MINISTRY OF NATURAL RESOURCES

Forest Management Program

BACKGROUND

The mandate of the Ministry of Natural Resources is the sustainable development of the province's natural resources, including the economies and communities that depend on these resources. One of these resources is Ontario's 700,000 square kilometres of forested land, of which 44% is classified as productive Crown forest.

The Ministry estimates that 40 communities and 90,000 jobs are dependent on the Ontario forest industry. In 1997, the industry shipped \$4.5 billion worth of wood products and \$9.1 billion worth of paper and related products.

Under the *Crown Forest Sustainability Act*, the Ministry is responsible for ensuring the long-term health of Ontario's Crown forests. The Act provides for the regulation of forestry planning, information, harvesting, renewal, trust funds for reforestation, and processing facilities, such as pulp and saw mills. The legislation also includes sanctions and penalties for non-compliance.

With the enactment of the *Crown Forest Sustainability Act* in 1994 and the implementation of a ministry downsizing and reengineering plan in 1996, licensed forest management companies, rather than the Ministry, became directly responsible for forest sustainability planning and were required to carry out forest renewal on behalf of the Crown. The Ministry's role in ensuring the long-term health of Crown forests has progressively become one of overseeing the activities of these companies. For the purposes of forest harvesting and renewal, most of the province's productive Crown forests were divided into 68 units, most of which are managed by forestry companies under the terms of a sustainable forest licence granted by the Ministry.

The Ministry's oversight functions are carried out through its Forests Division and its Field Services Division, with three regional and 25 district offices. The Ministry's Science and Information Resources Division also provides the forest management program with scientific knowledge, information management and information technology.

In the 1999/2000 fiscal year, the Ministry spent \$70.8 million on forest management. In addition, under the *Crown Forest Sustainability Act*, the Forest Renewal Trust and Forestry Futures Trust were set up to fund renewal expenditures made by licensed forest management companies and the Ministry. During the 1998/99 fiscal year, the two trusts paid out \$104.8 million to licensed forest management companies for forest renewal and related activities. All licensees harvesting Crown timber pay forest renewal charges into the trusts. Forest renewal charges are based on a prescribed rate per cubic metre of timber harvested.

Forest management companies also pay Crown stumpage charges into the province's Consolidated Revenue Fund. Stumpage charges are levied according to volume and species of wood cut. For the 1999/2000 fiscal year, stumpage charges totalled \$155.7 million.

AUDIT OBJECTIVES AND SCOPE

The objectives of our audit of the forest management program were to assess whether the Ministry had adequate systems, policies and procedures in place:

- to measure and report on the effectiveness of the program in ensuring the long-term health of Ontario's Crown forests;
- to ensure compliance with legislation and ministry policies and to identify areas requiring corrective action; and
- to ensure that ministry resources were managed with due regard for economy and efficiency.

The criteria used to assess the program were discussed with and agreed to by ministry management. These criteria included: clearly defined objectives for forest sustainability; the collection of appropriate forest management information; adequate planning, monitoring and enforcement; and the accuracy and completeness of the revenue systems.

Our audit was performed in accordance with the standards for assurance engagements, encompassing value for money and compliance, established by the Canadian Institute of Chartered Accountants, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

The scope of our audit, which covered the period up to March 2000, included discussions with ministry staff, a review and analysis of documentation at the Ministry's head office in Sault Ste. Marie and visits to two regional and seven district offices. We also sent a questionnaire to each of the district offices we did not visit.

The Ministry's internal audit group had not issued any recent reports on the forest management program. However, to comply with the *Crown Forest Sustainability Act* and the terms and conditions of an assessment under the *Environmental Assessment Act*, the Ministry is required to carry out an audit of each forest management unit every five years. At the time of our fieldwork, audits, which included the findings of registered professional foresters, had been completed for 20 forestry units. Where appropriate, we relied on those audits to reduce the extent of our testing.

