

**Nova Scotia Department
of Natural Resources**

**Annual Accountability Report For
The Fiscal Year 2004-05**

Report DNR 2005-02
December 2005

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1 Accountability Statement

The accountability report of the Department of Natural Resources, for the year ended March 31, 2005, has been prepared pursuant to the *Provincial Finance Act* and government policy and guidelines. These authorities require the reporting of outcomes against (Natural Resources') business plan information for the fiscal year 2004-05.

The reporting of department outcomes necessarily includes estimates, judgments and opinions by department management and staff. We acknowledge that this accountability report is the responsibility of department management. The report is, to the extent possible, a complete and accurate representation of outcomes relative to the goals and priorities set out in the department's business plan for the year.

original signed by
Minister - Richard Hurlburt

original signed by
Deputy Minister - Peter Underwood

2 Message From The Minister

I am pleased to present the Department of Natural Resources' annual Accountability Report for the year that ended on March 31, 2005. This is the department's fifth accountability report. It is an opportunity for us to make available to the public information on our 2004-05 accomplishments, relative to the commitments that we made at the start of the year in our 2004-05 Business Plan. Information is also provided on actions taken by the department in response to several other significant issues that arose throughout the year.

Recovery from the damage caused by Hurricane Juan was a focus of the department in 2004-05, and its effects will continue to be felt in 2005-06 and beyond. This extreme weather event provided an example of the degree to which our natural resources are affected by climate and weather, and the type of challenges the department faces when managing our natural resources and operating our provincial parks.

Work on a renewal of our forest and minerals strategies, the preparation of a provincial biodiversity strategy, and the development and implementation of a comprehensive system strategy and plan for provincial parks began in 2004-05. These strategies will provide a policy framework that supports sustainable natural resource management, the conservation of a healthy natural environment, and economic opportunities linked to these resources.

I would like to thank department staff for their efforts during the past year to provide Nova Scotians with programs and services related to our forest, mineral and wildlife resources, our provincial parks system, and our Crown land base. Readers are welcome to visit the departmental website at www.gov.ns.ca/natr to learn more about the many activities carried out by the department and to view information on the many facets of the department's operations.

3 Introduction

This document reports on the priorities and performance measures identified in the department's 2004-05 Business Plan, which can be accessed at <http://www.gov.ns.ca/natr/businessplan/default.htm>.

There are two purposes to this document. First, the document allows the department to meet our legislated responsibility for outcomes reporting required under the *Provincial Finance Act*. Second, and most importantly, the document allows the department to provide the public with a description of its accomplishments and the results achieved during the past year.

The principal responsibility of the department is the management of natural resources (forests, wildlife, minerals, parks) and Crown lands in the province. When reviewing this document, readers should recognize and be aware of several facts.

First, Nova Scotia has one of the lowest proportion of Crown lands of all provinces and territories, at just over a quarter of the province's land mass. Strongly held public expectations and numerous competing demands for the use of this limited public land and resource base has created an on-going issue that the department recognizes and considers in its decision making. Although the province has acquired several significant properties in recent years, the fact remains that a relatively small proportion of this province is publicly owned.

Second, each year in the past our previous accountability reports have provided a caution that the unpredictability of nature is a continuous influence on departmental operations, that weather patterns and climatic conditions vary greatly from year to year, and that this can have a significant impact on departmental priorities and activities, resources and budgets. Hurricane Juan showed just how much of an impact the weather can have on the department's operations. As previously stated, forest fires, insect infestations, wildlife and forest health, park attendance, and the state of departmental infrastructure, such as boardwalks and trails, are all affected by the weather.

Third, due to the location of the majority of our natural resources, the department has a higher profile in the province's rural areas, and a more rural focus. Foundation industries are key contributors to the economic health of the province, particularly in the rural parts of Nova Scotia. There is an ongoing need for the department to heighten public awareness and understanding of the economic importance of our natural resources to both the rural population and the province of Nova Scotia as a whole, and the efforts made by the department to manage our resources in a responsible and sustainable manner.

Finally, the department is responsible for significant infrastructure, such parks, trails, fire towers, buildings, vehicles, and equipment. It is a continuing challenge to replace and maintain this essential aging infrastructure that is required for the department's operations,

especially given the damage caused by several major storms which have occurred in recent years.

4 Department Progress and Accomplishments

The department's broad goals that were included in the 2004-05 Business Plan are listed below. These are to:

- achieve sound natural resources stewardship;
- conserve the diversity of Nova Scotia's natural environment;
- support Nova Scotia's economy through the sustainable development of natural resources;
- improve the quality of life in Nova Scotia; and
- manage the department's financial, physical, human, and information resources effectively and efficiently.

The department's activities were allocated to one of three core business areas. These core business areas were:

- Natural Resources Management;
- Crown Lands Administration; and
- Infrastructure and Support Services.

The following paragraphs report on accomplishments during 2004-05 for each priority listed for each of the three core business areas in the department's 2004-05 Business Plan.

4.1 Natural Resources Management

Accomplishments for this core business area describe actions taken by the department with related to the province's forest, mineral, parks, and wildlife resources.

4.1.1 Implementation of the Forest Strategy

Revisions made to the *Registration and Statistical Returns Regulations* and to the *Forest Sustainability Regulations* took effect in January 2004. Two meetings were held with Registered Buyers to explain the requirements after the revisions to the *Registration and Statistical Returns Regulations* took effect. Also, three regional meetings were held with department enforcement staff to review the internal "compliance and enforcement strategy" to ensure that the requirements of the *Registration and Statistical Returns Regulations* and the *Forest Sustainability Regulations* were being met by Registered Buyers.

The Code of Forest Practice principles document, entitled "Nova Scotia's Code of Forest Practice; A Framework for the Implementation of Sustainable Forest Management", was completed, approved and released to the public in the fall of 2004. This framework

document provides the principles for implementing sustainable forest management in order to conserve and/or maintain forest biodiversity, while enabling the sustainable utilization of forest resources on Crown and private forest lands in Nova Scotia. On Crown lands, the Code will be implemented through the Integrated Resource Management planning process. Work also proceeded on the second stage of the Code of Forest Practice, which is the Guidebook component.

The wood supply analysis is used to assess forest resource utilization opportunities, develop forest management programs, and determine the amount of silviculture required annually to support wood demand. This analysis is conducted using a computer-based model which utilizes current provincial forest inventory information, wood harvest data from the Registry of Buyers, and annual silviculture information compiled under the *Forest Sustainability Regulations*. Internal work on the provincial wood supply forecast was underway during 2004-05 but a final forecast for public distribution and discussion was not completed.

