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***An Evaluation Of The Northern Affairs Forest
Management Program - Executive Summary***

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AN EVALUATION OF THE NORTHERN AFFAIRS
FOREST MANAGEMENT PROGRAM

Sector: Forestry

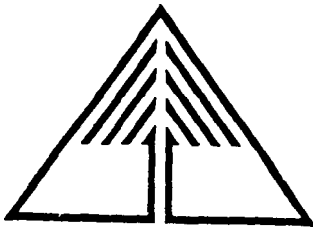
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Analysis/Review

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An Evaluation of the
Northern Affairs Forest
Management Program

Executive Summary



JOHN S. MACTAVISH

and

DENDRON RESOURCE SURVEYS LTD.

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An Evaluation of the
Northern Affairs Forest
Management Program

Executive Summary

Completed by John S. Mactvish and Dendron Resource
Surveys Ltd. for the Department of Indian Affairs and
Northern Development

May 1982

FOREWORD

The following is an evaluation of the Northern Affairs Forest Management Program, undertaken for Evaluation Branch, Corporate Policy Department of Indian Affairs and Northern Development (DIAND). Its main objective is to assess the mandate, objectives, effectiveness, and efficiency of the program, and to provide information for policy development and legislative changes. The study is not a comprehensive review of organizational structure, nor a means of giving specific guidelines for forest management operations.

The Department's forestry function is focussed on timber supply management and fire control. Other aspects of multiple use management have been assigned to other programs in the Department or delegated to the territorial governments. The fire management program is excluded from this study since it was evaluated in 1980.

This is not the first evaluation of DIAND forest management programs. We have, for example, encountered a 1968 evaluation of the Yukon Forest Service (Tuskey and Biddiscombe, Directorate of Program Evaluation) which reached conclusions similar to ours. Also, the DIAND Audit Branch reviewed aspects of the forest management program during early 1982. This project ran parallel to ours, and results were not available during the present study.

Work on the evaluation began in January 1982, with the requirement to complete a final draft before March 31, 1982; discussions and revisions were to take place before the end of May. The schedule, and a project budget limited to only 121 professional person-days including time for travel and presentations restricted the scope and intensity of the evaluation.

The evaluation began with discussions in Ottawa followed by visits to Edmonton, Whitehorse, Yellowknife, Fort Smith and Fort Resolution to meet with officials of DIAND and territorial departments, representatives of the forest industry, native interest groups and individuals. Others, including the provincial forestry organizations in Alberta and British Columbia and the Canadian Forestry Service were also contacted.

Information required was always **willingly** provided. The **Forest Resources Division in Yukon** and the Northwest Territories made a **major effort to** assemble data. Problems, however, arose because of gaps in information. The most serious was probably **the** lack of a clear statement of the goals and objectives **of** the program to be evaluated. Inventory data **were also** weak, **which** prevented a good analysis of wood supply.

We **relied** on a review of **files** and interviews for an assessment **of the timber harvesting inspection** system. **This** information was adequate for the larger operations. **Field audits** were beyond the scope of the study.

Progress on the project was guided by the "Terms of Reference" which are presented **in** Appendix 2. The evaluation team was assisted by an Evaluation Advisory Committee **which** was ably chaired by Mr. Peter **Fillipoff**, **Senior Project Officer in** the Evaluation Branch. **This** Committee contributed many **positive ideas** to the study and "posed a challenge by the diversity of **views** held by **individual** committee members."

Our major recommendations are contained in this Executive Summary. A complete listing of all recommendations from the main report is presented in Appendix 1. Each recommendation discussed is cross-referenced to the appropriate chapter and page of the main report.

In conclusion we would like to again acknowledge the excellent assistance **provided** by all cooperators, and in particular by the Forest Resources Divisions in Whitehorse, Fort Smith and Ottawa. We also received the highest level of cooperation from **representatives** of different departments of the Governments of Yukon, the Northwest Territories, **Alberta**, and **British Columbia**, and from Mr. **Fillipoff**, to whom we reported **during the** course of the project.

John S. Mactavish

Leo Sayn-Wittgenstein
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THE FORESTS OF THE NORTH

The forests of the North play an important role in the lives of northerners, creating and safeguarding environmental values, providing **wildlife** habitat and a setting for the pursuit of traditional lifestyles, as well as being a source of raw materials for wood products. Even today, however, their use for wood production is outweighed by these other uses. In the Northwest Territories, for example an estimated annual \$7.5 - \$8.9 million worth of "country food", mainly caribou and moose, and **\$2.5 - \$5.7 million** worth of furs has been harvested. In 1979, the estimated value of **sawmill production was but** \$1.75 million.

