not things of the past, are not features of some old and dying tradition. Rather, they appeared to us to be a part not only of a living reality, but a fundament to Indian identity throughout the region.

ii. The Questionnaire Results

Many of the questions that could arise from land use mapping could arise similarly, in relation to our questionnaire results. Many of the answers are also the same.

Did individual respondents suppose that the questionnaire related to their rights and to future negotiations? Could they then have exaggerated some things, understated others? Pretended ignorance here, and made false claims there? Also, insofar as individuals thought that the results might find their way to the offices of the game management officials or other government agents, they might have been wary of telling too much about harvest levels. Finally, and most generally, who is to say that respondents took the questionnaire seriously at all, that they didn't simply answer the questions without thought?

Some of these possible reasons for doubting the truth of what was said can easily be answered. But rather than go point by point through each possible basis for skepticism, apprehensions of this kind can best be dealt with in two ways. The first of these is simple enough: once again it is to be emphasized that native people are extremely accurate when it comes to details of everyday life. There might be some difficulties over counting, but a scrupulous regard for literal truth is a part of people's ideas of honesty. This means that if we can be confident that respondents on the whole were sympathetic to the administrators of the questionnaire, and did indeed take the process with some minimal degree of seriousness, then it is reasonable to assume that no attempts were made systematically to distort results. It is possible that in some cases people felt uncomfortable about a question. But in these cases, their reaction was to ignore it altogether. There are blanks on the questionnaires, but not purposeful lies.

This first reason for having confidence in the results may not be convincing to those most hostile to the native point of view, or to those who feel that a maximum of skepticism is the appropriate approach to data that might have to stand up in a hostile advocacy situation. The second reason for confidence should be

convincing to them. It is that results can be checked against one another, and sets of figures can be tested in relation to other sets. In this way, it can quickly be seen if there are inconsistencies on the basis of which we should have doubts about the integrity of the responses.

A simple example of this is harvesting of moose. Many individuals estimated their annual moose kill, and as we look at the results, we find quite clear patterns emerging. There is a consistency to the harvest levels which has to do with the ages and other activities of the respondent, as well as to do with the reserve on which they live. If one man's moose kill estimate is very much out of line with these patterns, then it should be doubted. This did happen in one instance, and when we checked back on what had occurred during his interview, it emerged that he had indeed been drinking, and therefore gave answers that were not to be trusted. A more complex example can be found in answers to do with trapping. Most respondents stated how much they earned from sale of furs in a one year period; in another section of the questionnaire they also indicate the numbers of species taken during the trapping season. By consulting the 1977-78 fur price lists (which give average prices paid to trappers), it is possible to carry out a rough check

on the consistency between the two sets of answers. With the help of this kind of scrutiny, we find that respondents almost all appear to be trying to give the basic facts, and that where there are inconsistencies, these are to do with difficulties with numbers.

Yet, there are some answers to the questionnaires' questions that raise another methodological problem. This should be dealt with, for it concerns those responses to the questionnaire that are the most vague and possibly confusing. Some questions encourage more impressionistic answers than others. For example, when asked how much time was spent trapping last winter, a man may reply with a number of days, or he may reply with a more vague statement - like "on and off", or "mostly all the time". Answers that are not in the form of so and so many days or weeks might well be indicative of something other than the actual time spent doing a particular kind of activity. This might represent a person's idea of himself, of how he likes to be seen, of what he considers to be the right way to live. When evaluations of self reach into answers, the facts of the matter become less clear, and literal numbers about reality, about what in truth took place, may be obscured by subtler concerns. If a person sees himself as a real trapper, then the statement

that he traps all winter, "on and off", may be an indication of values more than of anything else. This does not mean that the answers are false - indeed, they may be all the more revealing for all they tell us about what people want to be. Now we should also be alive to the possibility that the numbers are to some extent doing the same thing. That is, numbers might not be literal truths so much as an idea of how things should be, or an indication of how a man likes to see himself. This is not a matter of exaggeration or misrepresentation. Many, perhaps a significant majority of those who did the questionnaire, are persons for whom numbers are difficult. For non-numerate people, the use of numbers can go beyond a narrow arithmetical truth, and take on some of the significances of those general, impressionistic statements that are much connected with values and identity. All this is to say that behind some of the actual numbers there might be a phenomenology, a construction of reality that is not entirely the reality of the world of social scientific questionnaire data. The questionnaires might also be telling us, therefore, other kinds of truth. Of course this will lead to major difficulties of interpretation. But it is a possibility that it is always useful to bear in mind when we consider the results.

VI.

THE NATURE OF IMPACTS

The Nature of Impacts

i. Historical Perspective

This presentation attempts to develop an understanding of what impacts on Indian peoples in the past have been all about. This is a very difficult thing to do, but it is very important to build up a picture of impacts over the years in order to arrive at some general idea of what has been taking place on the land, for the most part out of sight.

The thing that all the Bands in the northeast have in common is their great use of wide areas of land and their reliance on small groups of hunters. Flexibility and mobility are the key words when talking about the Indian system. People were quick to adapt, quick to take advantage of the new opportunities, ready to move now in one direction and now in another direction. Even before Europeans reached this area, the Indian cultures had made some very important adaptations, had already demonstrated their great flexibility when it came to change. Perhaps in this region, the most important example of this is the way in which the horse was used. The horse reached this area probably some considerable time before Europeans ever got here. Probably horses were passed on to the Beaver from the Sarcee--who are also an Athabascan culture who were directly to the south of the Peace River--and the Sarcee certainly had horses in the 1700's.

The Beaver people of this area got the horse very early and quickly built the use of the horse into their system. Similarly with the gun: the gun arrived before Europeans and was built into the system. A particularly

striking and quite exciting example of how this adaptation and flexibility reveals itself is in the religious system.

At the community hearing at the Halfway Reserve a dream map was presented. Dream maps are expressive of a reconciliation of the shamanistic, the aboriginal traditions and the Christian tradition. When you look at the dream map you see in one corner of it a picture of Heaven, and in another corner there is the location of where the animals came from. The traditional shamanistic system depended on the dreaming of animals and the killing of the animal which you had dreamed.

Dreams then were to do with trails to animals. When the Beaver people in this area heard about Christianity, they built that into the dreaming system since Heaven seemed to be so important you better know about the trails for getting there. The only way to know about trails in the shamanistic system is to dream them, so you need to dream trails to Heaven and that is the origin of the dream map shown by the Halfway people. It reveals the way in which the culture took new elements, absorbed them and molded itself around the new elements. The system didn't change, it just strengthened itself, enriched itself by taking advantage of what came along.

Now, a more basic consequence of this adaptability and flexibility is that when whites came into the area, when developers came in, settlers, ranchers, whoever they were, one of the most basic reactions to the arrival of these newcomers was to move away, avoid them and since the system was so flexible and adaptable, that wasn't too hard. You could shift your hunting territory a little, you could move

back deep into the woods, go a bit further up into the foothills, move a little higher up a river valley and keep out of the way of the newcomer.

People protect themselves therefore by avoiding confrontation, by avoiding fights, by and large. There are some important exceptions to this: I don't want to leave the impression that all the Indian people in this area welcomed newcomers enthusiastically and with open arms. Dependence on the fur trade very quickly became a problem for people here and when a fur trade post upon which people had become dependent apparently was going to be closed, the Indians burned it down and killed some of the traders.

Another example of them defending the system was when the gold rush through to the far northwest meant that corridors were being opened to this area and that very large numbers of whites were passing through. The Indians at one point in outrage wrecked a considerable number of wagons that people were bringing in. On other occasions, they interfered with whites coming into the area who were trying to hunt in what the Indians regarded as an excessive manner.

Though the people were accommodating, flexible and adapted their way of life to the newcomers, whenever the system was directly threatened, they tried to hold the ground against the newcomers. So although there was a great deal of flexibility, it clearly had its limits--but perhaps there is no greater tribute to the flexibility than the way in which the system has survived into the present.

The fact that we were able to conduct the map biographies and the fact that the questionnaire results show the harvest levels which they do demonstrates how people have endured. They have endured by being highly flexible and highly adaptable, and it's very striking that in the present day, the flexibility of the system has revealed itself on a daily basis.

The emphasis on tracking, the preoccupation with trails, all the skills that are to do with moving around in pursuit of animals are the ones that are most celebrated. The young people, teenagers, even younger than teenagers are expected to be able to track. They are expected to be able to move around in the bush which means they are expected to be flexible and are quick to adapt to new pieces of information that they encounter when travelling in the woods.