4.1.2 Support the Mineral Industry and Other Geoscience Information Users

Submissions from the first tender call for surface coal resources, issued in December 2003, were evaluated and successful bidders were announced in March 2004. Proponents had one year to submit applications for mineral rights. One mineral lease and one exploration licence have been granted as a result of this call.

Pincock, Allen and Holt was selected as the international consultant to work with DNR to complete the Donkin resource tender. The terms were developed in 2004 and the tender call was issued in December 2004, with closure in March 2005.

DNR staff continue to sit on the steering committee to monitor Devco progress on remediating lands impacted by coal mining.

Amendments to the *Mineral Resources Act* were proclaimed in 2003. A comprehensive review of the Act has been temporarily put on hold pending completion of the Minerals Strategy, which is part of the DNR strategy renewal process that is currently underway. The Minerals Strategy renewal process began with a series of internal consultations in late 2004 and early 2005. Work began on a consultation document that will provide background information for public consultations.

The One Window committee, which was created to facilitate efficient and effective reviews of mineral development projects, met regularly through the year. The department participated as a member of the committee, and provided scientific, technical, and policy advice with respect to other departments who were members of the committee. Department staff also provided technical information and advice to a number of other provincial government departments, including the Office of Economic Development; Energy; Environment and Labour; Service Nova Scotia and Municipal Relations; Tourism, Culture

and Heritage; and Transportation and Public Works, on a variety of issues requiring geoscience knowledge and expertise.

4.1.3 Integrated Resource Management Planning on Crown Lands

Crown lands account for approximately a quarter of Nova Scotia's land area. Integrated Resource Management (IRM) is the department's approach to making land-use decisions for this land. This approach incorporates the broad range of resource values and land uses that exist on Crown lands and enables DNR to take into account the relationships between these various land uses and resource values, and the effects of management practices and decisions on these uses and values.

IRM consists of two components. The first is a planning component which identifies known resource and land-use values, sets goals and objectives, and provides management frameworks for geographic areas of Crown land. The second is a process to review information and making management decisions.

The province is categorized into 39 ecodistricts. A Long Range Management Framework (LRMF) is an ecologically based land use planning document. Eventually each ecodistrict will be covered by a LRMF.

During 2002-03, the department initiated a Long Range Management Framework (LRMF) Pilot Project in the Mulgrave Plateau ecodistrict (that included land in both Antigonish and Guysborough counties). The Mulgrave Plateau Pilot project, including an assessment and evaluation of the project and its process, was substantially completed by the end of 2004-05. However final approval of the LRMF and its public release did not occur. The initiation of the LRMF process for the next ecodistricts to be covered was also deferred to 2005-06.

Ecological management guidelines, which provide the basis for the Long Range Management Frameworks were completed to an internal draft form. Work also proceeded on several special management practices, including practices for wetlands, beaches, coastal values, shoreline access, and park reserves, as well as revisions to an existing special management practice for pine marten. These special management practices relate to specific IRM values identified on Crown land.

4.1.4 Provide an Effective Parks and Recreation Program

The department supports the planning, design, development and operation of more than 124 provincial parks, including campgrounds and day-use facilities. In addition, the department provides opportunities for trail development and other outdoor recreation activities on Crown land.

In 2004-05 the Province acquired several properties that support the continued development and enhancement of the department's parks and recreation program. The acquisitions

included Second Lake (25 ha), Psyches Island (40 ha), East Pennant (16 ha) and Wellington (1 ha).

Within provincial parks management plans are used to set broad development and management objectives. A management plan for McNabs and Lawlor Islands Provincial Park was presented by a Ministerial Advisory Committee to the department. Work continued on several other plans, most notably the gathering of background data at Cape Split.

The department delivered another successful Parks Are For People program with more than 97 events attracting in excess of 23,500 participants. This program also encompassed several events that coincided with the National Parks Day in July. The Campground Host program continued to provide a meet and greet to campers by using a base of volunteers who offered visitor services at six different parks over the summer.

The department unveiled its fourth park poster, an image of West Mabou Beach, that helps to promote the unique environment and scenery within our provincial parks. In addition, the department introduced a newly designed Provincial Park Brochure and several individual park information pamphlets. The new publications provide a more striking example of what parks may offer. A small example of the provision of French-language information and services was the translation of the park rules and emergency information sheet, for use during the 2005 camping season.

The 2004-05 fiscal year was a major rebuilding year following Hurricane Juan, with most parks being restored to pre-Juan condition and opened for public use. A series of information sessions in May and June provided an opportunity for residents in HRM to view proposed changes in area parks, most notably a new concept for Porters Lake Provincial Park.

The department also carried out a major infrastructure re-investment program which was highlighted by the construction of a new comfort station at Battery Park, St. Peters; a new boardwalk at Rissers Beach, Lunenburg County; core facility repairs at Rainbow Haven and Clam Harbour, Halifax County; bridge maintenance at Laurie Park, Halifax County; and the purchase of new land maintenance equipment for many parks throughout the province.

New investment and development was also occurring in conjunction with partnerships. Cape Chignecto Provincial Park facility development was started at Eatonville and trail development work continues at several locations.

4.1.5 Conserve Wildlife and Wildlife Habitat

Twenty four species were listed under the *Endangered Species Act* with the next review of candidate species scheduled for the fall of 2005. A new status report was completed for Eastern white cedar and five new Nova Scotia species were listed by the Committee on the Status of Endangered Species in Canada (COSEWIC). Recovery actions are continuing for species that are currently listed. A major species at risk related project that involved Nova Scotia municipalities was completed. Improvements in cooperation and the coordination of species at risk issues were made through meetings with provincial fisheries (aquatic species) and federal government departments (bilateral agreements).

Monitoring of the abundance and harvest of game species was completed. The results of the monitoring were used in the annual review of the hunting and trapping regulations under the *Wildlife Act*. Adjustments were made to antlerless deer permits and the number of moose licenses was increased slightly. The open season for harvesting furbearers was extended from the end of February to the end of March.

The department continued to be involved in a leadership role in the testing and development of trapping devices for the humane capture of furbearer and other wildlife species and in the implementation of the Agreement on International Humane Trapping Standards at the provincial, national and international levels. The department completed a multi-year consideration of a proposal to introduce wild turkeys to Nova Scotia with a decision not to approve the proposal as a result of unresolved concerns.