Territorial sawmills do not meet local demands. Green lumber, **poor sawing** and grading standards, **unreliable supply**, and **consumer preferences** for Douglas fir lumber are all **cited** as problems.

In Yukon average annual production has been about 12 million board feet (**68,000m³**) from more than 20 mills, only one of which has a significant capacity. In the Northwest Territories **eight mills produce 7 million board feet** (39,650 m³) annually, over 40 **percent** of **which is** shipped to southern markets. Demand is estimated at 15 **million** board feet (85,000 m³) **in** each territory.

Employment levels have been low. In 1980, for example the forestry sector provided 57 person-years of work in Yukon, 0.6 percent of total full time employment in the Territory. In the **Northwest Territories** about 54 **person-years of labour** are attributed to forestry.

Studies in neighboring provinces have shown that for each job in the forestry sector at least one additional job is created elsewhere in the economy.

There is strong consumer preference for kiln-dried building materials in both territories. Territorial government agencies insist on it. The recent installation of a kiln at Watson Lake, Yukon and the possibility of another in the Hay River/Fort Resolution area, N.W.T. would respond to this requirement. In Yukon this could lead to a quickening of the gradual increase in **production that has** occurred over the past 20 years. Production could double over the next 10 years. In the Northwest Territories a kiln could lead to a doubling of output from two sawmills, with further increases depending on the **availability** of local timber supplies and expansion of milling capacity.

New access to the Liard valley should result in at least one sawmill producing up to 10 million board feet (56,635 m³) for regional markets.

Beyond these modest developments, no **major** forest industry development is **lively** in the foreseeable future.

At the "community level, immediate opportunities exist to increase use of fire-killed timber as a substitute for fuel oil.

Developments that will occur will involve forest management in the **usual** land use conflicts and will affirm the well established role of multiple land use management. The outstanding issue of native land claims need not delay forest management action. A well managed forest will be a requirement regardless of how land claims are settled.

PROGRAM EVALUATION

Forest management mandate - A special obligation.

1. As proprietor, the federal responsibility for the forest **lands** of the North is complete. It is equivalent to the sum of provincial and **federal** responsibilities in the provinces.

2. The **Department of Indian Affairs and Northern Development Act** provides a clear mandate for the control, management, and administration of territorial lands, but does not elaborate **specific policies** respecting forest land management.

3. Sections 13 and 14 of the Territorial Lands Act provide a specific mandate for only one aspect of forest management, the regulation of timber cutting. The Act and the Territorial **Timber** Regulations under it are seriously flawed:

(a) The "terms and conditions" for cutting permits must be in the form of regulations applying to all permits; consequently the Act does not **provide** for regulation of basic elements of timber harvesting pertaining to individual logging operations. Species or volumes to be cut, measures to minimize fire hazard or environmental damage, or other site specific forest management measures cannot be enforced.

(b) The Territorial Timber Regulations concentrate on administrative matters of **permits** and the collection of dues. There are no regulations respecting several essential elements of timber harvesting management, including allocation of long-term **timber rights**, disposal of timber by competitive means, **logging plans**, timber utilization standard or penalties for infractions.

4. Use of annual cutting permits under the Territorial Timber Regulation creates two problems for the forest industry that inhibit industrial development. Without assured wood supplies, operators are **unwilling** to invest in modern plant and equipment and they face difficulties **raising** working capital.

(3.3.3) *IT IS RECOMMENDED that Section 14 of the Territorial Lands Act and the Regulations themselves be amended to provide regulations:*

a) *allowing prescription of terms and conditions for individual permits for those factors that tend to be unique to specific harvesting operations and cannot be prescribed on a territorial basis, such*

as location of operation, area to be harvested, products to be cut;

- b) governing the competitive disposal of timber rights;*
- c) governing the terms and conditions under which permits may be granted for periods longer than a year, and be renewed;*
- d) requiring the submission of logging plans and specifying the subject contents thereof;*
- e) designating primary forest products;*
- f) defining utilization standards;*
- g) governing the transport of timber;*
- h) governing the licensing of sawmills;*
- i) prescribing penalties for various infractions.*

5. **Section 4** of the **Territorial Lands Act** provides for the lease of land. A lease known as a **Timber Harvesting Agreement**, exempt from the **Territorial Timber Regulations**, has been used to overcome their serious deficiencies.