There are many examples of the psychological correlates to this kind of flexibility. One specific example is that hunters on the whole don't like to hunt in the same place two days in a row. They will go to one area and even if they find animals but don't make a kill in that area, they will go to another area the next day. They are working the system in a flexible manner all the time.

The consequence of being flexible over all this period of time, and the consequence of withdrawing in favour of fighting means that it's very easy for white settlers to come in. There tend not to be great challenges to the enthusiasm and excitement by which the frontier is surrounded.

When the settlers were dreaming of unimaginable riches in this area, when they were looking at the possibilities of

massive development of the agricultural frontier or thought of opening up new and exciting corridors to riches beyond this frontier, they didn't really have to deal very much with the problem of Indian resistance.

There was a visitor to the Peace River country who in 1912 expressed the optimism that surrounded the attitude to settlement in this country at that time. He said that this was an area that, "does not belong to the desolate wastes of the extreme north, but to a country that will one day be thickly populated and that day is not very far distant." [1] A vision of that kind would have been far harder for somebody to advance in the Prairies or the plains of the United States, for example, where it meant the process of Indian wars before such a country could be thickly populated.

In this area, whites didn't really have to think about Indian wars because the Indians on the whole moved out of the way. This meant that first of all, the land tended to be taken over very easily, and secondly, that little was known and still less cared about the Indian people who were here. It's one of the cruelest ironies of this area that the very richness and strength of the Indian system contributed to the ease with which the land could be expropriated and settled.

ii Trapline Registration

Let us turn now to the whole question of traplines. At the community hearings traplines were referred to more often, with more passion and more concern than any other single thing. Traplines came up again and again when people talked about the threat that exists to their way of life: traplines are at the centre of people's concerns about the future.

Traplines were registered in the late 1920's and through the 1930's. The registration process was not put in place in order to protect the Indian interests; it was put in place because of a conflict between white trappers. Because of the depression in the industrial section of the Americas (and in the western world generally) there was a great flood of white trappers into all northern regions. Fur prices stayed high in spite of the depression; indeed, they went higher and higher while the level of earnings in the cities and countryside went down, with the result that fur trapping looked like a good deal.

The registration process was put in place in order to cope with the intensified conflict between white trappers. It was extended to Indian trappers because it became clear after a while that Indians were being driven out more or less altogether by the intensity of white trapping, and because white trappers became extremely resentful when they encountered Indians on lands that white trappers had registered and considered their exclusive areas.

Given the flexibility and the complexity of the Indian land use system, it was possible for a white trapper to register and use a line for as much as two years without ever encountering an Indian. Then suddenly an Indian Band would move into his registered trapline and start trapping and hunting. Of course the white trapper was outraged that this should happen to him, and he regarded the Indians as poachers on his trapline. In fact, the Indians were simply operating their ordinary system, moving now into one area and then to another that they hadn't worked for one or several years. Suddenly they encountered extremely hostile whites, and the tension between whites and Indians over traplines mounted very intensively.

Very little has ever been written about this, and not much in fact is known about it. We were very lucky in the course of our research to stumble across some files of correspondence from the 1930's between Fish and Wildlife Branch and other Government agencies, including Indian Affairs, about the trapline problem in northeast and northwest B.C.

This correspondence is an extraordinary window into how the whole trapline business occurred and how it was thought about at the time by those most centrally involved. What we find is comments on the condition of life among the people, comments on the Indian system and how this conflicts with the registration business. Most importantly, this correspondence includes glimpses of how the future of the area was conceived by the people who were registering traplines.

Virtually everyone writing these letters who had first-hand experience of the region, commented on the extreme poverty of the people. Clearly, this is an indication of the misunderstanding of poverty. Indians, because they didn't have fancy clothes and didn't use tents very often, were thought to be completely impoverished. Of course, not having fancy clothes and not using tents is part of a system that allows you to keep moving about on the land. In a way the poverty was a corollary of a cultural richness.

More relevant to the trapline registration business is a series of comments about the way the Indians roamed around the place in an undisciplined and haphazard manner and how this roving was really a nuisance.

One significant quote is from a Mr. G.M. Kerkoff, who was with the Fort St. John Detachment of the Game Department in the early 1930's: "The Indians are roving and have no

permanent place of abode. They have been allotted their reservations, they do not live on them except during a short time in the summer to receive their treaty money." [2]

This was a little cry of protest from one official. Again and again the correspondence turned to the business of Indians insisting that they have freedom of movement and how this was at odds with the principle of registration.

However, the conflict became so intense between Indians and whites that by the early 1930's and certainly predominantly by the middle 1930's, all those who cared about the Indian interests in this region, those who were most obviously sympathetic to Indian needs and concerns in the Game Department and in the Indian Affairs offices were pressing Indians to register.

It was decided clearly by those sympathetic persons that the only hope for the Indian in this region was to register his trapline and thereby secure for himself some basis for harvesting the land in spite of all the pressures that were coming into the region.

Sometimes statements about the needs for Indians to register are made sympathetically. Other times they are made less sympathetically. Let me quote Kerkoff once again in another of his 1933 letters, who, after complaining about the ignorance of the Indians, says:

> "A great improvement would be to place the Indians between some rivers and to make them understand that they were not to trap or hunt outside of these areas....If no such measures are taken for the protection of the white trapper and for the preservation of the game, it will be necessary to bring in all the Indians and their Bands who are found hunting and trapping or on any other area but their trapline." [3]

By the 1930's then, not only was it decided that Indian traplines should be registered, but it was clear that many senior and important officials had decided that Indians had to be confined. The attempt to confine and restrict Indian land use is an endeavour that has continued in various forms ever since.

One of the other concerns behind trapline registration was that Indians should be part of the larger system: they should have the benefits of our kind of economy, and our kind of economy depends upon individual ownership of resources and upon cash flows, production for cash. A trapline is as close as the Indians could come to having an individually owned resource base, and trapping, if it were to become the mainstay of the economy, would of course lead the Indians away from subsistence towards cash and trade.

A consequence of causing Indians to own the resource base individually was that they could then sell it individually. Once registration of traplines to Indians was underway, a whole new threat, a whole new menace came into prominence: whereas the hunting areas were used collectively, traplines were supposed to be used individually.

If an individual sold a trapline, therefore, there was a loss not just to him, but to the entire Band. The progressive restriction of Indian land use was therefore compounded in a very serious manner by the possibility of sale, and many traplines have been sold in that way and have had just that consequence. Indian people today, in this region, speak with pride about their traplines. They feel very strongly about them but they don't represent the idea of an area which is exclusively for one person, nor do they represent the idea that this is a trapping area. They feel, partly because I think they were encouraged so to feel during the registration process, that the trapline is their land, for their exclusive use for hunting and trapping.

In a way, the Indians often understand a trapline as something like a family hunting territory and the combination of traplines is something like a Band hunting territory. This means that when people challenge the Indians for not having trapped for two years on a trapline and therefore clearly not using it and not needing it, they are misunderstanding what traplines are about.

Similarly, when people seek to compensate people for loss of traplines because they are losing the furs from the trapline, they are failing to understand what the trapline is all about. You can't compensate a trapper who thinks that his trapping area is a hunting area by giving him the price of the furs that he would have been harvesting, were he to continue to do so.

There is, therefore, a tremendous confusion over the whole trapline business that exists in the region. When Indians at the hearings got up and said, "Don't spoil our traplines" or "The pipeline is going to wreck our traplines", they weren't thinking simply of martens or squirrel. They were thinking of the assault upon the one area that they feel is still theirs as an exclusive hunting region.

They believe that they have the right and indeed they do have the right to hunt throughout the year on all Crown lands, and they exercise that right, particularly in areas close to the Reserve where there are not registered traplines. But it is the trapline that continues to be a special focus for land-based activities and therefore a special focus for concerns about the future.

When people say, "If we lose our traplines, we will lose everything in the future", they are drawing on the idea of traplines that was established during the registration process and has continued ever since.

Disputes over traplines, especially in 1931 and '32, became so great that a conference was called at Prince Rupert to discuss the whole matter. One important episode in this region concerned the poisoning of Chief Apsassin's dogs by a white trapper.

After the conference in Prince Rupert in May, 1932, a report was filed by C.C. Perry who was at that time the Assistant Indian Commissioner for the whole of B.C. This report was addressed to the whole trapline problem and to its resolution. He argues in his report that thanks to the conference, all problems are now resolved and there can no longer be any basis for complaint against the trapline machinery. He also says that it is necessary to press for further extensive trapping and hunting territories.