The Significant Species and Habitats Database was updated at least once per week based on observations by DNR staff or other naturalists. At least once per week enquiries were answered for purposes of environmental assessments or land acquisitions. Updated versions of the computer files were distributed to department staff for IRM purposes and a generic version of the map was maintained on the Wildlife Division's web site for other land managers. Some researchers or landowners received copies of data under license agreements.

The *Wildlife Habitat and Watercourses Protection Regulations* continued to have high priority in the department's educational efforts. Printed materials were distributed through field offices and staff answered questions regarding the legal interpretation of the regulations. Complaints from the public were investigated by staff and, where warranted, warnings and charges were laid. Using satellite photography, a random selection of sites was made and staff determined the level of compliance with the Regulations.

The department and its partners in the Eastern Habitat Joint Venture (EHJV) delivered projects and activities valued at more than \$1,348,000 to the wetland conservation program in Nova Scotia. A total of 293 acres were acquired through direct purchase and an additional 5,839 acres were acquired by the department through the owners unknown process. Another additional 358 acres were enhanced and brought under landowner agreements.

Agricultural and coastal habitat stewardship to conserve valuable wetland habitat was the focus of the EHJV Wetland Stewardship Program. New partnerships were formed under the *Kings County Wetland Conservation Initiative*, which promotes a dynamic and viable agricultural industry practicing sustainable agro-ecosystem management that conserves and restores species and ecosystem biodiversity at the watershed level.

With its EHJV partners, the department maintained its efforts in the Minas Basin region to directly address shorebird conservation concerns. The *Nova Scotia Shorebird Conservation Project* continued throughout the 2004 World Acadian Congress to address potential impacts the increase in coastal ecotourism activity might have to sensitive shorebird areas such as Grand Pré. In response, the project worked cooperatively with other partners to develop new communication products (Grand Pré outdoor Shorebird Interpretive Pavilion, Grand Pré indoor Shorebird Interpretive Video, Shorebird Interpretive Signs, and print materials), organize public events, and made links with the local tourism industry to promote shorebird and habitat conservation amongst coastal users at sensitive coastal areas.

The department is supporting with Agriculture and Agri-Food Canada and other partners a M.Sc. candidate in a multi-year research projects on wildlife responses to agro-ecosystem management in Nova Scotia. We also continue to collaborate with the Canadian Space Agency and other partners to demonstrate the use of remote sensing technology and new analytical tools as a cost effective measure to update our wetlands inventory.

Fourteen projects were approved for funding under the Habitat Conservation Fund for a total of \$106,000. This money is used by conservation organizations and individuals for the protection and enhancement of wildlife habitat. The Species at Risk Fund continued to receive funding from the sale of conservation license plates but project submissions have not been requested as the fund has not yet reached a sufficient level.

A cooperative undertaking at the Shubenacadie Provincial Wildlife Park with Ducks Unlimited Canada continued to progress with on-site planning, trail location and development of a wetland restoration strategy. Ducks Unlimited meanwhile worked with various levels of government and the private sector to get funding in place. The proposed facility will provide for a new interpretative and educational centre, expanded trail system and public access to an upgraded marsh which will enhance public awareness of wetland habitats and waterfowl. Construction is expected to start in 2005.

The Shubenacadie Wildlife Park further broadened its wildlife educational opportunities by doubling the Ducks Unlimited "Adopt a Marsh" educational program participation and introducing a student outreach program. Staff provided educational programs to approximately 4,500 students/adults from many parts of the province.

A review of existing provincial wildlife management areas and game sanctuaries as well as opportunities for new ones was undertaken. Following an internal analysis by Department

biologists, a web-based public review was initiated with the final deadline for submissions extended to May 31, 2005.

The department, in conjunction with various partners, is supporting an M. Sc. student working on habitat modeling for the provincially endangered American marten population and an M.Sc. student investigating the effects of environmental mercury in river otter and other fish eating vertebrate species, as a component project of the Canadian Collaborative Mercury Research Network. Creative partnering and financial resource generation continues to augment department management and conservation capacity.

The department completed the planning process for the new Wildlife Resources Card and database which will replace the old Hunter Safety Card and Furharvester Training Course Card, with a planned implementation to be completed by December 2005.

4.1.6 Utilize Department Information and Expertise

Clients downloaded 48,668 geoscience related digital products (maps, reports, databases) from the department's website in 2004-05, a 25% increase over the number of downloads in 2003-04. This reflects the level of interest shown by clients in DNR's geoscience information. Department staff also undertook joint mineral development projects with the Strait-Highlands and Southwest Shore Regional Development Authorities and with Enterprise Cape Breton Corporation. Meetings were held with several municipal planning groups in Cape Breton Island to provide them with information and advice on local geology and mineral resources that had potential as community economic development opportunities.

As part of the department's program to remediate abandoned mine openings, a bat grate was installed on an opening at Glenelg to block humans from entering the opening but which permitted the continued use of the opening as a bat habitat. Other openings were remediated in the Stellarton, Montague, Londonderry and Lake Charlotte areas to a budgeted expenditure of \$50,000. This work helps to reduce the risk of death or serious injury to Nova Scotians from falling into these former mine openings.

Department staff made presentations about Nova Scotia's geology and mineral resources to a number of primary and secondary school classes, and to Parks are for People events in 2004-05. Staff also participated in geology-related events at the Joggins Geology Museum (EdGEO workshop for teachers) and at Parrsboro (Rockhound Roundup).

Materials promoting responsible and sustainable forest management were provided to teachers and students at the Natural Resources Education Centre throughout the year. Materials from the Canadian Forestry Association were sent to schools across the province during National Forest Week in May 2004. Woodland owners and other clients were provided educational materials upon request and at specific events such as three woodland conferences, field days, winter courses, and Christmas tree technical sessions.

The department carried out the initial promotion of the Canadian FireSmart program by providing materials to volunteer fire departments, urban planners, emergency management coordinators, and home owners on protecting homes and businesses from forest fires.

4.1.7 Meet National Obligations

The department is a participant in a federal-provincial-territorial initiative to develop a Canadian Geoscience Knowledge Network (CGKN). This initiative will make the information holdings of all Canadian government geoscience agencies available in compatible digital formats over the Internet. Department staff participated in a national workshop to share progress and solutions to technical issues impeding development of the CGKN. The department utilized federal funding to create a CGKN-compliant metadata catalogue of its information holdings as part of the national initiative.