As a minimum measure:

- (5.4.2) *IT IS RECOMMENDED that the Department pursue negotiations with the larger commercial sawmill operators in the Northwest Territories to develop a mutually satisfactory formula for long term Timber Harvesting Agreements modeled after the existing Agreement.*

As an improvement to the Timber Harvesting Agreement concept:

- (3.3.2) *IT IS RECOMMENDED that the Timber Harvesting Agreement policy be maintained with the following modifications:*
- a) that an Agreement area be large enough to contain sufficient timber for 20 years of operation.*
 - b) that a 10 year Agreement be renewable after the first five years and again after the second five year period.*
 - c) that an Agreement specify the operation of a sawmill of appropriate capacity.*

Objectives and policies - They have yet to be defined.

1. The Department's objectives for its Northern Program are:

"To manage the natural resources. . . and to stimulate economic development and employment. . .
To contribute to the protection and enhancement of the northern environment.
To advance the **social**. . . and economic development. . .
with special emphasis on the needs of native
northerners and the protection of the environment."

The Department's **forest management** objectives are:

"a) to provide for a northern forest whose aesthetic qualities, **socio-economic** values, and ecological viability are **maintained at acceptable standards**.

b) to **maintain** a sustained supply of wood for residents and local markets."

These do not **respond** adequately to the Northern Program objectives; nor are they sufficiently specific to be useful as standards for program evaluation.

2. A **third** objective, found in a **Timber Harvesting Agreement, is that:** "the **timber** resources upon territorial lands are harvested to provide employment opportunities. . ."

3. A current **planning objective is** "to develop and implement a northern forest management regime". This implies, and our review confirms, that policies for most components of forest management are either weak or absent.

4. There is no integrated forest management program, only a set of activities with differing priorities in the two regions.

5. Yukon and the Northwest Territories are the only jurisdictions in Canada without comprehensive forest legislation to provide a framework for management and industrial development.

6. The absence of an integrated forest management policy and coordinated program to implement it has wasted public funds and has discouraged development of the forest industry and multiple use of forest land.

- (5.3) IT IS RECOMMENDED that the Department assign sufficient priority to the Forest Resources Division to develop forest management policy framework, a basis for new legislation, for Cabinet approval within one year.
- (4.7) IT IS RECOMMENDED that the Department's legal mandate for forest management be consolidated and expanded to include forest inventory, forest management planning, timber rights disposal alternatives, harvesting regulation, protection, and silviculture in a Northern Forests Act to be modeled after legislation in British Columbia and Alberta.
- (5.5) IT IS RECOMMENDED that regional field programs not directly related to the Department's priorities be abandoned or reoriented to respond to requirements more fully.

Organization - Responsibilities are uncertain..

1. The structure of the Department's organization has confused the lines of responsibility. Five separate units have responsibilities for forest resources; none is directly responsible to another of them. The result has been a failure in policy development and priority setting on subjects where a common approach is mandatory or desirable.

Pending devolution of responsibilities to the territories :

- (5.1) IT IS RECOMMENDED that the Forest Management Division in Ottawa be clearly identified as the centre of forest management policy development and interpretation on the major elements of the program that are common to the two regions.
- (5.1) IT IS RECOMMENDED that the Regional Forest Resources Divisions be identified as the centres of operational forest management policies and interpretations for programs to be implemented by Field Operations staff on a common basis in a territory.

Expenditures and personnel - The data are misleading.

1. Far less is spent on forest management than is implied by budget statistics. Figures provided by the Department for 1980-81 showed a complement of 39.5 person/years, operating funds of \$1,830,358 and \$209,150 for capital allocated to forest management. However, if we subtract resources assigned to fire management and non-forest management functions, then only 22 person/years, about \$896,500 of operating funds and \$209,150 for capital were expended. In addition there was a special transfer of \$150,000 from road construction funds for forest inventory work.

Revenues - Too low!

1. Little revenue accrues to the public purse from commercial logging operations. Over the last five years the average was only \$33,880; Yukon accounted for 87 percent of the total. The low revenue stems from the small size of the industry and the low level of timber dues' (stumpage) prescribed in the Territorial Timber Regulations.

2. Except for the single Timber Harvesting Agreement in Yukon, sawlog stumpage rates are \$0.20 per cubic meter, or about 1 percent of log costs at the sawmill, rather than the more usual 3-5 percent. This represents an indirect subsidy.