OVERALL AUDIT CONCLUSIONS

The Ministry does not have sufficient information to adequately meet its obligation to report annually on the management of Ontario's Crown forests. In addition, the Ministry has not yet completed the transition from directly managing many aspects of forestry to implementing appropriate oversight and monitoring procedures to ensure that forestry companies comply with

legislation and ministry policy and to ensure that ministry resources are managed with due regard for economy and efficiency. Specifically, we noted the following:

- Although the Ministry is required by the Environmental Assessment Board to report annually on the management of Ontario's Crown forests, the last report issued was for the 1995/96 fiscal year.
- In 25% of the forest management units audited by registered professional foresters, due to a lack of information, the foresters could not assess the *harvest area successfully renewed*, which is a key measure of forest sustainability for the Ministry.
- The forest resources inventories, which are detailed descriptions of forested areas, were over 20 years old in 16% of forest management units. The Ministry cannot readily assess the long-term health of the province's forests unless all inventories are periodically updated. Nevertheless, this was a substantial improvement over our last audit of the program in 1994 when 55% of the units had outdated inventories.
- Although the Ministry received, thoroughly reviewed and approved documentation submitted by forest management companies, such as forest management plans and work schedules, it needed to require forest management companies to provide a more detailed analysis of major variations from planned results, including recommendations for corrective action.
- Due to the lack of markets for some species, forest resources processing facilities often did
 not accept all the wood that they had planned to consume, which hindered plans for forest
 sustainability. Consequently, overall forest management planning needed to incorporate
 more in-depth analysis of the economic factors affecting the industry.
- Independent foresters were generally satisfied with the renewal and maintenance work that
 had been carried out in the majority of the management units they audited. However, the
 Ministry needed to implement corrective action in the remaining units to ensure that
 renewal and maintenance work achieved planned levels.
- In areas where the Ministry continued to perform compliance inspections after the
 responsibility for such inspections had been delegated to forest management companies,
 ministry inspectors found significantly more violations than industry inspectors did. This
 indicated a need to upgrade the forest industry inspection process and develop a more
 formal ministry oversight program.
- District offices were inconsistently imposing penalties for non-compliance and stricter penalties were likely warranted where warnings and less severe measures were not having the desired deterrent effect.
- Since our 1998 financial controls review, the Ministry has significantly reduced the number
 of overdue stumpage charges receivable from forest management companies. However, to
 ensure that forest management companies were submitting all stumpage charges due based
 on timber actually harvested, the Ministry needed to take more effective action to correct
 the widespread problems noted during its stumpage audits of the companies.

DETAILED AUDIT OBSERVATIONS

MEASURING AND REPORTING ON FOREST SUSTAINABILITY

REPORTING REQUIREMENTS

The *Crown Forest Sustainability Act* defines sustainability as long-term Crown forest health consistent with the principles of a large, healthy, diverse and productive forest that conserves ecological processes and biological diversity. Sustainability must balance the economic demands of the production of wood and wood products with the provision of proper environmental conditions for wildlife, protection against floods and soil erosion, maintenance of recreational uses and protection of the water supply. The Act outlines good forestry practices to ensure the proper implementation of appropriate harvest, renewal and maintenance activities.

Under the *Crown Forest Sustainability Act*, the Minister is required to prepare and submit to the legislature a report on the state of Crown forests at least once every five years. In addition, under the terms of an assessment mandated under the *Environmental Assessment Act*, the Ministry is required to prepare an annual report on forest management. The Ministry is bound by the terms of this assessment until the year 2003, at which time the Minister of the Environment will decide whether to extend, amend or require a new environmental assessment.

This annual report on forest management must contain a number of statistics, including a summary of Ontario's forest base, harvest volumes, spending on renewal activities, and a summary of renewal effectiveness, monitoring results and forestry revenues. Such a report would provide the Legislature, the Ministry and the public with timely information with which to assess the management of Crown forests and, where necessary, highlight matters requiring corrective action. However, the Ministry has not prepared the required report since the 1995/96 fiscal year.

Recommendation

The Ministry should report annually on the management of Crown forests, as required under the *Environmental Assessment Act*, so that any necessary corrective action can be taken on a timely basis.

Ministry Response

The Ministry will renew its efforts to produce these reports. The 1996/97 and 1997/98 provincial annual reports on forest management are scheduled for completion by October 2000. The 1998/99 provincial annual report on forest management is scheduled for completion by December 2000. Subsequent provincial annual reports on forest management will be scheduled for completion within 18 months following the fiscal year being reported on. The 1995-2000 state of the forest report is on schedule for completion by December 2001.