The department is participating in the National Orphaned and Abandoned Mines Program. This program is a joint industry-government initiative to address the legacy of orphaned/abandoned mines in Canada with all the associated issues such as environmental liability, human health concerns and the financial cost of clean-up. The department continued to participate in the work of this committee through a financial commitment and the provision of information on regulatory processes in the province.

The department is participating in a national working group to assess changes to natural resource taxation. This group is considering how recent changes to the federal tax system effect the mineral resource industry. The department is providing input and advice to the Department of Finance with respect to the consideration of an investment tax credit for exploration in Nova Scotia, harmonized with the federal tax credit.

The Department participated in the tax working group deliberations through a number of conference calls and two meetings. Work on the investment tax credit has been suspended following the announcement by the Federal Government in its 2005 budget that it would discontinue the Federal incentive. The province has been participating with other jurisdictions in encouraging the Federal Government to revisit this decision.

Representatives from the department were engaged, along with other Federal/Provincial/Territorial governments, in extensive discussions to formulate a new national fire management strategy, entitled the Canadian Wildland Fire Strategy.

4.1.8 Provide Forest Protection Services

A number of activities were completed related to the department's wildland fire responsibilities. A review of forest fire danger indices, which provide for earlier setting of open fire bans and wood closures, was completed and new danger index levels were established for the central region of the province. A multi-agency media communications committee was formed to coordinate various initiatives. A second draft of the forest fuel classification system was completed and preliminary field checks were started to verify draft results (progress on the project was delayed when the lead staff member transferred to another job within the department). Basic fire risk assessments were completed on the increased fire hazard and threat to adjoining properties in the Halifax Regional Municipality (due to the damage from Hurricane Juan). A new Preparedness Plan for Initial Attack (of forest fires) was also completed.

Several significant projects were also underway related to the department's pest related responsibilities. Cooperative research programs were implemented to track the spruce bark beetle and the brown spruce longhorn beetle. Participating agencies included Natural Resources, the Canadian Forest Service, the Nova Forest Alliance, and the Canadian Food Inspection Agency. The discovery of damage in the Cape Breton Highlands caused by the blackheaded budworm in August 2004 was of significant concern to the department. Natural Resources entered into a research agreement with the Canadian Forest Service to study this insect and identify possible options for dealing with it. Another threat to the province's forests, the pale winged grey insect, was discovered for the first time outside the boundaries of Kejimikujik National Park. Field checks were done to delineate the extent of the damage on the private property outside the Park.

4.1.9 Other Initiatives

Voluntary Planning released the final report and recommendations from the Off-highway Vehicle Task Force in November 2004. The report made 39 recommendations that focused on enforcement, safety, protection of property, appropriate designation of trails, and uniform standards for off-highway vehicles. The department was assigned responsibility for leading an interdepartmental committee in a review of the recommendations and prepare the province's response to the report. Natural Resources was a key department in this initiative due to the implications of off-highway vehicles use on Crown lands and the department's enforcement related responsibilities for Crown lands and wilderness areas. During 2004-05, work proceeded on a review of the recommendations and the preparation of a plan of action for government.

Approval was received to proceed with the renewal of the department's forest and mineral strategies, the development and implementation of a comprehensive system strategy and plan for our provincial parks, and the preparation of a provincial biodiversity strategy. Planning for this initiative and the preparation of background material began late in the year.

4.2 Crown Lands Administration

Accomplishments for this core business areas are primarily related to the department's administration of the Crown land base.

4.2.1 Provide an Up-to-Date and Responsive Legislative Framework

A draft *Trails Act* was prepared in the Fall of 2002 but was deferred due to concerns expressed by some stakeholders, and Voluntary Planning's public consultation and research initiative being conducted on off-highway vehicle (OHV) use in Nova Scotia. Further action, including consultation with trail interest groups, continues to be deferred until the OHV recommendations are released, and government developments and implements its action plan in response to the Voluntary Planning report recommendations.

The department participated as a member of the provincial Private Land Conservation Enhancements (PLaCEs) Committee. The function of this committee is to identify barriers and disincentives to private land conservation in Nova Scotia and to make recommendations that will improve the climate for private land conservation initiatives. Advice was provided by the department that was used to amend the *Special Places Protection Act*, which resulted in the Act becoming a more effective tool for private land conservation.

4.2.2 Improve Opportunities for Land Acquisition

During 2004-05 the department acquired a number of properties. Acquisitions of note announced during the year included more than 1,900 hectares at Cape Sable Island, Baccaro, and Port LaTour in Shelburne County, more than 470 hectares, with 5.5 kilometres of coastline, at Port Bickerton in Guysborough County, and 40.5 hectares at Pyches Island in Halifax, just offshore Taylor Head Provincial Park. Collectively these coastal lands provide valuable wildlife habitat, including lands where several endangered species live.

In 2000, the Crown and the Nature Conservancy of Canada (NCC) entered into a partnership agreement to protect ecologically significant land. This agreement expired at the end of December 2004. Another agreement was reached with the NCC with the Crown providing the NCC with financial assistance of \$300,000 over the next three years. In return, the NCC will transfer lands with an appraised market value of at least \$300,000 to the Crown. The NCC will also acquire land through purchase or through conservation easements with a value of at least \$300,000.

A similar partnership agreement was reached (and signed in the first week of April 2005) with the Nova Scotia Nature Trust (NSNT), where the province has agreed to provide financial assistance of \$300,000 over three years to the NSNT. In return, the NSNT will transfer lands with an appraised market value of at least \$300,000 to the Crown. The NSNT will also acquire land through purchase, through conservation easements, or the provision of educational programs, with a value of at least \$300,000.

Work on the development of a land acquisition policy began in 2004-05. When complete, this policy will provide for consistency and fairness in future land acquisitions by the department.

4.2.3 Streamline Land Administration Processes

Revisions to the Ministerial Land Transaction Regulations were approved, which expanded the limits allowed for acquisitions and allowed for other transactions, such as disposals and leases, within certain limits and conditions. These revisions reduced the amount of “red tape” involved in processing land transactions, resulting in greater efficiency and the more effective delivery of services related to land transactions.

4.2.4 Improve Access to Land Information

The department holds a considerable amount of Crown land information. However, much of this information is paper based, which limits its usefulness. Scanning old field books, conveyancing documents and survey plans continues as part of a multi-year process for improving document protection and providing user access to these archival documents. This will allow improved utilization of Crown land information and facilitate access by users from within and outside of government. In addition, during the past year, Internet access to the Crown Land Property Database was made available to all government offices with Internet access and was also available to internal and external clients on request as digital data.