(2.3.3) IT IS RECOMMENDED that sawlog stumpage rates be increased to the same level charged on the existing₃ Timber Harvesting Agreement area, currently \$0.45/m³, pending completion of new appraisal methods by Alberta and British Columbia which should be considered for adoption in the Territories.

3. Commercial fuelwood dealers are charged \$0.05 per cubic meter or about \$0.18 per cord. This is an extremely low rate. The amounts involved are not worth collecting.

(2.3.3) IT IS RECOMMENDED that commercial fuelwood stumpage rates in the territories be set at \$0.30/m³ to provide some reflection of product value.

4. Other revenue sources include land rental fees and fire protection taxes from Timber Harvesting Agreement areas. Charges are much lower than those in British Columbia.

- (2.3.4) IT IS RECOMMENDED that the Department undertake a detailed comparison of obligations imposed on holders of Timber Harvesting Agreements in the North with obligations imposed in British Columbia and Alberta to ensure that overall costs are comparable for services rendered.

Forest inventory - The new priority.

1. Present forest inventory information and understanding of growth capability is entirely inadequate for both Yukon and the Northwest Territories.

2. As a result the Department is unable to decide if forest management **should** be based on a simple depletion basis in response to demands, on a controlled depletion basis, or on a sustained yield basis.

3. Potential forest industry investors have turned away because of the lack of inventory data and uncertainty about the Department's forest development policy.

- (6.4) IT IS RECOMMENDED that forest inventory be the priority of the forestry program in both territories during the next three to five years. The most urgent requirements are:

- a) completion of a small scale forest reconnaissance map of broad forest types, based on existing information supplemented by new data,
- b) completion of more detailed management inventories for the important forest areas, starting with zones where lack of information is critical: Watson Lake, Liard (NWT), the Cameron Hills, and areas south of Whitehorse.

- (6.4) IT IS RECOMMENDED that there be a temporary major increase in annual funding of \$300,000 plus three person/years for forest inventory to overcome the large gaps in information through a combination of "in-house" effort and inventory contracts. Following this period, of perhaps five years, DIAND resources for inventory should stabilize at 50% to 60% of the total forest management effort.

Summary of impacts and effects

1. Despite weak legislative authority and a lack of defined departmental policies, the forest resources divisions have provided a federal forestry presence in the North and an informal timber harvest regulation program based on **modern** forestry practices.

2. The forest **industry** in the **Territories** does **not** meet local demands **for the** wood products that could be met. Characterized by inadequate levels of capital investment, it is less efficient than it should be and has failed to provide an attainable **level** of stable employment. These problems are directly related to the Department's forest management program:

a) Lack of forest inventory data makes it impossible for the Department to develop plans for the rational exploitation of potentially merchantable forest areas. The same difficulty confronts potential investors.

b) Yukon and the Northwest Territories are the only parts of Canada without comprehensive forest management policy and legislation to serve as a framework for management and to provide an operating climate for industry.

c) The sections of the Territorial Lands Act relating to the control of timber cutting and the Territorial Timber Regulations under the Act do not provide the authority to regulate timber harvesting through forest management principles.

3. Stumpage rates bear no relationship to the value of products harvested, have no impact on encouraging efficient logging operations, and **annual** timber revenues accruing to the Department are less than **half** what they should be for the volumes harvested.

4. The lack of guiding forestry policy and priorities have resulted in a variety of regional activities that have been wasteful of public funds. Some projects bear little relationship to appropriate priorities.

5. Lack of forest inventory and policy result in an inability to respond to anticipated land use planning or native land claims issues.

6. Continuation of present **forest** management activities could, on recovery from the current recession, lead to **missed opportunities for industrial development** on the one hand, or **over-exploitation and wood shortages** on the other.

PROGRAM OPTIONS

Discontinue - Besides being required by present law, **abandonment** of the timber harvesting regulation function in the North is an untenable concept. **There would** be conflicts among operators seeking the best timber stands, increased waste on logging operations, increased risk of fire, greater environmental damage, and greater instability in the industry.

Continue unchanged - The present situation is wasteful of government resources. It does not satisfy the needs of industry, nor does it respond to requirements of other departmental programs, including land use planning and native land claims settlements.

Minimum change - Forest inventory should be the priority of the forestry program over the next three to **five** years. A temporary **increase** of **\$300,000 per year** and three or four **person/years** should **accomplish** this task.