Built into Perry's report is the tacit recognition of the fact that Indians were being told that these were hunting territories, a piece of gross deception. In his report, there is also an extraordinarily revealing sentence. He says that all things are now fine, we don't need to worry about problems and conflicts and there is no need to give people anymore hunting lands "until such time as the settlement of that country makes it necessary for the Indians, who have no estate right in their traplines, to move on." [4]

What Perry reveals of course, is that no one high up in the burearcracy took seriously for a moment the idea that the Indians were getting entrenched rights in traplines or in any other part of the land. What Perry's sentence reveals is that the senior people involved took the position that the Indians were going to move on when it suited the settlement frontier and nothing was going to get in the way of that.

Nowhere in our research have we stumbled across a more shocking and disturbing revelation about what actually was going on in this country in the 1930's and thereafter. The progressive restriction of Indian land was not only occuring

as a matter of unbridled and unregulated economic process, it was also occurring with the complicity of the very officials whose task it was to protect Indian people against the impact that would hit them.

iii. The Progressive Restriction Process

It is hardly necessary to say that since the registration process, the story has not been very different and the progressive restriction of the Indian land use base in this area has continued.

The W.A.C. Bennett Dam project provides one more example of how the restriction of the Indian land use base occurred. The W.A.C. Bennett Dam completely flooded hunting and trapping territories of some whites but most importantly, of the Ingenika Indian Band.

New farms were given to white homesteaders who were in the valley, a scheme was devised for provision of substitute moose habitat, and some consideration was given to compensation for loss of traplines, but the Indians were never adequately compensated for the loss of their lands. A 1962 report written by a B.C. Hydro employee who was charged with the job of looking at what was going to happen to the people who lived in the area provides some interesting information. The author is obviously delighted by the trading and trapping activities he sees in the valley. He takes great pleasure in visiting the posts and observing the way of life there, but he quotes an Indian as saying, "By the time the water comes, I find some other place". [5] Once again, the development process proceeds because the people feel confident that the Indians can actually just move on. We don't need to worry about them because they have this flexible adaptable system. They can keep moving on, moving out of the way.

There is no other reference to the Indian interests, and the people whose hunting and trapping territories were flooded by the W.A.C. Bennett Dam now live on the edge of other communities around the area. But the B.C. Hydro employee's report gives some insight into his (and probably many of his colleagues') ideas of what would be a good future for this country:

> "You know, I think this part of the country is going to be a real tourist attraction when the lake is formed. It will be so much more accessible to so many people and they say there are lots of lakes within reach of the big lake with good fishing. We lose one tourist attraction which few have taken advantage of to get another which will be in reach of so many." [6]

Unfortunately, the Indians who lived in the valley didn't have the status of tourists, otherwise their interests might have been taken a little more seriously.

How then do we assess the impact of the industrial project on people here, given the past impact of industrial projects? Insofar as people could, they moved on, they adapted, but all the time they were getting restricted, all the time they are losing more of their land. They don't feel inclined to say too much about it to outsiders. If they suffer, they suffer in silence and out of sight.

The situation now, of course, is very different: people are no longer in a position to move and adapt. Their backs are in a sense to the wall, if the wall is regarded as the Rocky Mountains on one hand, alienation of their land on the other and industrial development on the last. There isn't the possibility of moving and dodging and avoiding impacts. People now are going to be impacted in a way that they have never been impacted before. The process, in fact, is already under way.

REFERENCES

1. See Captain C.F.J. Galloway, The Call of the West - Letters From British Columbia, London: Ernest Benn Limited (Fisher Unwin), 1916. Extracted: Peace River Chronicles, ed. Gordon E. Bowes, Vancouver: Prescott Publishing Co., 1963, p. 289.

2. U.B.C.I.C. Archive: Trapline/Correspondence (See text p. 7, paragraph 1 and 2).

3. ibid.

4. ibid.

5. See C.B. Cunningham, The Fur Trade on the Finlay, unpublished report to B.C. Hydro and Power Authority, June, 1962, Extracted: Peace River Chronicles, p. 352.

6. op. cit., p. 534.

VII.

THE FUTURE OF THE INDIAN ECONOMY

The Total Intrusion Process

i. Sports Hunting

There is one problem that arises when we focus on cumulative impact and when we try to speak about the great networks of roads and seismic cuts and all other intrusions. It's a problem that is to do with building the links in a causal chain. How can we really tie together one particular piece of development and all the other pieces of development in a clear and precise set of causal connections, and more seriously, how can we really articulate how that network of developments impacts the hunting, trapping, fishing and other aspects of the lives of the people?

There are points, of course, where you can trace a causal chain but very often, although we can be sure there are connections, it is difficult to spell them out precisely. There is, however, one point at which all these developments and the infrastructure that lies beneath them impact directly on all the Indian people of the region and that's sports hunting.

When you go into the communities here, sports hunting is one of the things you hear most about and it is certainly an issue that is raised most often with direct and unconcealed anger. Sports hunting upsets and troubles people more than anything else. They relate it to the whole process of development absolutely rightfully because sports hunting depends upon access and not only upon access roads, but upon seismic cuts and trails and everything else.

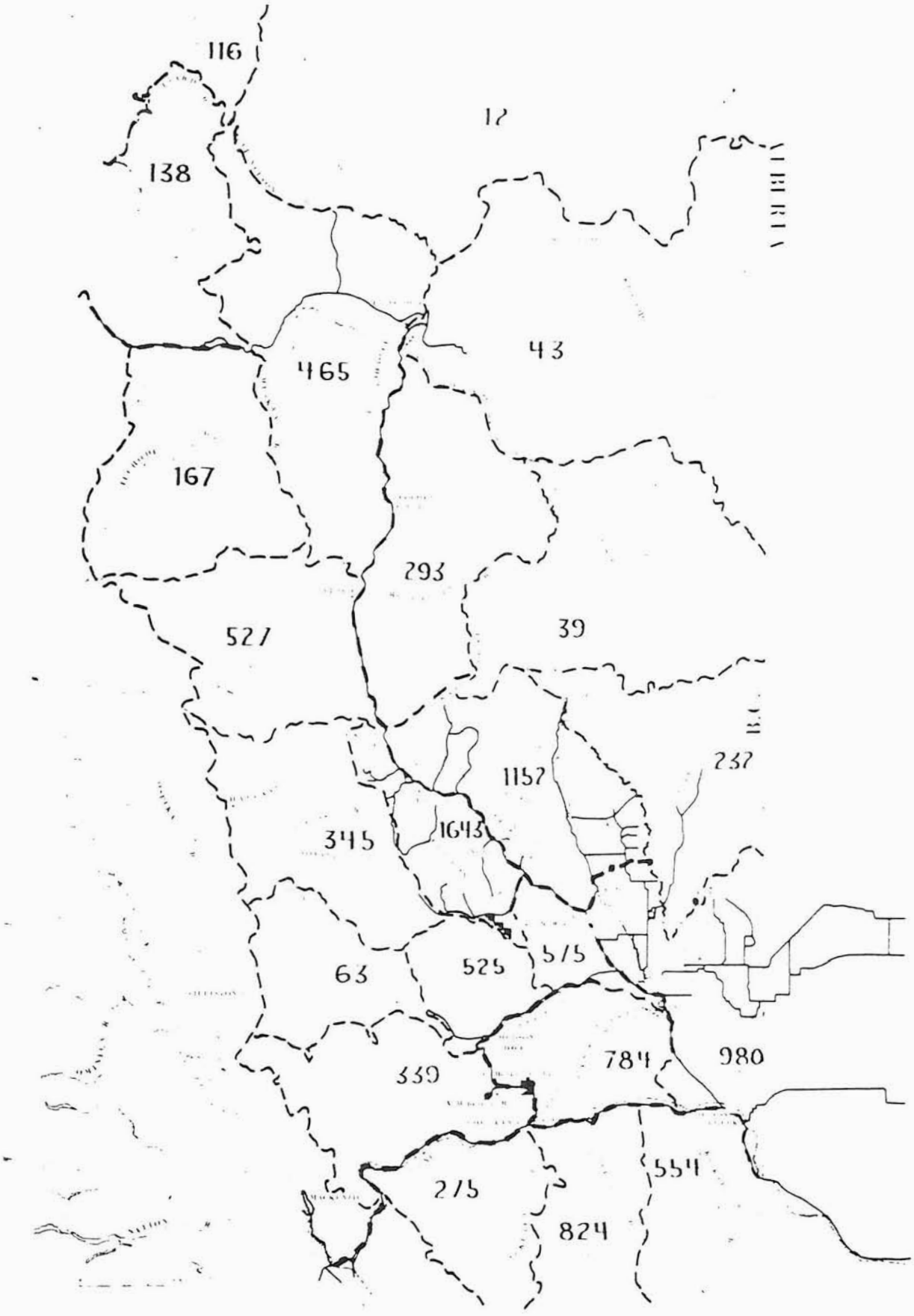
When people talk about sports hunting, they are looking at the cutting edge of development where that cutting edge is

biting into their economic lives. The intrusion of sports hunting is very general and very profound and it is profound in a way that goes beyond numbers or kills. It is to do with the sense of invasion of the woods, invasion of the terrain.