A project steering committee was in the final stages of planning for the migration of Crown lands into the new Land Titles System and a detailed plan was prepared that called for 14 project staff to commence work on the migration beginning in the Fall of 2005. As part of the process, both the title and graphics portion of each parcel will undergo a quality evaluation to ensure a high level of accuracy prior to migration into the new system.

4.3 Infrastructure and Support Services

A number of internal initiatives were underway during the year to upgrade communications and information technology infrastructure and equipment and to implement systems to improve department wide internal efficiency. This infrastructure and these systems are important because they support the department’s other core business areas and permit activities to be carried out that could not be done previously.

4.3.1 Infrastructure / Equipment Maintenance and Replacement

Several infrastructure related initiatives were completed including: the acquisition and installation of a new file server, additional data storage, and a backup library; the installation of a wireless network at the department's Shubenacadie location to connect the aviation services, mechanical equipment, Hants East area office, and integrated pest management buildings to the data network; the actual networking of nine regional offices and planning for the networking for eight others; and the replacement of about a quarter of the department's computers as part of an ongoing technology refresh initiative.

4.3.2 Implementation of Initiatives to Improve Internal Efficiency

The department's head office converted to the corporate inventory control system. Field offices were not converted for several reasons. Testing of equipment needed for the implementation of the system in the department's field offices was not completed during the year. Also, at the start of the year, several field offices did not have the ability to properly use the system until the infrastructure improvements mentioned earlier were completed.

Information continues to be viewed as a valuable corporate resource which must be accounted for and properly managed. The department's records management program is well on its way to standardizing how its information assets are managed. The department's new electronic records management system was officially launched in Head Office in 2003-04. To prepare for the implementation of this system in the department's field offices, designated staff received training on records management, the software used for the system, creating and managing files, and records transfers and dispositions.

5 Financial Results

The department's 2004-05 net program expenditures estimate (after chargeables, fees and recoveries) was \$59.3 million. Actual expenditures for the same period were \$58.8 million.

Department of Natural Resources - Estimated Budget Expenditures *			
	2003-04	2004-05	
	Estimate	Estimate	Actual
	\$ Millions	\$ Millions	\$ Millions
Total - Gross Expenses	\$61.6	\$62.1	\$64.6
Total - Net Program Expenses	\$59.2	\$59.3	\$58.8
Salaries and Benefits	\$38.6	\$40.0	\$39.7
Funded Staff (in Full Time Equivalents)	847	847	825

- * Note that the cost of services provided through the Resources Corporate Services Unit (financial, human resources, and information technology services) to a number of other government departments and agencies is included in the department’s budget.

6 Performance Measures

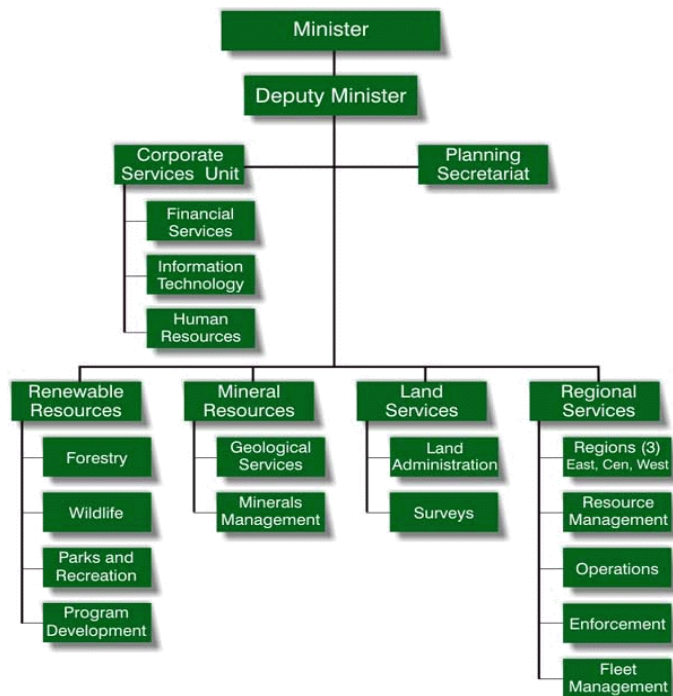
The department has identified a number of performance measures that help track our success in meeting our goals. Information on each of our measures is provided at the end of this document in an appendix. A brief write-up on what each measure tells us, where we are now for each measure (2004-05 results), and where we want to be for each measure (future target values and target years) is provided in this appendix.

The department intends to undertake a thorough review of the current set of performance measures included in our business plan and which are reported on in our accountability report, with any changes to be incorporated in the 2006-07 business plan.

7 Supplemental Information

During 2004-05, the department had broad responsibilities for the management of forest, mineral, parks and wildlife resources, and the management of Crown lands. Nova Scotia’s natural resources provide significant economic, social, cultural and environmental benefits for all Nova Scotians and are one of the province’s features that make it an attractive place to live, do business in, and visit.

The department’s organization chart is shown to the right. The department consisted five branches as well as the Resources Corporate Services Unit (RCSU). The RCSU provides financial, human resources, and information technology services to the Department of Natural Resources, several other provincial government departments, and a number of agencies, boards and commissions.



Appendix - 2004-05 Performance Measures

Crown Land with Long Range Management Frameworks in Place

Just over one quarter of the province is comprised of provincial Crown lands. One key responsibility of the government is to manage this land wisely. Long-range management frameworks (LRMF) are being developed for all provincial Crown lands administered by the Department of Natural Resources. (Natural Resources is the department that administers most of the province's provincial Crown lands.)

What does the measure tell us?

Long-range management frameworks are being developed to provide a framework for Crown land management and land use decisions. These frameworks will provide a database of information and features for the area included within the plan, and the longer term objectives and goals for the planning area. The frameworks will recognize and consider the special land use features and values and the various interests in the use of Crown lands. These LRMFs will be important tools to help support sound decision making related to use and management of Crown lands. The measure provides a clear indication of the department's progress in getting these frameworks in place.

Where are we now?

The province is categorized into 39 eco-districts. No LRMFs were in place as of March 31, 2005. The LRMF for the Mulgrave Plateau eco-district was substantially completed but was not finalized by the end of the year. This LRMF will be used as a model for the preparation of subsequent frameworks for other eco-districts.

Where do we want to be?