- It is essential that the Territorial Lands Act and Regulations be amended to allow **the application** of specific "terms and conditions" to individual permits, increased stumpage rates, competitive disposal of cutting rights, permit periods of several years, permit renewal, logging plan requirements, utilization standards, and penalties for infractions.

Recommended change - In addition to minimum changes required, Yukon and the Northwest Territories need forest legislation to define the operating climate for business and the basis for the Department's programs. New legislation should stress the positive options **available** in forest inventory, allocation of timber rights, regulation of harvesting, **silviculture** and forest protection.

PRIORITIES FOR ACTION

1. Commence a planned **inventory** program.
2. Amend Territorial Timber Regulations, including stumpage rates.
3. Amend Territorial Lands Act.
4. Draft a Yukon and Northwest Territories forest management policy framework for Cabinet approval.
5. Draft Northern Forests Act.

Appendix 1

Recommendations

Present Departmental mandate - timber harvesting regulation

IT IS RECOMMENDED that the **Timber Harvesting Agreement** policy be maintained with the following modifications:

- a) that an **Agreement** area be large enough to contain sufficient timber for 20 years of operation.
- b) that a **10 year Agreement** be renewable after the first five years and again after the second five year period.
- c) that an **Agreement** specify the operation of a sawmill of appropriate capacity.

IT IS RECOMMENDED that the **Department** pursue negotiations with the **larger** commercial **sawmill operators** in the **Northwest** Territories to develop a mutually satisfactory formula for long term **Timber Harvesting Agreements** modeled after the existing **Agreement**.

IT IS RECOMMENDED that Section 14 of the Territorial Lands Act and the Regulations themselves be amended to provide regulations:

- a) allowing prescription of terms and conditions for individual permits for those factors that tend to be unique to specific harvesting operations and cannot be prescribed on a territorial basis, such as: location of operation, area to be harvested, products to be cut;
- b) governing the competitive disposal of timber rights;
- c) governing the terms and conditions under which permits may be granted for periods longer than a year, and be renewed;
- d) requiring the submission of logging plans and specifying the subject contents thereof;

- e) designating **primary** forest products;
- f) defining utilization standards;
- g) governing the transport **of** timber;
- h) governing the **lic**ensing of sawmills;
- i) prescribing pens'ties for various infractions.

Forest management objectives and policies

IT IS RECOMMENDED that the Department adopt as primary forest management objective: to stimulate economic development of forest resources and related employment opportunities, with emphasis on the needs of native northerners and within the constraint of environmental quality protection.

IT IS RECOMMENDED that the Department's legal mandate for forest management be consolidated and expanded to include forest inventory, forest management planning, timber rights disposal **alternatives, harvesting regulation, protection, and silviculture** in a North-m Forests Act to be modeled after legislation in British Columbia and Alberta.

IT IS RECOMMENDED that the Department assign sufficient priority to 'he Forest Resources **Division** to develop a forest management policy framework, a basis for new legislation, for Cabinet approval in 1982-83.

IT IS RECOMMENDED that the Department adopt the following primary operating objective:

-to complete a forest inventory with sufficient information on the amount of standing timber and **its** rate of growth on **which** to base fundamental **forest management strategies,**

IT IS RECOMMENDED that the Department consult with those responsible for land, water, wildlife and recreation to determine possible mutual benefits obtainable from multiple-resource surveys in the North.

organization

IT IS RECOMMENDED that the Forest Management Division in Ottawa be clearly identified as the **centre** of forest management policy development and interpretation on the **major** elements of the program that are common to the two regions.

IT IS RECOMMENDED that the **Regional** Forest Management Divisions be identified as **the** centres of operational forest management policies and interpretations on programs to be implement. by Field **(operations staff** on a common basis in a territory.

IT IS RECOMMENDED that **the** Forest Resources Division, **Ottawa, in consultation** with regional offices, prepare a policy directive for **implementing** forest management aspects of the Territorial Lands Act and Regulations, including an interpretation of Regulations and guidelines for the issuance of permits and operations inspections for implementation by district staff.

IT IS RECOMMENDED that the Forest Resources Division, in consultation with regional offices, prepare a policy directive the the forest management, aspects of the Territorial Lands **Act** and Regulations, **covering** the interpretation **of** the Regulations and guidelines for the issuance of permits **and** operations inspections for implementation by district staff.