MEASURES OF EFFECTIVENESS

Each year, the Ministry develops a number of key performance measures that are reported through the government business planning process. In its 1999/2000 Business Plan, the Ministry proposed a measure of forest sustainability termed *harvest area successfully renewed*. Forest renewal can be achieved naturally (natural seeding) or artificially (direct seeding or planting). To be deemed successfully renewed, a forest stand must require minimum stocking, be composed of the desired species, reach a minimum height and be free of competing vegetation that may impede growth. Forest assessments are conducted by forest management companies to determine the status of the forest condition, the effectiveness of renewal treatments, and the need for and type of remedial action required if an area is not successfully renewed.

The Ministry's Business Plan noted that measurement of the *harvest area successfully renewed* would be based on the results of a sample of independent forestry audits performed during the year. The Ministry made a commitment to achieve a 96% success rate for renewals and report on any major variations in renewal success.

The Ministry reviewed the independent audits of 20 forestry management units that had been completed in 1998 and 1999 and noted that 5 of the 20 units had not reported on *harvest area successfully renewed*. The results for those units had not been reported because insufficient information was available, specific areas had not been tracked over the years or records had not been kept on renewal assessments. The results for the remaining units ranged from 53% to 100% renewal success in the areas surveyed. However, several reviews included qualified conclusions, noting, for example, that only a small portion of the management unit area had been surveyed.

The Ministry plans to accumulate the results of this measure each year so that, after five years, the sample will be large enough to draw overall conclusions on the state of renewal of the Crown forests in Ontario. The Ministry intends to use aggregate results to monitor provincial trends and identify areas requiring corrective action. However, any conclusion on the state of the renewal of Crown forests in Ontario that is based on such incomplete information may be misleading.

Recommendation

To ensure that sound conclusions can be drawn on the state of renewal of Ontario's Crown forests, the Ministry should require that the necessary forest assessments be carried out in each forest management unit.

Ministry Response

The Ministry will take steps to ensure forest managers comply with their reporting obligations for renewal activities. The Ministry will also enhance the assessment of these results to draw sound conclusions on the state of renewal of Ontario's Crown forests.

FOREST MANAGEMENT OPERATIONS

As of December 1999, 45 of the 68 forest management units had been licensed and another 13 units had been assigned the responsibilities of a licensee under prior agreements. The Ministry plans to issue licences to the 13 deemed licensees by the end of the 2000/01 fiscal year. The management units assigned to licensees and deemed licensees accounted for over 95% of forestry activity over the past five years. The Ministry manages the 10 remaining units directly.

FORESTRY INFORMATION

Forest resources inventories classify forests and other areas into broad physical categories, such as productive forests, non-productive forests, non-forested land and bodies of water. Such inventories provide a baseline of information for assessing the health of Ontario forests, developing management plans and monitoring the activities of forest management companies. Traditionally, the Ministry's objective was to update its inventory for each forest management unit at least every 20 years. In 1994, the Environmental Assessment Board made it mandatory to update and make publicly available forest inventory data for each forest management unit.

The 1994 *Crown Forest Sustainability Act* requires the Ministry to produce a forest information manual clearly stating current policies and requirements for forest resources inventories as well as responsibilities for inventory preparation. However, the Ministry had not yet completed this manual to clarify policies, requirements and responsibilities for forest resources inventories.

In our 1994 audit of this program, we reported that approximately 55% of the existing forestry resources inventories were over 20 years old and required updating. We reviewed the Ministry's current forest resources inventories and, while significant progress had been made, in 11 management units, or over 16% of the units, forest resources inventories were over 20 years old and required updating. The Ministry plans to have all inventories updated by the end of the 2001/02 fiscal year. We also noted that the roles and responsibilities of the forest industry in updating these inventories would need to be clarified in the forest information manual.

Up-to-date information is necessary to ensure that the forestry planning process is reliable. For example, an independent audit of a forest management unit by a registered professional forester indicated that the difference between planned and actual harvest was predominantly the result of differences between the inventory description of the forest and the actual conditions that existed on the ground. In addition, ministry staff in the district offices we visited indicated that outdated forest inventories seriously hampered their planning efforts. Furthermore, two of the districts we visited questioned the accuracy of newly completed inventories. Current, accurate information is essential for forestry planning and monitoring.

Recommendation

To comply with legislation and the 1994 requirements of the Environmental Assessment Board and to assist in forestry planning and monitoring, the Ministry should:

 produce the required forest information manual to establish policies regarding the collection of forest resources inventories; and

 implement adequate oversight procedures to ensure that forest inventory information is accurate, publicly available and up-to-date for each forest management unit.