Eventually each of the province's 39 eco-districts will be covered by LRMFs. The department identified a target of 50% of Crown land with LRMFs in place by the end of 2004-05. This target was overly ambitious and we did not reach it by 2004-05. Our new target for this measure is to have 100% of Crown land to be covered by long range management frameworks by March 31, 2010. Note that these LRMFs are not static documents; once the initial LRMFs are in place they will be subject to periodic reviews and potential revisions to take into account new information and changing circumstances.

“Species at Risk” Partnerships in Place

The Province is committed to the conservation and protection of species at risk provincially and nationally through the *Nova Scotia Endangered Species Act* and the *Accord for the Protection of Species at Risk*. Many of these commitments are made through voluntary stewardship efforts that are linked to government programs. These partnerships are key to the conservation of species at risk and other components of environmental health and contribute to sound natural resources stewardship”.

What Does the Measure Tell Us?

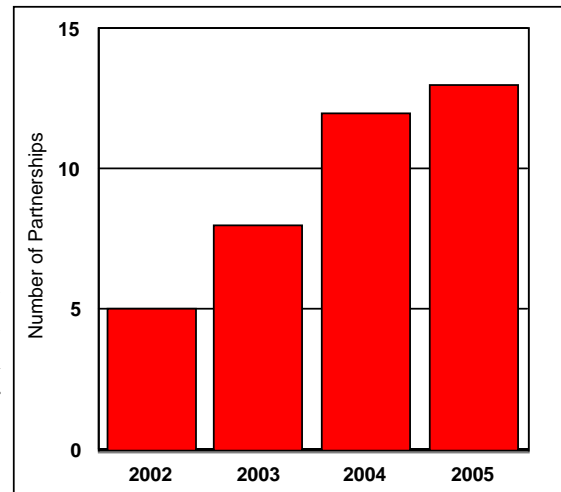
This measure is an indicator of our efforts to build and maintain stewardship partnerships for species at risk. As more groups and individuals are engaged in our formal efforts to conserve and protect species at risk we have a better capacity to provide for their maintenance and recovery. The measure is expressed as the number of “major” partnerships in place for species at risk.

Where Are We Now?

The department had 13 major stewardship partnerships for species at risk in place as of March 31, 2005, up one from the same time the previous year.

Where Do We Want To Be?

Our target for this measure was to gradually increase the number of major stewardship partnerships in place to somewhere in the 10 to 15 range by 2004-05 and this was accomplished. Though the development and implementation of recovery plans for species at risk we are working to identify and build partnerships for all species listed under the *Endangered Species Act*. The new target for this measure is to have 15 partnerships in place as of March 31, 2010.



Wetland Influenced by Wetland Stewardship Agreements

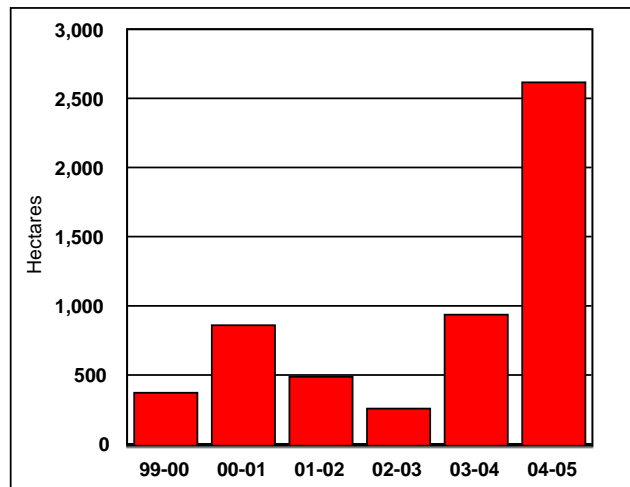
Three key goals of the Department of Natural Resources are *to achieve sound natural resources stewardship, to conserve the diversity of Nova Scotia's natural environment, and to improve the quality of life in Nova Scotia.* Wetlands represent less than 7% of the provincial land area yet provide significant environmental, social, and cultural functions. Wetlands continue to be lost and degraded through urban and industrial growth, inappropriate land use activities, and development of transportation and energy corridors. With approximately 75% of the province privately owned, the involvement of landowners in the stewardship of this resource is critical. Stewardship can involve agreements for the restoration and management of wetlands on private land, modification of land use activities to benefit wetlands and wildlife, or the transfer of ownership.

What does the measure tell us?

The measure is the area of wetland and associated wildlife habitat influenced by stewardship agreements concluded during that year, expressed in hectares annually. It provides information on agreements with private landowners related to restoration and/or management of wetlands, or the transfer of land ownership to a wetlands based partnership of conservation organizations.

Where are we now?

There were 2,626 hectares of wetlands influenced by wetland stewardship agreements concluded during 2004-05. Approximately 90% of the area was wetlands acquired by the department through the owners unknown process.



Where do we want to be?

The department’s target for 2004-05 was 300 hectares. Since these stewardship agreements frequently involve large, discrete blocks of land, it is difficult to accurately forecast where we want to be in the future, other than increasing the area of wetlands covered by agreements. A target of 284 hectares has been identified for 2005-06.

Nova Scotia’s wetland conservation initiatives benefit through Natural Resources’ involvement in the North American Waterfowl Management Plan. The delivery mechanism of the Plan in Eastern Canada is the Eastern Habitat Joint Venture (EHJV). The NS-EHJV is a cooperative partnership involving various provincial agencies; Canadian Wildlife Service; Wildlife Habitat Canada; Ducks Unlimited Canada; Nature Conservancy of Canada; local non-government agencies; state, federal and non-government agencies in the United States; industry, and private landowners. Success in meeting the target depends upon a combination of available funding through the partnership and land owners willing to participate in agreements.

Registered Buyers Participating in Forest Sustainability Agreements

One measure which gives an indication of private sector commitment to support private woodlot owners in the management of their woodlots is the “number of registered buyers participating in forest sustainability agreements”.

What does the measure tell us?