IT IS RECOMMENDED that regional field programs not directly related to the Department's priorities be abandoned or reoriented to respond to requirements more **fully**.

Revenue

IT IS RECOMMENDED that **sawlog stumpage** rates be increased to the same level charged on the **existing**, Timber Harvesting Agreement area, currently **\$0.45/m**, pending completion of new appraisal methods by Alberta and British Columbia which should **be** considered for adoption in the territories.

IT IS RECOMMENDED that commercial fuel wood **stumpage** rates in the territories be set at \$0.30/m³ to provide some reflection of product value.

IT IS RECOMMENDED that the Department undertake a detailed comparison of obligations imposed on holders of Timber Harvesting Agreements **in the North with obligations imposed in British Columbia and Alberta** to ensure that overall costs imposed in the territories are comparable for services rendered.

Forest inventory

IT IS RECOMMENDED that forest inventory be the priority of the forestry program in both territories "during the next three to five years. The most **urgent** requirements are

- a) completion of a small scale forest reconnaissance map of broad **forest types**, based on existing information supplemented by **new** data
- b) completion of more detailed management type inventories for the **important** forest areas, starting with zones where the lack of information is critical: Watson Lake, **Liard (NWT)**, the Cameron **Hills**, and areas south of Whitehorse.

IT IS RECOMMENDED that there be a temporary major increase in funding for forest inventory to overcome the large gaps in information through a combination of "in-house" effort and inventory contracts. Following this period of perhaps five years. **DIAND** resources for inventory should stabilize at **50 to 60%** of the total forest management effort.

IT IS RECOMMENDED that in the interest of efficiency **DIAND** must accept a long term forest inventory **strategy** and common inventory standards for the Northwest Territories and Yukon. This involves the following elements:

- a) Division of the territories into reconnaissance and management **inventory** zones.

- b) Assembly and updating of all reconnaissance information. Reconnaissance map should be updated as information becomes available.
- c) A long term schedule for the progress of forest inventories and a decision on the re-measurement cycle for management inventories.
- d) No gaps or overlap between surveys of neighboring areas.
- e) Minimum standards and common definitions of inventory terms, so that the results of individual surveys can be added to provide meaningful totals. The expected results, but not necessarily the survey methods, should be standardized.
- f) Formal quality control standards should be set for field work, mapping and photo interpretation, as they have been in other major inventories. These standards should be applied for internal quality control and for acceptance of work done under contract.
- g) The forest inventory organizations should work more closely with other resource survey programs which often cover the same ground with different objectives. A minimum requirement is to have other surveys accept and map according to the forest inventory definitions of "forest land", "productive forest land" and major forest cover types.

IT IS RECOMMENDED that DIAND accept a long term forest inventory strategy and some common inventory standards for the Northwest Territories and Yukon. This involves the following elements:

- a) Division of the territories into reconnaissance and management inventory zones.
- b) Assembly and updating of all reconnaissance information. Reconnaissance maps should be updated as information becomes available and should combine forest inventory and forest fire information.
- c) A long term schedule for the progress of forest inventories and a decision on the re-measurement cycle for management inventories.
- d) No gaps or overlap between surveys of neighboring areas.
- e) Minimum standards and common definitions of inventory terms, so that the results of individual surveys can be added to provide meaningful totals. The expected results, but not necessarily the surveys methods, should be standardized.

- f) Formal quality control standards should be set for field work, mapping and photo interpretation, as they have been in other major inventories. These standards should be applied for internal quality control and for acceptance of work done under contract.
- g) The forest inventory organizations should work more closely with other resource survey programs which often cover the same around with different objectives. A minimum requirement is to have other surveys accept and map according to the forest inventory definitions of "forest land", "productive forest land" and **major** forest cover types.

IT IS RECOMMENDED that to meet the inventory priorities the following increases in resources will be required:

	<u>Ottawa</u>	<u>Yukon</u>	NWT
Professional Person/Year	1		1
Technical Person/Year			1.
Inventory Contracts		\$150,000	\$150,000

Terms of Reference
Forest Resource Management Evaluation

INTRODUCTION

The forests in the Yukon and Northwest Territories are managed by the Northern Affairs Program of the Department of Indian Affairs and Northern Development (DIAND). In the Yukon some \$7 million worth of lumber and \$1 million worth of firewood are produced each year. In the NWT the comparable figures are \$7.5 million and \$.25 million respectively. There are no pulp mills in the territories.