The essence of the Indian peoples' response to white intrusion and development is to back away, to retreat, to keep out of sight. Sports hunters--with the benefit of all the access roads--reach very deep now into the hunting territories of many of the Bands, and it is very hard to keep out of sight of sports hunters. Indian hunters try very hard to avoid sports hunters and very often will go into an area that they have decided to hunt, find too many sports hunters and move to another area. They would rather be in a less favoured hunting zone than have to deal with large numbers of sports hunters. In some places, Indians are frankly scared of sports hunters. They don't trust them, they think they will shoot people, they worry about them getting lost in the woods because they don't know how to orient themselves in different terrain, and imagine all kinds of problems are going to arise because of sports hunters.

When people talk about sports hunting, they talk about numbers. One Elder from Halfway told me that last year about a thousand hunters came into his hunting territory. When he told me that number, I imagined really that this was an expression of his dismay and was in many ways a metaphor of the kind of intrusion that sports hunting represents.

Figure I gives the estimated number of moose hunters for 1977 in this region based on B.C. Fish and Wildlife statistics for B.C. residents only.



ESTIMATED MOOSE HUNTERS – 1977 – B.C. Residents Only

(from B.C. Fish and Wildlife Statistics)

Fig. I

If you add together the number of sports hunters that have entered the core of that Halfway Elder's territory, (south of the Halfway Reserve, along the tributaries of the Halfway River) you find that well over one thousand--and possibly as many as two thousand--sports hunters have been in that area.

It is certainly the case that when that Elder at Halfway told me that a thousand hunters were in his hunting territory, he was understating it if anything. If you look at other areas, the Blueberry people's hunting area to the east of the Alaska Highway you also find that the number of B.C. resident sports hunters could be a thousand or more.

If you now take the Moberley Lake hunting area, bearing in mind that for East and West Moberley large proportions of the hunting area is shared, once again you find that there are probably over a thousand sports hunters in their hunting territory. The numbers are a little short of alarming.

We can sophisticate these numbers a little by looking at the proportion of non-local B.C. moose sports hunters as a proportion of the total number of B.C. residents sports hunters. (Fig. II) By non-local is meant people who travel some distance to hunt in this region and the point of these figures is that we are excluding those persons who live in Fort St. John or Dawson Creek, the people who are hunting perhaps on a day trip or for a couple of days over a weekend. The non-local hunters are coming from Vancouver, Victoria and other urban centres across B.C.

If you look again at the Blueberry area, you will see that over half the hunters in that area are coming from some distance and if you go west of the highway to the Halfway hunting area, it's between seventy and eighty percent in the northern end and somewhat less to the south.

PROPORTION OF NON-LOCAL B.C. MOOSE SPORTS HUNTERS - 1977

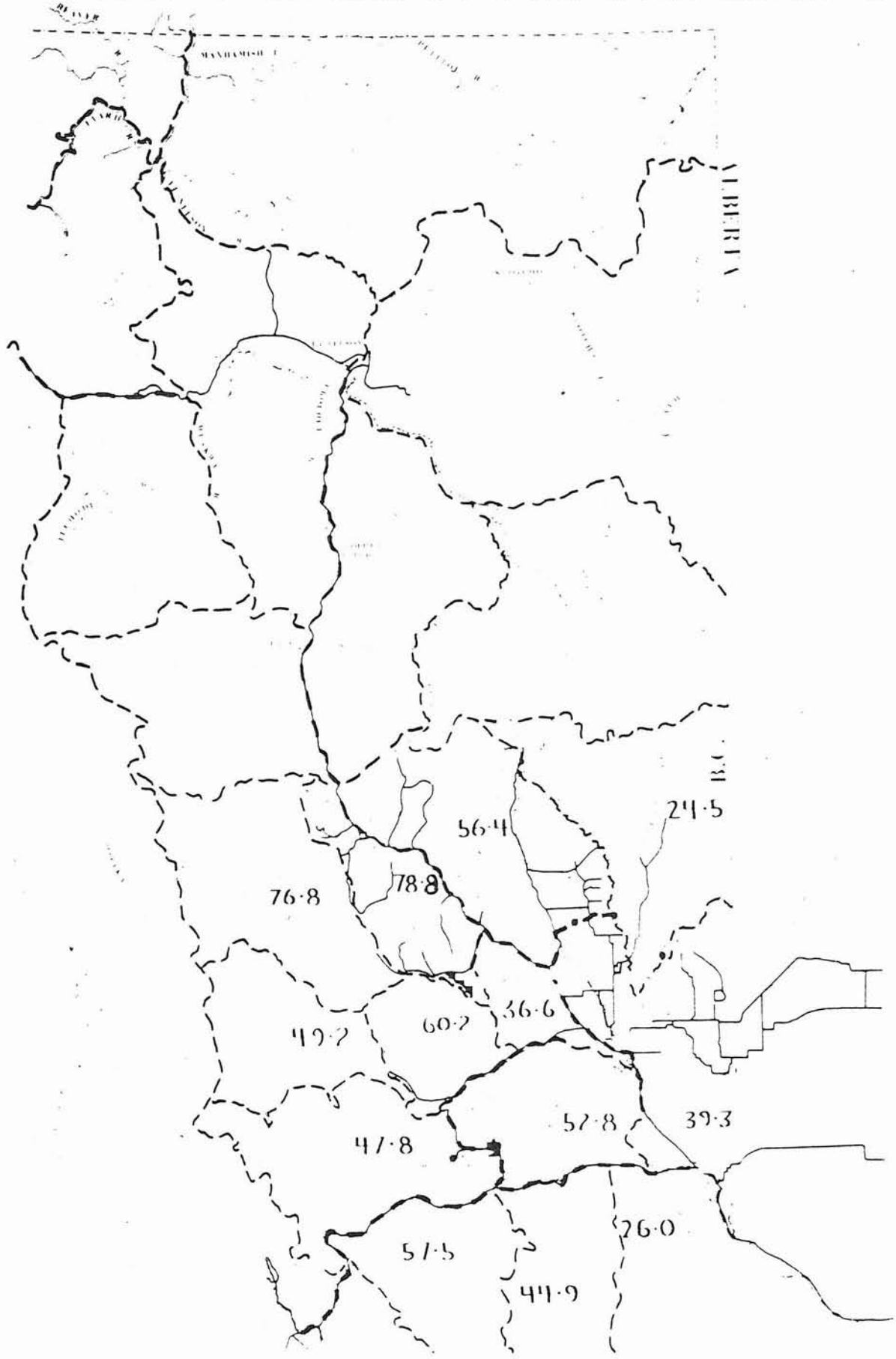


Fig. II

The sports hunting problem, therefore, is not simply a local matter. It's to do with this region being celebrated as one of the great sports hunting areas, plus the fact that this region, especially the area covered by those statistics, has been opened up by the oil and gas industry and secondarily by logging activities.

It is thanks to the oil and gas industry, particularly the seismic cuts, that four-wheel drive vehicles can penetrate deeper and deeper every year into the Indian people's hunting lands. Sports hunters are now entering the core of the Halfway hunters' territories, they are reaching the Chowade River which is the centre of the Halfway people's area and there is now an access road that reaches high into the foothills in that direction, an access road that is being used more and more by people from Victoria and Vancouver.

Looking now at the number of animals the sports hunters are killing, we find over six hundred moose coming out of one part of the Halfway people's hunting territory per annum.

If you take the core of the Blueberry hunting areas you find that about three hundred moose are taken by sports hunters per annum. In the Moberley Lake areas, between three hundred and six hundred moose are killed.