Ministry Response

The Ministry is pleased to have the Provincial Auditor recognize the significant progress made in updating the forest resource inventory. The Forest Information Manual will also describe the roles and responsibilities of the Ministry and the forest industry in ensuring the information remains current in the future.

The Ministry will complete the stakeholder consultation on the Forest Information Manual, and will bring forward the Manual for regulation under the Crown Forest Sustainability Act in fiscal 2000/01. The Ministry will also undertake a review of the delivery of the forest resources inventory, including a quality assurance component, to identify and act upon cost-effective improvements that will meet the needs of forest managers and the public.

PLANNING AND HARVESTING

Under the *Crown Forest Sustainability Act*, forest management plans are to be prepared every five years for each forest management unit. Forest management plans are to contain: an economic profile of the unit, including a forecast of available wood supplies; estimates of harvest volume and sales demand; and a determination of the economic, social and environmental impact of forestry operations. These plans are designed to ensure that the unit is managed on a sustainable basis. The Act also requires annual work schedules that detail the areas to be harvested and the species and volume of trees to be cut. These schedules must be consistent with the forest management plan.

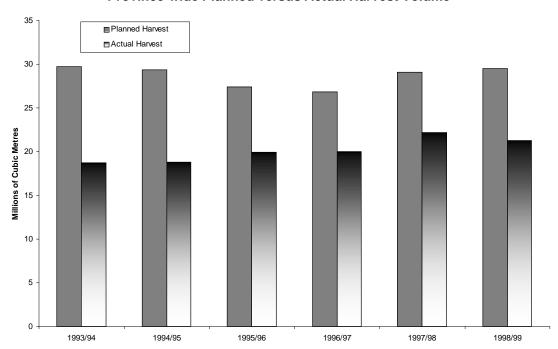
Forest management planning must balance a number of diverse factors to ensure sustainability. For example, over-harvesting has a negative affect on sustainability as renewal should keep pace with harvesting to optimize the resources available. If harvesting of selected species is practised, the makeup of the forest, or its biodiversity, may change, allowing less desirable tree species to dominate. If the forest is not cut as planned, the wood may over-mature and lose much of its merchandisable volume.

We examined the plans and work schedules prepared by forest management companies in seven district offices. All of the required plans had been submitted and were completed in a format consistent with the legislative requirements to ensure sustainability. They had been reviewed in detail and approved by ministry staff. All work schedules had been reviewed for consistency with the forest management plans and properly approved by ministry staff. However, over half the district offices reported that forest management companies had continually and significantly over- or under-harvested.

While there may be valid reasons to over- or under-harvest from one year to the next, the actual harvest over the last six years for each of the 68 management units ranged from 20% to 122% of the planned levels. The vast majority of units were under-harvested, with the primary

reason being a lack of markets for the planned wood supplies. Province-wide, the actual harvest was 72% of planned levels, as noted below:

Province-wide Planned versus Actual Harvest Volume



Source: Ministry of Natural Resources data

To assist in monitoring forest operations, the Ministry requires forest management companies to submit summary reports comparing planned to actual harvesting. These reports are to include an analysis of any variance from planned activity as well as specific conclusions and recommendations for improvement when variances are significant.

We reviewed these summary reports in the seven districts we visited and noted a need for more complete reporting of variations from planned harvest levels. General explanations were usually provided for differences between planned and actual results, but thorough quantitative analyses of the differences and recommendations for improvement were not normally included. More detailed explanations could highlight the significance of each factor and identify areas requiring corrective action.

Recommendation

To help ensure that forest management units are managed on a sustainable basis and harvest operations are carried out in accordance with approved plans, the Ministry should require:

- a thorough quantitative analysis of all substantial variations between planned and actual harvests; and
- specific conclusions and recommendations for corrective action whenever there are significant variations from planned harvest volumes.

Ministry Response

The Ministry will take steps to ensure sustainable forest licensees provide a quantitative analysis of substantial variations between planned and actual harvest levels, and will take corrective actions to address these variances.

The Ministry recognizes that actual harvest levels have been lower than planned. The Ministry has turned this situation into an opportunity, in that it has positioned itself to address:

- the expansion of Ontario's parks and protected areas by 2.4 million hectares, under Ontario's Living Legacy initiative, resulting in reduced areas available for timber harvesting;
- the projected decline in the Crown conifer wood supply, resulting naturally from an aging forest; and
- the surplus of underutilized Crown hardwood species, which are currently being offered to businesses that will create new economic development and employment opportunities.