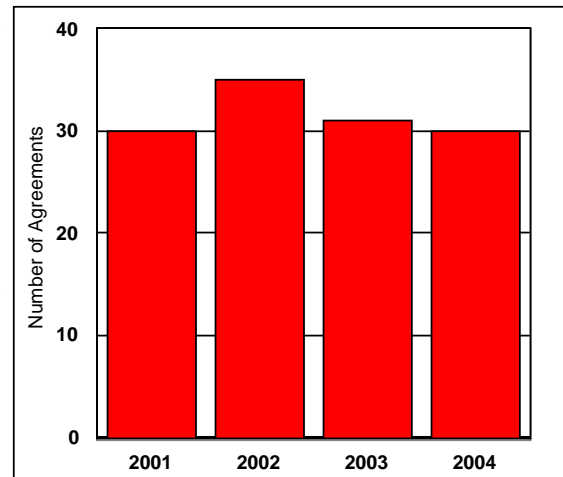
Registered buyers, under the Forest Sustainability Regulations of the *Forests Act*, are responsible to ensure that the required amount of silviculture work is completed on private lands. Forest sustainability agreements are government/private sector funded silviculture programs that offer funding to private woodlot owners. The number of registered buyers that participate in forest sustainability agreements indicates their support in ensuring that a sustainable supply of wood fibre comes from private woodlots, and that proper forest management techniques are adopted by woodlot owners who supply them wood.

Where are we now?

For the calendar year 2004, there were 30 registered buyers that participated in forest sustainability agreements.

Where do we want to be?

The department had a target of 70 forest sustainability agreements in place by the end of 2004. Our goal was to have at least the required number of registered buyers, under the *Forest Sustainability Regulations*, participating under forest sustainability agreements. A long term goal is to have full participation from all registered buyers, both mandatory and voluntary. The target for this measure is now 40 agreements in place by the end of 2008.



Natural Resources Stewardship Training at the Wildlife Park

Providing natural resources related education to the public and helping the public to better understand natural resources related issues helps to promote sound natural resources stewardship.

What does this measure tell us?

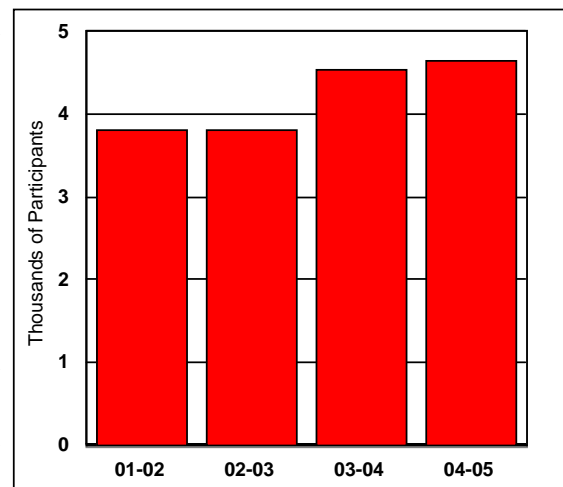
This measure records the number of teachers and students who receive training in wildlife education programs at the Provincial Wildlife Park in Shubenacadie. This training is delivered on-site in a classroom at the Wildlife Park in combination with the captive indigenous wildlife at the Park and is an integral part of the provincial science curriculum. The annual number of students and teachers participating in the various programs offered at the facility is a good indicator of the level of training in wildlife education provided to educators and young people. Annual attendance figures also give an indication of overall satisfaction with the delivery and content of the programs.

Where are we now?

The number of students and teachers who received natural resources related stewardship training at the Provincial Wildlife Park during 2004-05 was 4,460 individuals, up 2.4% from the number trained the previous year.

Where do we want to be?

The department's target for this measure for 2004-05 was 7,500 teachers and students attending these programs. It is hoped that in-service training and professional development workshops for teachers, improved educational programs for school and youth groups, and the new wetland interpretative centre will lead to an increase in this measure over time. A new target of 10,000 individuals receiving training during 2009-10 has been set.



Natural Resources Stewardship Training at the Natural Resources Education Centre

Providing natural resources stewardship training to educators and youth helps to expose these groups to important concepts that they may use and pass along to others.

What does the measure tell us?

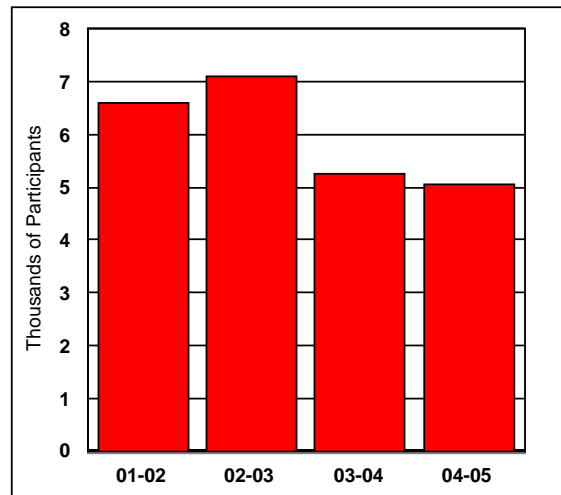
The measure reflects the number of teachers, adult leaders, students and youth who have participated in one of the natural resources programs at the Natural Resources Education Centre (NREC) annually. The programs involve pre- and post-visit activities as well as interactive activities as part of the visit to the Centre. Through the Centre and its programs, participants gain a heightened understanding of natural resource issues which contributes to the development of a stewardship ethic.

Where are we now?

During 2004-05, there were 5,075 persons who participated in training through the Natural Resources Education Centre, down 3.5% from the previous year.

Where do we want to be?

The department's target was 8,000 teachers and students. While a sustained increase in the number of participants is desirable in future years, increased effort is being placed on reaching teachers, students, youth and youth educators who reside outside of the core service area (which is within a one hour drive of the NREC) through the provision of distance-learning support, in-service training, and outreach activities. The target for this measure has remained at 8,000 individuals with a new target year of 2009-10.



Age of Forest Resource Data

Sound stewardship of our forest resources is dependent upon the availability of accurate and timely information on the characteristics of these resources. Forests change regularly through management, harvesting and disturbance by pests and fire. It is important to have current information available to resource managers. The provincial forest inventory system provides this information for Nova Scotia on all land ownerships. This measure reports on the percentage of the province for which forest resource data is ten years old or less.

What does this measure tell us?