A few further observations about the sports hunting problem need be made. First of all, we have not included any figures for non-resident sports hunters--people who come from out of province or out of the country. Northeast B.C. is very much favoured as an area for people to want to go trophy hunting, both for moose and mountain ungulates.

The pressure that guide and outfitting hunting activities put on Indian people is very hard to assess. There are one or two areas where there is a direct overlap between a guide and outfitter's territory and the Indians' hunting territory and I have heard some accounts of conflict thereby arising.

However, the Indian people in this region are amongst the most important of the guiding groups. In fact they are the prime sources of guides for outfitters and many Indian people told us in the course of our work, that when it comes to sports hunting, they are much happier with the trophy hunting business, although the waste of meat offends them very deeply, but they are happier with it because to some extent, they have some control over it. They can direct the hunters as to which animal they are going to kill and they can control infractions of the hunting rules.

Nonetheless it is quite possible that intensive pressure from the trophy hunting sector affects the breeding stock of ungulates, particularly moose, and over time this might have an impact on the general health of the moose population in the region. That is a speculation that some Indian people have made to me and I find it compelling. Given the problem of habitat in relation to development and the kind of dependence that the Indian economy has on moose, I am sure that the sports hunting data speak for themselves.

ii) <u>The Problem of Mitigation</u>

It should be clear that Terms and Conditions thus far devised do not address the real situation or the actual needs of the Indian people in this region. There has been no process, no effective consultation, no assembly of a data base with the help of which real Terms and Conditions could have been written.

If our research indicates any single major conclusion, it is that further large scale development in northeast B.C. could well entail impacts upon Indian people that they will not be able to withstand. We urge everyone who will be making proposals that seek to mitigate these impacts, to think about a simple analogy: it is one thing to push a person who stands in the middle of a field. It is a very different matter to push a person who stands on a cliff face.

There is in this region the prospect of great suffering and real tragedy. Not only because Indian people are once more being dispossessed and are threatened with a complex of developments that could well complete that dispossession, but because these processes, unless addressed with new intelligence and great resolve, will be accompanied by sickness, violence and death.

Look for a moment at the consequences of the Alaska Highway and its associated developments for the communities of Prophet River and Lower Post. We all know what has happened to Indian people who have lived in such places. There has not just been despondency, intrusion by outsiders, predation upon native women and much associated sickness, there has also been death. Death as a result of suicide, violence and accidents. Indian communities thus affected have violent death rates twenty and thirty times the national average.

Our research results show the progressive restriction of Indian people from the terms of Treaty 8 to white settlement and attendant alienation of lands through trapline registration and the prospect of trapline sales; through more settlements and alienation; through industrial activity and the oil and gas play in the north. The obstacles in the way

of the operation of the hunting and trapping economy, as a result of such restriction, are evident enough.

Much of our evidence speaks plainly enough to the vulnerability of the people in this region at the present time. The impact is going to be upon Reserve populations which are already experiencing difficulties. We should address, briefly, the social, demographic and socio-pathological aspects of life on these Reserves.

Reliable demographic statistics are difficult to compile. Records, until quite recently, were incomplete and present-day Band lists do not distinguish between on and off Reserve populations. Also, many people who are not Treaty or Status Indians have an identity that is still closely bound up with the kind of concerns that we have been raising here.

On the basis of the most reliable figures we could assemble, however, we have put together a demographic profile of each Band. These profiles are revealing. Firstly, in several communities there are serious imbalances in male-female ratios, especially in the 20 to 50 age groups. It appears that women are considerably outnumbered. Perhaps the best way to express this statistically is by taking the number of men in each age group and then looking at how many women there should be accordingly.

This sample method probably understates the number for it fails to take into account the fact that the numbers of men in some age groups is low, largely as a result of loss of status and high accidental death rates. But even with this tendency to understate the difference, the results are startling.

For all age groups 15 years and over, the number of women is between twenty-five and thirty-five percent less than it should be. It is particularly startling to find that in this respect, there is no very great difference between communities most dependent and those least dependent on wage employment.

In the case of Fort Nelson, the number is twenty-six percent; for East Moberly, it is 37.5 percent; whereas for Doig and Halfway, the figures are thirty and thirty-five percent respectively.

Along with this imbalance between adult men and women, there are also things to be said about the overall age structure. The proportion of population aged 19 or under varies little between the Reserves in this region. It is between forty-two percent and fifty-five percent. For the on-Reserve population of the region as a whole, in fact, the figure is almost exactly fifty percent.

By comparison with Indian communities in other parts of the country, this is a rather low percentage. However, most interesting of all is the discovery that there are significantly fewer children aged 0 to 9 than aged 10 to 19. In fact, the numbers for all Bands are 193 in the 0 to 9 group and 222 in the 10 to 19 group. Moreover, there are fewer in the 0 to 4 group than in the 5 to 9 group. In fact, the 5 to 9 group outnumber the 0 to 4 group by almost two to one.

The population pyramid for all the region's Bands indicates in very general fashion, these findings. The pyramid is shaped by demographic vulnerability. Even if we made allowances for the smallness of total numbers and allowance also for trends that are national, it can still

be seen that the population is not in good health. If we look at the data reserve by reserve, it is clear that in each case, there are strong indications of reserve population loss.

This quick overview of the population situation brings us to the most uncomfortable subject that can be raised. The discomfort is moral as well as scientific. It would be irresponsible as well as misleading of us to give reinforcement to racist stereotypes and notions that bedevil social life in this region. To discuss social problems and pathologies in general or to discuss the alcohol question in particular, is to take the risk of providing credibility to those who despise and disregard Native people. On the other hand, however, it may be best to take such issues head on and address directly the source of the stereotype and its validity.

No one can pretend that the problems are not real and it is part of our argument that they could very easily become much worse. Since our findings do so firmly point towards the present vulnerability of Indian people, I would like now to elaborate on some of that data despite an apprehension about ways in which such data can be used against us.

Because I am anxious about such a prospect, I think it would be as well to preface the main substance of this submission with an indication of the sheer scale and historical depth of the stereotype problem in this region.

In 1821, George Simpson, probably the first European to describe the condition of life among the Indians of the Peace River region, spoke in his capacity of Governor of

the Hudson's Bay Company of the people's weakness, pulmonary illnesses, "excessive addiction to spiritous liquors",[1] and apparent extreme impoverishment.

In 1897, Inspector Moodie of the R.C.M.P. reported on the condition of the people along the Gold Rush Trail that was expected to become a route through this region to the Yukon and observed that the Indians were, "a miserable lot, half starved most of the winter, and utterably unreliable... their morals are of the lowest...the murder of the aged and the helpless...is no uncommon occurrence...(and they) were often starving from their inability to procure game..." [2]

In 1912, Phillip Godsell, popular author and adventurer, described the Indians of the Fort St. John region, referring to them as barbarous, primitive, unwhipped, insolent, unfriendly, untamed, pagan, impudent, fierce, cruel and insulting. [3]

In 1913, the annual report to the Department of Indian Affairs observes that the Indians of the Fort St. John Band are impoverished, make no progress, lie completely outside civilization and suffer extremely from drunkenness and tuberculosis. Since Fort St. John and Fort Nelson became growth poles in the industrial frontier, a stereotype of the Indian as sickly, dangerous and drunk has more than persisted.

This local and long-established stereotype is reinforced by the general tendency to believe that the Indians, however marvellous they may once long ago have been, are somehow doomed. Anyone who has lived for much time in this region will have had experiences with Indian people that do not

fit in with the land use and Indian economy which we have described. The stereotype is not, after all, without some basis in reality. Even if it is a stereotype that reflects prejudices and racism, notions imbedded in European views of Native people since the earliest colonization in the Americas, it is nonetheless an idea that received, and still receives, support from much that takes place on the frontier.

When we find that Indian people are widely regarded as indigent, bums, and chronically dependent on white institutions or officials, let us ask a very simple question: when do non-Indians encounter and get to know Indians? The answer to this is a list of reinforcements of the stereotype: in the bars; on the streets or towns where Indians do not live; in situations where whites are often asked for money or for a ride or for a sympathetic ear; in places of employment where in order to be a success, the Indian must demonstrate ability at many non-Indian social and technical skills.

Indians are forever judged in the arenas and by the standards of the dominant society. When they are in these arenas, vulnerable to these standards, when they are in town and away from home, the people of the reserves are highly conspicuous. Unless it is patches of urban bush or empty houses--both of which are used as places of sleep and respite--Indians who come to town are likely to wander in the streets or sit in the bars. Since visits into town often include spree drinking, this visibility encourages the idea that Indians spend much, if not most of their time, dispossessed or drunk.