While these factors will reduce the variance between planned and actual harvest levels in the future, planning, operational and economic uncertainties in the forest products industry will continue to contribute to the variances noted in this audit.

FOREST RESOURCE PROCESSING FACILITIES

The Crown Forest Sustainability Act states that a person shall not operate, construct or modify a forest resources processing facility except in accordance with a licence issued by the Minister. The Minister may issue a forest resource processing facility licence to a person if the Minister is satisfied that the person has a sufficient supply of forest resources to operate the facility. In Ontario there are approximately 120 licensed facilities, including saw mills and pulp and paper mills. Many forest management companies have integrated operations and run their own mills. Licences are granted for five years. The holder of a licence is required to report annually to the Minister detailing information on production, employment and sales.

The licensing and annual reporting process is intended to allow the Ministry to evaluate whether a sufficient supply of resources is available to operate a facility and whether sufficient facilities are available to process the planned harvest. However, during our audit, we noted that 13 forest resources processing facilities were operating without a current licence. We also noted that annual reports were not received by the Ministry on a timely basis and in some cases did not include all the information required.

The lack of markets for some species was a major factor in many mills failing to meet commitments they had made to forest management companies to accept forest resources. The Ministry did not monitor the extent to which mills failed to meet commitments to forestry companies or whether commitments corresponded to expected harvests. For example, one forest management plan outlined commitments from mills to receive forest resources that represented less than 25% of the expected harvest. In general, the forest management plans we reviewed had not adequately assessed future market demand or the forest resource

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requirements of the mills. Planning for long-term forest sustainability is not practical without a reasonable expectation that mill commitments will be honored and forest resources can be processed.

Recommendation

To promote sustainable forest management practices and optimize economic opportunities, the Ministry should ensure that:

- all operating mills are licensed, as required by the Crown Forest Sustainability Act;
- the required annual information reports from mills are complete and received on a timely basis; and
- forest management company plans consider market demand as well as the capacities and requirements of the local mills.

Ministry Response

The Ministry will take steps to ensure all operating mills are licensed and information reports are received. The Ministry will also ensure that forest management plans adequately assess market demand and the forest resource requirements of local mills.

FOREST RENEWAL AND MAINTENANCE

Renewal and maintenance activities are designed to ensure the proper renewal of the forest after harvest or natural depletions caused by fire or insect infestation. Renewal and maintenance include activities such as site preparation, seeding, planting and insecticide application.

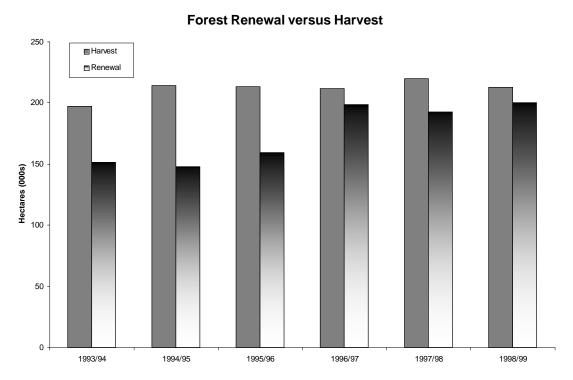
Forest management companies are required to include in their forest management plans documentation of the desired outcome of renewal and maintenance activities, the planned method of reaching that outcome and the standards that will be used to assess success. These activities are to conform to the renewal specifications, standards and other instructions that are specifically designed for each management unit by a registered professional forester.

We reviewed a sample of independent forestry reports completed in 1999 and representing all three regions of the province. These reports assessed forestry operations over the preceding five years, highlighted problems and included recommendations for improving forest renewal and maintenance operations. We noted that, for the majority of the management units they audited, the independent foresters were generally satisfied with the renewal and maintenance work that had been carried out, and they reported that the work performed was consistent with the renewal plans designed for these management units.

However, for the remaining management units, the foresters were generally not satisfied with the renewal and maintenance work that had been carried out over the period of their audit. The foresters commented that, in these units, the lack of renewal and maintenance activity was primarily due to insufficient funding. For example, in one management unit, less than 60% of the

area that had been assessed for natural renewal was regenerating as planned. The poor results were attributed to a lack of funding to perform the necessary work to clear the area of competing vegetation.