The management of this resource is done by staff both in Ottawa and the two Regional Offices located at Whitehorse and Fort Smith. Existing legislation addresses primarily the subject of timber permits.

The cost of managing this resource was about \$2 million in 1980-81. Some \$16,000 in direct revenues (stumpage) were collected. There are many additional benefits in the form of jobs, free firewood, etc.

EVALUATION PURPOSE

There is a requirement to evaluate this function to provide input to policy development and possible legislative changes. Regardless of whether these changes take place the evaluation is anticipated to lead to improvements such as in strengthening objectives, goals, and effectiveness of the present program.

There is a possibility that this function may be transferred to the territorial governments. Both DIAND and the two territorial governments agree that the evaluation is essential regardless of who has the final responsibility when the evaluation is completed.

There are two specific exclusions from this review:

- forest fire management as this had been studied in 1979-80; and
- organizational considerations relating to the existing mandate are being addressed by the Departmental Audit Branch and need not be considered in this evaluation.

EVALUATION ISSUES

1. Legislation

Conflicts, contradictions, or problem in present federal legislation will be highlighted. Forestry legislation (Acts and Regulations) promulgated by the federal government and the governments of Alberta and British Columbia will be reviewed , compared and significant differences noted.

Based on this analysis changes will be recommended as follows:

- minimum additional or modified policy/legislative requirements to manage the resource. To illustrate the need the potential impact of a large-scale forestry development will be illustrated with and without a change in legislation; and,
- desirable policy/legislation change to facilitate the most effective management of the resource.

In proposing legislative changes the evaluator must take into consideration the following issues:

- land claims negotiations. New legislation now may affect and be affected by land claims discussions;
- implications of the possible transfer of the responsibility to the territorial governments; and ,
- the issue of optimum resource use.

2. Forest Potential (Supply)

How much is known about the resource and how effectively are we proceeding with inventorying it? What are the priorities for the inventory and are they considered to be optimal given potentially conflicting demands, e.g. forestry industry versus land claim information.

There should be specific recommendations, under the two options of (a) within existing resources, and (b) the desirable situation, with respect to the type of forestry information that should be available to managers. This should include both the geographic scope and the level of detail about the resource.

3. Forest Utilization (Demand)

Under existing policy, legislation, regulations and objectives how effectively is and can utilization of the timber cut under permit be controlled, e.g. wastage, Location of cut, etc.

Under existing marketing arrangements, reliableness of supply and quality of product is current territorial demand being met and can it be better met?

What are the current opportunities for achieving incremental increases in territorial, North American and off-shore demand?

What are the renditions required to permit a very large increase in demand, e.g. a pulp mill. Should large-scale projects be considered given existing controls and multiple requirements of forests in the north?

What is the longer term potential of the resource given known and developing technology, e.g. gasification?

4. Impacts and Effects

(a) Direct Revenues

Stumpage returns are very low. The fees should be compared with northern B.C. and Alberta and an appropriate rate recommended. This should include policy options with respect to the responsibility for reforestation.

(b) Direct Benefits

The number of jobs directly related to forestry should be approximated. To the extent information is readily available from the literature the multiplier effect of this primary resource industry should be described.

(c) Other Benefits

To the extent that information is available from the literature indirect benefits from a forestry resource should be described, e.g. recreation, trapping, etc.

(d) Negative Effects

Negative effects that may be caused under the existing mandate should be described.

5. Forestry Resource Management

Under the **existing** mandate, authorities **and management objectives** the effectiveness with **which** this resource is currently **being** managed should **be described** and **improvements recommended** under the following options:

- (a) given existing dollar and person years levels; and,
- (b) with **some incremental** increase in either dollars **and/or person years**.

What would be the anticipated consequences of the discontinuation of this program?

6. Multiple Use

There are other initiatives currently underway that relate to **forestry utilization**, e.g. the Land Use **Planning Commission**. What are the **considerations** and **options for improved management** under a multiple or integrated land use **planning system**?

7. Priority

To the extent that the **conclusion can be** supported **by information** obtained during the evaluation, what priority is being assigned **the management of this resource** in relation to other northern resources? What evidence **is** available **to** suggest a **change** in the priority.

EVALUATION APPROACH

The **review will be done** in **two phases, firstly**, to prepare a **work** plan and **secondly**, to do the review. Following **completion of** the final report there may **be a requirement** for three separate presentations , one **in** each of the two territories **and one** in Ottawa.