Ever since trading posts were first established and Indian hunters were transformed into trappers and guides, the periodic visit to the post or white encampment or town has been part of a pattern of Indian mobility and these visits have always been associated with partying. In the early days of the fur trade, groups of trappers would trade their skins once or twice a year and at each such trade, would, if it were available, buy booze. Trading and drunkenness were closely associated with one another.

Indeed, traders in many areas used alcohol as a trading article and as a way of increasing Indian dependence upon trade goods. But the only times whites saw Indians was at trading posts. The origin of the negative stereotype is easy to recognize. Moreover, the association between visits to trading posts or to town with partying or drunkenness has persisted to this day.

In recent times, the problem lies in the simple fact that the reserve residence is more permanent and reserves are located for administrative convenience not too far away from town. Whereas the trading visit 25 years ago may have occurred twice or three times per annum, it is now possible and quite normal for people to come to town once every two or three weeks, and not unusual for a person to stay in town for anything between two and ten days. The proportion of time spent in town has grown, whereas the idea, the tradition of how time in town should be spent has stayed pretty much the same.

For those who encounter Indians in town, in the bars, at the sides of the highway or in the local grocery store, it is all too easy even for the sympathetic observer to become convinced that Indians' self-reliance, pride, self-respect and traditional strength are all things of the past.

Similarly, it is very difficult for those who thus experience Indians to have much patience with any suggestion that the Indian interest must be taken now into full and careful account when it comes to a consideration of the region's future.

Moreover, even on the reserves themselves, there is a tendency for the few whites who spend any time visiting Indian people to find confirmation of the familiar stereotype of Indian life. The reserves in Northeast B.C. are not the Indian homeland. In other regions, it may be true that the reserve is a basis of economic and social life. Perhaps in the case of people dependent on salmon fishing locations that are included within reserve lands there really is an association between homeland and reserve. In nearly all cases in this region, however, they are only a small fraction of the resource base and in many cases, may have ceased to be a part of the resource base at all.

The reserves are also places designed and built by whites. Houses are, for the most part, the standard low rental type with clusters of homes located very close to one another. Men and women seem to be unemployed and it is no secret that much partying is taking place on reserves: there also, the drunks are more conspicuous than the sober.

Furthermore, the kinds of relationships that white officials have with Indian people on the reserves tend to reinforce the idea that Indian people are culturally impoverished and, it may therefore be deduced, have lost real reliance on their own economic system. Here again is a way that the stereotype receives confirmation.

The Indian people in this region do not pretend that the drinking problem does not exist. Indeed, they are deeply

alarmed by it. But they also know the extent to which Indian life goes far beyond anything that non-Indians ever get to see. Many, many aspects of Indian culture and economy are concealed--concealed from criticizing and moralistic eyes. Aspects of Indian life which are the most valued by the people themselves, which relate most directly to Indian identity and self-respect and cultural well-being, continue to be hidden.

In the family, in the homes, in the deep privacy of the bush, the very shyness, the withdrawl, that often pervades dealings between Indians and outsiders, is a mark of adult, mature, wise presentation of self. These are places where it may be possible to discern Indian life as it is now valued by the people themselves. Yet these are not places where it is possible for outsiders to enter easily, if at all. The hidden qualities of life and personality are barricades, directed against outsiders and generally and totally against all forms of intrusion.

Thus, to be hidden, may in some way draw on cultural tendencies that are beyond historical understanding, that are as old as the cultures themselves. They may, in this regard, be related to ideas of wisdom and linked to the manner in which children are raised. Or, they may be corollaries of the flexibility of the system. But withdrawal is also intrinsic to colonial history. Indians have been driven or have found it best to retreat out of sight.

It may be that much of this kind of withdrawal has been possible on reserves, though as already remarked, the reserve itself is part of the colonial situation and the place where alien administration often can reach into everyone's everyday life.

Of crucial importance, of course, is the bush. And the bush, as the land use maps show, comprises large expanses of Crown land. Among the most compelling features of life in this region is the manner in which people change when they leave the reserve or towns and go out on hunting trips. Persons who have been tense and uneasy, relax; the uncertain and shy often become sure of themselves. For virtually everyone, there is a sense of well-being that comes only with activities at which one feels profoundly comfortable and relaxed--practices the Indians know all about and know that they know best.

Contrast between this and the conditions of town or even reserve are all too obvious, and it is not surprising to find, therefore, that as people go into the bush, out on their hunting and trapping trips, they do not drink, are not violent, but are supportive of one another, disciplined and relaxed.

The contrasts are astonishing. The skills of men who track animals, make fires and virtually never get lost even in the most difficult of conditions, these skills are real and are shared by almost everyone, young and old alike. All this is not known, not a part of the present day idea of Indians in the area because it is not and cannot be seen. Most whites who have lived up here for many years, maybe all their lives, have never had an opportunity to experience Indians away from the reserve, in the bush.

Experience just does not provide any substantial refutation of the ugly stereotype. It is therefore likely that those most fatalistic or pessimistic about the prospects of the Indian interest, as we have described it, will find it difficult to believe in our data.

But this consideration of the alcohol problem indicates that one major point of our submission is really quite simple. If the pressure on Indian lands, the obstacles to the traditional component in the Indian economy, the disregard for the Indian interest, continue unchanged or unchecked, then we can all be sure that the fatalists will in the end be proved right. Alcohol and its related difficulties are a very real threat. They certainly could engulf native society in this region; what really could happen is that the native people's defence against such an engulfment will be eroded beyond repair.

In our submissions we have repeatedly emphasized the notion of a mixed economic system. The nature of the mix, the balance between its elements varies from person to person and from community to community. There are individuals who try and live a life that is predominantly hunting and trapping. There are other individuals who work as much as they can as slashers or in other sectors of the wage economy.

But the historical process that has formed this mix seems to have been largely one-directional. The wage labour component has gotten larger, while other components have come under increasing pressure. The industrial development frontier emphasizes, reinforces and creates opportunities for jobs, however low these may be on the hierarchy of wage employment.

This same process, reinforced by administrative institutions, undermines the resource harvesting component in the economic mix. Some lands have to be given up. More agricultural settlement and logging reduces the resource base; the oil industry impacts the Indian land-use system. Progressive restriction, along with economies of administrative scale, have made it more and more difficult for people to use or even to reach their land-use areas. Much of our data has spoken to these processes.

It is evident, therefore, that there is no equality between the components in the economic mix and it follows from this that in order to protect the mix--or to protect the possibility of a mixed economy at all--emphasis must be on the one side, and need not be on the other. The inequality needs to be redressed.

Since the idea of tradition and the basis of Indian identity are focused on the resource harvesting component in the economic mix, there are strong moral or political grounds for strengthening these components. But it is more than a question of politics or morality, it is also enjoined by welfare considerations.

Virtually all native people in this region are proud of being Indian. Being Indian means living in or close to a community that maintains certain skills and persists in certain forms of harvesting. Not every individual who is proud of being an Indian necessarily spends a majority of time as a practitioner of these skills or as a resource harvester, but what he wants, including his idea of self-respect, is nonetheless attached to such skills and harvests.

Evidence suggests, moreover, that at present, a majority of Indian people are critically dependent upon the land. Whatever technological and other adaptations have been and continue to be made, the Indian economy rests on the resource harvesting base. The continuing use of this base represents, also, a source of social strength, in particular in the attempt to resist alcohol problems and their related ills.

Members of the Lower Post Band told you that the answer to the alcohol problem lay in a single word, "bush"; yet it now seems, with the prospects of the pipeline and its multiplier

effect on frontier activity, that a host of new obstacles are going to render the maintenance of Indian identity and well-being yet more difficult.

This does not mean that no mitigative measures should focus on employment opportunities and other related economic spin-offs. The point is that if this latter kind of mitigation is the only kind or even the predominant kind, then the imbalance that has gravely damaged the Indian interests in recent times could persist.

In this case, measures or new schemes could aggravate rather than prevent damaging impacts. If the economic mix, if the traditional life as it is now understood is to continue to be a possibility, then the weak or vulnerable components in the mix are the ones that must be fortified. There is a limit to Indian flexibility and a limit to the preparedness to be accommodating.