On a province-wide level, there has been a significant increase in the total area of annual renewal of Crown land. In addition, as can be noted from the table below, in recent years, renewal has approached harvest levels:



Source: Ministry of Natural Resources data

Based on our visits to district offices and a review of forest management company files, we noted a general lack of overall analysis and explanation of variances between actual renewal rates and renewal targets. In those units where renewal efforts were significantly below planned levels, the corrective action that needed to be taken had often not been identified.

Recommendation

To ensure that all forestry companies manage their units on a sustainable basis and achieve sufficient renewal success, the Ministry should:

- require companies to identify, explain and report on major variations between actual and planned renewal and maintenance activities; and
- identify units where the renewal and maintenance work consistently falls short of target levels and implement corrective action to help achieve renewal success.

Ministry Response

The Ministry is pleased to have the Provincial Auditor note the significant increase in the total area of annual renewal of Crown land. The Ministry will take steps to ensure sustainable forest licensees comply with their forest renewal and maintenance obligations as described in their licences; address the renewal and maintenance variances noted; and take corrective action, where necessary, to ensure renewal success.

COMPLIANCE MONITORING

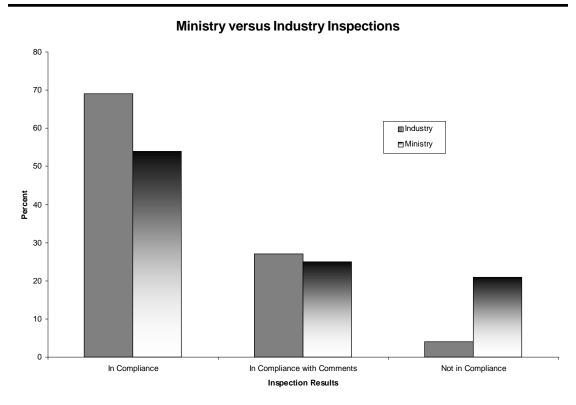
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COMPLIANCE INSPECTIONS

Each licensed forest management company is required to prepare a forest compliance plan to monitor, inspect and report on its forest operations. The plan is designed to ensure compliance with legislation, forestry plans and ministry guidelines and requires the approval of the Ministry. As of April 1, 1998, the lead role for compliance inspections was delegated to forest management companies under the terms of the sustainable forest licence. Previously, the Ministry performed these inspections.

The Ministry's role is to monitor the inspection process of licensed forest management companies to ensure that they carry out their responsibilities as required. However, over a three-month period in 1999, the Ministry performed over 650 inspections in areas where the responsibility had been transferred to forest management companies. In many of these areas, forest management companies had implemented their own compliance plans and inspection cycles.

The results of each inspection were summarized for input into the Ministry's compliance system in terms of "in compliance" (no problems were noted), "in compliance with comments" (minor issues were noted) and "not in compliance" (a legislative transgression occurred). As can be seen from the chart below, in areas where both the Ministry and the forest management companies performed inspections, ministry inspectors generally found significantly more instances of non-compliance.



Source: Ministry of Natural Resources data

We reviewed a number of company compliance plans and found that the majority of the inspection strategies were general and not based on the specific risks associated with the management unit. Also, our analysis of violations over the 1997/98 and 1998/99 fiscal years revealed that half the offences for unlawful harvesting and harvesting without a licence occurred in four districts. Since the results of most ministry and company inspections are recorded in the Ministry's compliance system, this system could be used to help develop a risk-based compliance strategy for the Ministry and forest management companies.

The Ministry spent \$5.2 million during the 1998/99 fiscal year to employ over 40 staff to perform monitoring and inspection functions. Although this continued inspection program often duplicated the work of company inspectors, the primary goal of the inspection process was to ensure compliance, and the situation at the time of our audit indicated a need for a continued ministry presence. Alternatives need to be considered, such as more directly overseeing company inspectors where necessary or performing ministry inspections on a cost-recovery basis.

Recommendation

To help ensure compliance with the *Crown Forest Sustainability Act* through an effective and economical inspection process, the Ministry should:

 identify areas at high risk of non-compliance where ministry inspection staff should focus their efforts;

- where necessary, monitor and upgrade the skills of forest management company inspectors; and
- assess the inspection process as it is currently operating and resolve any concerns that have resulted from the transfer of inspection responsibilities to the industry.

Ministry Response

The Provincial Auditor's findings support the work of the Ministry in developing the compliance reporting system that is just beginning to produce trends and records of forest operations. These records, combined with independent forest audits, will over time support an effective, economical inspection process. The Ministry agrees with the Provincial Auditor's findings and will initiate a review of its compliance and enforcement activities to examine and act upon these audit recommendations.

ENFORCEMENT

To protect Ontario's forests from activities that may impair sustainability, the *Crown Forest Sustainability Act* outlines a number of penalties that can be imposed for violations such as illegal harvesting, wasteful practices and failure to comply with an order from the Ministry. The Ministry can: issue a warning; issue a repair, stop-work or compliance order; or impose an administrative penalty of up to \$15,000 and a stumpage penalty of up to five times the value of the forest resources harvested in contravention of the Act. In the most severe cases, the Ministry can suspend or cancel a licence and the courts can impose fines of up to \$1 million.

The Ministry's enforcement policy encourages district offices to utilize the full range of enforcement provisions in a progressively incremental manner depending on the frequency, severity and significance of the violation. All violations are to be recorded in the Ministry's computerized enforcement system. During the first nine months of the 1999/2000 fiscal year, although information from all districts had not yet been input, the system recorded over 450 violations.

We reviewed the Ministry's enforcement process and identified the following weaknesses:

• The enforcement system did not identify or track repeat offenders. For example, during our district visits, we noted that a forest management company had committed a number of serious violations over the last four years. These violations included unauthorized harvesting, wasteful practices and failure to comply with a compliance order. The company had been assessed administrative penalties five times, received three warnings, three compliance orders and a voluntary compliance request. The penalties were neither based on a complete history of the company's violations nor imposed in a progressively incremental manner. A readily accessible history of each offender would assist ministry staff in imposing penalties appropriately.

- The Ministry used penalties and warnings inconsistently among districts. In some districts, warnings were repeatedly issued for the same infraction when a more severe penalty might have been more appropriate. Our survey of district offices indicated that some ministry staff felt that warnings were only effective in certain circumstances while others felt that warnings, if used properly, were an effective enforcement tool.
- Escalating penalties were often not imposed where appropriate. For example, wasteful practices were often dealt with by issuing a warning or request to voluntarily clean up timber. The Ministry's rationale was that the wasteful practices usually involved small quantities of timber and were generally not a significant violation. However, we reviewed the nine-month period from April to December 1999 and found that unrestrained wasteful practices can accumulate into a significant problem. For example, two districts had over 100 instances of wasteful practices. The vast majority of these incidents resulted in a warning to the forestry company. In these two districts, warnings did not have the desired deterrent effect and more severe measures were likely warranted.

Recommendation

To improve overall compliance with the *Crown Forest Sustainability Act* and protect Ontario's forests from activities that could impair forest sustainability, the Ministry should:

- implement procedures to ensure that the information recorded in the compliance system is complete and can be used for management decisionmaking purposes such as identifying and tracking repeat offenders;
- review the enforcement approaches used by district offices to ensure that penalties are imposed in a consistent manner; and
- analyze the extent of specific violations to identify trends and areas where more severe penalties or other corrective action may be required.

Ministry Response

The Ministry agrees with the Provincial Auditor's findings. The compliance reporting system will produce trends and records of forest operations to support decision making related to enforcement. The Ministry will initiate a review of its enforcement activities and act upon these audit recommendations.

FORESTRY TRUSTS

To provide funding for forest renewal, the *Crown Forest Sustainability Act* established two trusts: the Forest Renewal Trust for renewal activities after harvesting and the Forestry Futures Trust to provide for renewal due to depletion from other causes such as fire, insect infestations and forest management company insolvency. The trusts are assets of the Crown but are administered by a trust company and audited annually by a public accounting firm. All licensed forest management companies that harvest Crown timber are required to pay renewal charges into the trusts based on a prescribed rate per cubic metre of timber harvested.

Trust Fund Activity and Balances for the Year Ended March 31, 1999 (\$ millions)

	Forest Renewal Trust	Forestry Futures Trust
Funds Beginning of the Year	115.7	11.4
Forestry Charges/Other Funding	130.8	21.2
Silviculture/Other Expenditures	(92.6)	(12.2)
Funds Available For Silviculture	153.9	20.4

Source: Trust Funds' Audited Financial Statements

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The trust company makes payments out of the Forest Renewal Trust based on renewal expense information received from licensed forest management companies. Annually, each licensed company is required to submit a final invoice report on the renewal activities for the preceding year. All renewal receipts and disbursements are accounted for by forest management unit and recorded in the name of the licensee. Licensees are required to maintain a minimum account balance for each forest management unit. A committee set up under the Act authorizes disbursements from the Forestry Futures Trust. In addition to disbursements for renewal, payments are also made from the Forestry Futures Trust for other authorized purposes such as performing forest resources inventories and independent forestry audits.