In many ways the people of this region have their backs to the wall. We must not forget the way in which key figures in key age groups are co-opted, hooked into the semi-permanent and unskilled wage employment sector. There are cash advantages, direct pressures from employers, along with the weakness in the basis of the domestic mode of production. Nor must we forget that when cash is earned in the employment sector, it very frequently happens that the majority of it is spent on alcohol.

Perhaps the greatest irony and the expression of the fundamental problem facing these communities is to be found in that simple fact: The strength of the wage employment economy in the absence of the resource harvesting economy can directly contribute to the suffering and difficulties of the people.

The total intrusion effect is a term sometimes used to characterize this process. It is total, because it is a process that destroys the mixed economy and therefore, causes the life people regard as traditional to be impossible. Yet the traditional, the mixed economy equals the basis for secure material life, identity in the present, and hopes as well as needs in the future. An elaboration of this, the total intrusion argument, is a way of encapsulating the research conclusions.

But where do Terms and Conditions really relate to all this? Let us approach this through a much oversimplified statement of conclusion. If things go on as they are, the vulnerability of the people will get worse. This means that the problems and pathologies referred to will become more serious. It also means that attempts by Indian people themselves to overcome social and economic problems will be extremely difficult, though not necessarily impossible.

If the future means an increased rate of industrial development and the attendant accumulation of impacts, we can be sure that all the problems will intensify. As bad as these problems are in this region, we have but to look at areas where the process of progressive restriction, where the dispossession of Indian people has proceeded far further, to see just how terrible the outcome can be.

It is unfashionable and unpopular for social scientists to make predictions, but it would be irresponsible as well as unprofessional to fail to make them now. There are Indian communities in Canada where the violent death rate is eighty times the national average and where the alcohol problem has engulfed seven out of ten households. If Indians' needs and

concerns in this area go unregarded, if the basic problems of Indian relationships to renewable resources and the mixed economic system in which such resources have an important place are not addressed, we shall find the same horrifying problems in Northeast B.C.

If Terms and Conditions focus solely or primarily on employment opportunities, cash compensation, and on the fortification of the wage labour sector generally, then they will contribute to these problems. Some individuals will benefit in the short run, but in the longer term the majority would suffer. Some people have compared Terms and Conditions of this kind to a doctor who prescribes poison for someone who has been poisoned. This analogy may be simplistic and exaggerated, but it is an analogy that contains a chilling truth.

The nuts and bolts Terms and Conditions, regulatory rules that pertain to the wage employment and related aspects of social and economic life, must be made in a context of Terms and Conditions that address the bases of collective or majority well-being. If these are secured, then nuts and bolts Terms and Conditions could really be beneficial. But a basis has to be established for mitigation. It is not our task to make the appropriate recommendations. That is for the political and regulatory processes.

But, we all know that real political difficulties face anyone who seeks to put in place the kind of Terms and Conditions that really would secure a context, a basis for proper mitigation. If these difficulties are not faced, if there is no plan for the development of a future that speaks directly and firmly to the Indian interest, to the basis of Indian self respect and well-being, then everyone involved will have much to answer for.

Indian people are deeply skeptical about the kinds of things most of us spend our time doing. They mistrust hearings and discussions and new policies and research, but the people in this region have been urged to set aside their skepticism. The Bands agreed to participate in the research and in the hearings. Let us hope that all the work so far done in this regard will not, after all, turn out to have been worse than in vain.

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VIII.

INDIAN RIGHTS WITHIN THE CONTEXT OF TREATY 8

Indian Rights Within the Context of Treaty 8

A large part of the region through which the northern pipeline will pass is within the boundaries of Treaty 8. It is important, therefore to trace the historical and legal relationship between Indian rights and development within the context of Treaty 8.

There is in Canada a long history of the legal recognition of Native rights to lands and resources, sometimes called Aboriginal Rights. Although it is thought by some that the assertion of Native rights is something which has evolved very recently and in some ways is an opportunistic response to development, that is far from the case. That long history of recognition took concrete expression in the 18th Century in the formulation of colonial policy in relation to Indians. The westward expansion in the 18th Century from New England brought settlers into conflict with Indian people. The British, anxious to retain the friendship of the Iroquois Confederacy in the wars against the French, sought to establish a policy which would ensure that the Iroquois maintained their alliance with the English.

That led, in 1763, to what has been called the Magna Carta of Indian Rights, the Royal Proclamation. It reserved to the Indians, all the lands west of the Allegeny Mountains. It reserved that land as their hunting territory.

The history of the recognition of hunting territory has therefore a long antiquity in colonial Canadian legal history. That Proclamation provided that if in the future land was required for settlement or development, a certain procedure should be followed. That procedure required negotiation with Indian people to determine the terms under which their land could be used for non-Indian development. That procedure was in fact the legal basis for the negotiation of Treaties in the 19th and 20th Centuries within Canada.

The Treaties, when they were first negotiated, covered relatively small areas of land. With the expansion westward, the geographical scale of the treaty areas expanded. Treaties numbers 1 to 7 were negotiated in the years after 1870 when Canada acquired the Hudson's Bay territory. They were negotiated for the explicit purpose of opening up the west to settlement and opening up the west to the Canadian Great Railway.

The instructions to colonial governments of the northwest were explicit:

> "You will also turn your attention promptly to the condition of the company outside the Province of Manitoba on the north and west and while assuring the Indians of your desire to establish friendly relations with them, you will ascertain and report to his Excellency the course you may think the most advisable to pursue whether by treaty or otherwise for the removal of any obstructions that might be presented to the flow of population into the fertile lands that lie between Manitoba and the Rocky Mountains." [1]

The Treaties, in other words, were conceived to remove obstructions - the Indians being the obstructions, and Aboriginal Rights being the legal impediment to development. While Treaties 1 to 7 were negotiated to open the west to settlement, Treaty Number 8, the Treaty which covers northeast B.C. was negotiated in order to open the way for the development of oil, gas and minerals existing in this region.

Although Alexander Mackenzie had mentioned in his first journey through this territory that oil was oozing from the banks of what is the Athabasca River, it wasn't until the late 1870's that geological exploration revealed the richness of the petrochemical and mineral resources of this region. An 1877 Senate Committee report on the resources of the Mackenzie Basin indicated that the basin contained:

> "The most extensive petroleum field in America, if not in the world. The uses of petroleum and consequently the demands for it by all nations are increasing at such a rapid ratio that it is probable that this great petroleum field will assume an enormous value in the near future or rank among the chief assets comprised in the Crown domain of the Dominion." [2]

That report of course, throws us forward to the debate we are presently engaged in. Deposits of silver, copper, iron, asphalt and other minerals were also mentioned. The committee also made some very optimistic comments concerning the viability of agriculture on a grand scale throughout the North.

In 1891, there was already sufficient interest in the development of the oil in the Mackenzie Basin to justify the authorization of a Treaty to cover the area. A Privy Council report authorizing the Treaty in 1892 clearly indicated the government's primary motive in signing the Treaty would be to remove the legal impediment formed by Indian title to the region in order to open up the region to development.

The Treaty, however, was not concluded in 1892. It was concluded in 1899. The delay was in part due to political instability of the Federal Government of the day. During these intervening years, however, continuing interest was shown in the Athabasca and Peace regions, particularly in relation to exploration for gold. While reports of the Department of the Interior sought to discourage white people from coming into the area before a Treaty could be signed, in fact there was some considerable intrusion in the 1890's by white prospectors and some white trappers.

In fact, that caused some early problems in relation to law and order. In particular, the Indian people were embittered by the use of poison baits by white trappers in those early years, and reports from the Northwest Mounted Police indicate,

> "The Indians felt it unjust that people who are not owners of the country are allowed to rob them of their living." [3]

Other reports indicated that the Indians were prepared, "to do some shooting" unless something was done immediately to bring the situation under control. The real problems of law and order came in 1898 with the Klondike Gold Rush and that is what precipitated the signing of Treaty Number 8. With the announcement of the gold rush, prospectors flocked north and one of the routes they used was through the Peace and up through the old Fort St. John trail to the Yukon fields.

Charles Mair, who was on the Commission which eventually negotiated the Treaty, described the situation:

> "The gold seekers plunged into the wilderness of Athabasca without hesitation and without as much as by your leave to the natives. Some of these marauders as was to be expected, exhibited a congenital contempt for the Indians' rights. At various places, his horses were killed, his dogs shot, his bear traps broken up." 4

An outcry arose in consequence which eventually would have led to reprisals and bloodshed had not the government stepped in and forestalled further trouble by a prompt recognition of the native title.