We reviewed the administration of the forestry trusts and noted the following problems:

- As at March 31, 1999, contrary to the trust agreement for the Forest Renewal Trust, 20% of forest management companies' accounts contained less than the minimum required balance, and one company was in overdraft.
- The trusts' accountant reported an arrangement whereby all forestry charges deposited to the credit of the Forest Renewal Trust are transferred to the Forestry Futures Trust after one to two months. As at March 31, 1999, \$3.3 million had not yet been transferred to the Forestry Futures Trust. Consequently, over the preceding fiscal year, the accountant estimated that the Forestry Futures Trust lost \$90,000 to \$120,000 of investment income. The Forest Renewal Trust benefited from this arrangement.
- Contrary to the trust agreement, final invoice reports, which detail the renewal activities for the preceding year, were not consistently submitted to the trustee prior to the final payment.

Recommendation

To ensure that the Forest Renewal and Forestry Futures trusts are administered in accordance with trust agreements, policy and legislation, the Ministry should:

- monitor Forest Renewal Trust account balances to ensure that each forest management company maintains the minimum balance required so that funds will be available for renewal activities when needed;
- ensure that forestry charges are transferred to the Forestry Futures Trust on a timely basis; and

 ensure that payments from the Forest Renewal Trust are made only after the required final invoice report is received.

Ministry Response

The Ministry will ensure that the minimum balance requirements for each sustainable forest licence area account are met by March 31, 2001 and continue to be met every March 31 thereafter.

The Ministry and the trustee have also taken steps to ensure Crown charges are properly transferred to the Forestry Futures Trust and that final payments from the Forest Renewal Trust are made only after the required final invoice report is received. These audit findings will continue to be reviewed in annual financial audits of the trusts.

FORESTRY REVENUE

Under the *Crown Forest Sustainability Act*, the Minister, on behalf of the province, collects stumpage charges from forest management companies for cut and measured timber. The charges are based on harvest volume and tree species and are deposited in the province's Consolidated Revenue Fund. Stumpage charges for the 1999/2000 fiscal year amounted to \$155.7 million.

In 1998, we reviewed ministry financial controls and reported that large overdue accounts receivable were a problem and that it often took six months after timber was harvested for the Ministry to issue an invoice for the applicable stumpage fees. In January 2000, the Ministry's aged trial balance showed that 93% of the balances were under 30 days, and our testing indicated that the average time between measuring timber and invoicing had improved to 3.4 months. The Ministry has made substantial improvements in its administration of stumpage charges receivable.

The Ministry has a program for conducting audits to provide assurance that the province's financial and other interests are adequately protected with respect to the measurement of Crown timber and the related stumpage charges. Forestry management companies are audited at least once every five years.

Some observations reported by ministry audit staff for the 1999/2000 fiscal year included:

- Poor controls over companies' bills of lading systems resulted in loads of wood being undetected and a corresponding loss in revenue for the province.
- A ministry district office's lack of timely reconciliations of a company's bills of lading made it impossible to determine whether the company had met all of its obligations.
- The company had not utilized the Ministry's mechanisms to differentiate private wood from Crown wood. Consequently, there was no guarantee that wood identified as private, which does not require a stumpage charge, was indeed private wood.

These observations were also described as problem areas in a summary report of the audits performed by ministry staff during the 1997/98 fiscal year. This summary report indicated that

in many cases the Ministry's interests had not been adequately protected and, in almost half the audits conducted, the proper amount of stumpage charges had not been paid.

Recommendation

To ensure that the province receives the proper amounts of revenue, the Ministry should systematically address any recurring problems noted through its audit examinations of stumpage charges.

Ministry Response

The Ministry is pleased to have the Provincial Auditor recognize the substantial improvements made in the administration of stumpage charges receivable. With a view to continued improvement, the Ministry will continue with its practice of undertaking wood measurement audits on 15 to 20 companies each year, and will systematically address any recurring problems noted in these audits. It should be noted that the margin of error in assessing Crown charges has been less that 2% in recent years.