An early and ominous sign of serious Indian resistance came in June of 1898 when 500 Indians from Fort St. John refused to allow police and miners to pass through the area until a Treaty was signed. They protested that some of their horses had been shot and that the influx of so many men would drive away fur-bearing animals.

In 1898 the Cabinet granted approval for the negotiation of Treaty Number 8. In 1900 the Deputy Minister of Indian Affairs gave a detailed explanation of why Treaty 8 had been signed:

> "Although there was no immediate prospect of any such invasion by settlement as threatened the fertile belt in Manitoba and dictated the formation of treaties with the original owners of the soil, nonetheless occasional squatters had found their way into the Peace River District. While under ordinary circumstances, the prospect of any considerable influx might have remained indefinite, remote, the discovery of gold in the Klondike quickly changed the aspect of the situation. Parties of white men in quest of a road to the gold fields began to traverse the country and there was not only the possibility ahead of such travel being greatly increased but that the District itself would soon become the field of propsectors who might at any time make such discovery which would be followed by a rush of miners to the spot.
>
> In any case the knowledge of the country obtained and diffused, if only by people passing through it, could hardly fail to attract attention to it as a field for settlement. For the successful pursuance of that humane and generous policy which had always characterized the Dominion in its dealing with the aboriginal inhabitants is of vital importance to gain their confidence at the outset.
>
> For the Indian character is such that if suspicion or distrust once be aroused, the task of eradication is extremely difficult. For these reasons it was considered that the time was right for entering into treaty relations with the Indians of the District and so setting at rest, the feeling of uneasiness which was beginning to take hold of them and lay the foundation for permanent, friendly and profitable relationships between the races." [5]

While Treaty 8 was clearly conceived at one level by the government as a treaty of peace and friendship, it also had the primary characteristic of its predecessors in being a document and a negotiation process whose ultimate purpose was to extinguish the aboriginal title of the Indian residents.

If you look at the document, Treaty Number 8, you find in it a clause which in an all-embracing way seeks to extinguish the aboriginal title of Indian people. It provides that the Indians "do hereby cede, release, surrender and yield up to the government all their rights, titles and privileges whatsoever in the area covered by Treaty 8." [6]

In return for that alleged surrender of the land, the Indians received annual payments of $5.00 per person with additional payments to the Chief or head man; the allocation of the reserves on a formula of one square mile per family of five; the provision of certain agricultural implements and provisions; and the offer of educational assistance.

The treaties also provide that the Indians shall have the right to pursue their usual vocation of hunting, trapping and fishing throughout the tract surrendered subject to such regulations as may be made by the government of the country and saving and excepting such tracts as may be required or taken up from time to time for settlement, mining, lumbering, trading or other purposes.

Now, taken at its face value, that clause together with the rest of the Treaty provisions contained in the document, would seem to be less than a solid or central pillar upon which Indian people could defend their hunting territory and their traditional economy. The historical record, however, is clear that the Indian people did not negotiate Treaty 8 on the basis of what is contained in this document.

The evidence of contemporary historians, people who were there at the time, and the evidence of the oral history of the Indian people makes it quite clear that the Indian people did not understand Treaty 8 as a surrender of their rights. They understood it as a treaty of peace and friendship. The condition precedent to their friendship was the affirmation or recognition of their rights to the land.

The words of Chief Drygeese at Fort Resolution are highly significant as to the Indian perception of what the Treaty was about:

> "If it is going to change, if you want to change our lives, then it is no use taking treaty because without treaty we are making a living for ourselves and our families. I would like a written promise from you to prove you are not

> taking our land away from us. There will be no closed season on our land. There will be nothing said about the land. My people will continue to live as they were before and no white man will change that. You will in the future want us to live like white man does and we do not want that. The people are happy as they are. If you try to change their ways of life by treaty, you will destroy their happiness. There will be bitter struggle between your people and my people."[7]

In particular, it is clear that the Indian people refused to sign the Treaty until they received guarantees that their hunting, trapping, fishing and their freedoms to engage in those activities throughout the region would not be affected, would not be restricted. Indeed the report of a Treaty Commissioner makes it quite clear what was the central negotiating position of the Indian people:

> "Our chief difficulty was the apprehension that the hunting and fishing privileges were to be curtailed. We had to solemnly assure them that only such laws as to hunting and fishing as were in the interests of the Indians were found necessary to protect the fish and fur-bearing animals will be made and that they would be as free to hunt and fish after the Treaty as they would be if they never entered into it.
>
> We assured them that the Treaty would not lead to any forced interference with their mode of life. The Indians were generally adverse to being placed on reserves. It would have been impossible to have made a treaty if we had not assured them that there was no intention of confining them to reserves." [8]

On the basis of the evidence, it seems clear that the Treaty would not have been signed if the Indians had not been given assurances designed to guarantee their traditional economy and freedom of movement. Some evidence indeed suggests

that the Elders insisted that they be protected from competition by white trappers and hunters. Johnny Yahey at Blueberry mentioned that specific fact.

Now, if the Treaty Commissioners had looked upon the guarantees of hunting and fishing and trapping as mere temporary privileges to be suspended at such time as settlement required or other developments required, they conspicuously failed to make that clear at the negotiations. Such a conspicuous failure also characterized the negotiations concerning the surrender of lands.

Even though, from the government's point of view, surrender of Aboriginal Rights, surrender of the Indian interests in the hunting territory was the purpose of the Treaty, the contemporary evidence indicates that hardly any mention was ever made of that. It's interesting to speculate why that should be, why the government would not make it clear as to what was their central position.

Some people have suggested that even had they tried, there would be incredible difficulties in explaining to Athabascan and Cree people the concept by which they would transfer the land to someone else. But apart from that question of the difficulties of linguistics and communication, it may well have been that the Treaty Commissioners saw the surrender of the land, the extinguishment of title as a mere formality of following in the tradition of the treaties on the Prairies.

It may be that they realized that if they made explicit what they were about, the Indians simply would not sign the Treaty.

While Treaty 8 was signed in Northern Alberta and parts of the Northwest Territories in 1899, it was not until 1900 that Indian people within the Peace River region were first approached to sign the Treaty. While the first signing took place in Fort St. John in 1900, not all Indian people signed the Treaty in that year.

Indeed, the evidence suggests that in this region there was considerable resistance to the idea of the Treaty. Johnny Yahey at Blueberry recounts that the government came down several times over several years and there were long discussions until finally his grandfather and his people agreed to sign the Treaty:

> "Finally they got a Treaty because the government promised them not to push Indians around. The government told the Chief no one was going to come down to the Beatton River or to Blueberry River. That is going to be yours." 9

Indeed, by 1907 reports from the Treaty Commissioners of Treaty Number 8 indicate that only half of the Indians in the Fort St. John area had been given sufficient assurances to justify their signing the Treaty. The Slavey Indian people of Fort Nelson were not persuaded to take the Treaty until 1911 and indeed some of the descendants of the Halfway people did not sign the Treaty until as late as 1915.

In none of those later adhesions to the Treaty is there any evidence to suggest that the Indian people understood or accepted the Treaty as a surrender of their rights to their hunting territories. Indeed, quite the contrary. The reports of the Commissioners indicate that it was these Indians who were the most independent and the most insistent on their rights to maintain their traditional economy who expressed the greatest antipathy to the Treaty.

There exists, therefore a clear dissonance between the understanding which government and the Indians have of Treaty Number 8. That dissonance was carried over in later history, as is evident in the history surrounding trapline registration.

The government saw trapline registration as a way to confine Indians, to limit their land use. The Indian people tended to regard registration of their traplines as a recognition of their rights to their traditional hunting territories. But just as the text of Treaty 8 does not entrench the guarantees the Indian people thought they had wrought from the government, so neither does trapline registration provide a basis for protecting the integrity of Indian land use.

As the owner of a registered trapline, you can defend the trapline or hunting territory against other trappers, but you have no basis to defend it against other uses by sports hunters, by logging, by oil and gas and by agricultural development.

While Indian people see their trapping and hunting territories as areas of Indian interest, there is no reciprocal recognition by government of that interest within any legally enforceable framework. Treaty Number 8, as understood by Indian people, should have provided that framework. But, as understood and implemented by government, it has not.

When Indian people say that they want their rights as Treaty Indians reaffirmed and their rights to hunting territorities recognized they are not making a new demand. They are speaking to an understanding of their rights which they have always had.

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