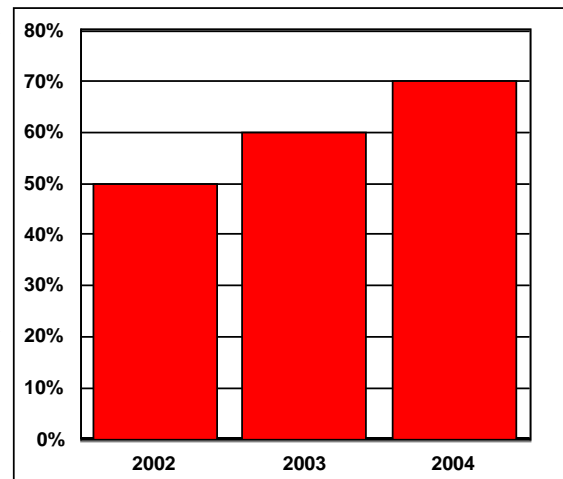
The frequency that forest information is updated is important. This measure tells how much of the province is meeting the target update cycle of every ten years. Updating the forest resource data consists of three major activities. Aerial photographs are taken of approximately 10% of the province. Then staff interpret these photographs. Finally, the results are stored electronically in a geographic information system (GIS).

Where are we now?

For 2004 the percentage of the province for which forest resource data was ten years old or less was 70%.

Where do we want to be?

The department's target for 2004-05 for this measure was for 100% of the forest resource data to be ten years old or less. This was not attained by 2004-05. The target value will continue to be 100% of the province with forest resource data ten years or less old and we hope to attain this value by the end of 2007. Our intention is to continue to modify and improve the forest inventory system to enable the department to maintain a ten year repeat cycle so that 10% of the province is updated each year.



Age of Geological Maps

It is widely accepted in the minerals and hydrocarbons exploration communities that maps which are greater than 25 years old do not reflect advancements in the geological sciences and are, therefore, less useful in exploration for resources. The availability of up-to-date maps for all areas of the province shows that the department is conducting an active mapping program and is supporting the users of these geological maps, including the mineral industry. This measure reports on the percentage of the province for which geological maps are less than 25 years old.

What does this measure tell us?

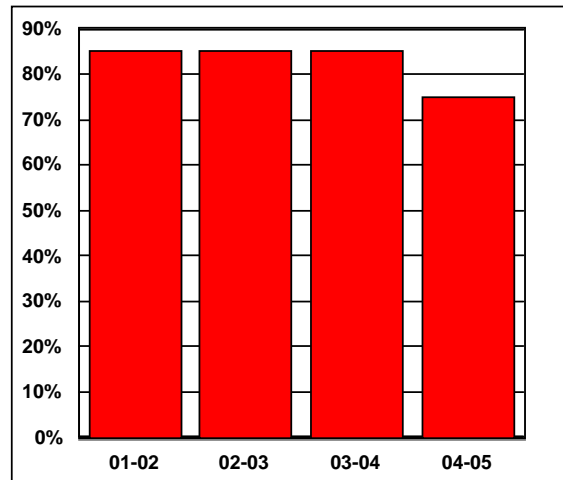
This measure tells us the degree of currency of geological maps produced by the department, which are based on geoscience mapping projects throughout the province. These maps are used by private sector companies to support their exploration programs.

Where are we now?

During 2004-05, 75% of the province was covered by geological maps less than 25 years old.

Where do we want to be?

The department’s target for 2004-05 was for 85% of the province to be covered by geological maps less than 25 years old. Our new target for this measure is 80% for 2005-06.



New Mineral Occurrences Added to the Provincial Mineral Occurrences Database

Information is acquired through the department's geoscience program and from required submissions by private sector companies exploring in Nova Scotia. The cumulative result of this effort is a comprehensive provincial geological and mineral deposit database, which is required by the private sector for the selection of exploration targets and development of exploration strategies.

What does this measure tell us?

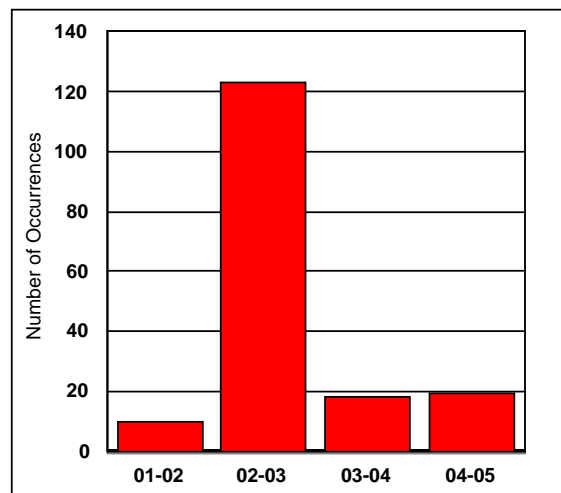
This is a measure of the department's level of annual progress in acquiring information on newly discovered mineral occurrences throughout the province.

Where are we now?

During 2004-05, 19 new mineral occurrences were added to the provincial mineral occurrences database, which was less than the target of 25 occurrences for the year.

Where do we want to be?

The department had identified a target of 25 new occurrences to be added during 2004-05. This target has been reduced to 20 occurrences for 2005-06 (although there is the potential for large variations from year to year in this measure).



Age of Aggregate Resource Information

Aggregate is a key commodity used by the construction industry and supports economic development throughout the province. Forecasts for infrastructure development (highways, urban roads, residential and commercial construction) suggest that the demand for high quality aggregate will increase markedly in the next decade. This measure reports on the percentage of the province for which aggregate resource information is less than 20 years old.

What does this measure tell us?

This measure tells us the degree of currency of information on the province's aggregate resources.

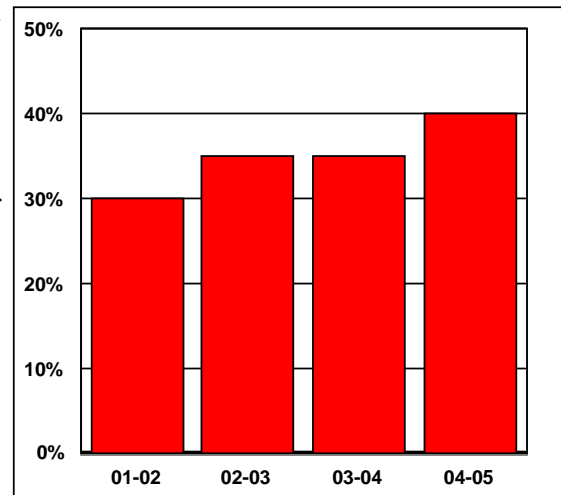
The availability of up-to-date aggregate resource information province-wide shows that the department is actively locating and cataloguing new deposits.

Where are we now?

During 2004-05, the percentage of the province for which aggregate resource information was less than 20 years old was 40%.

Where do we want to be?

The department's target for 2004-05 was for 50% of the province to have information on aggregate resources less than 20 years old. The target for this measure remains at 50%, for 2005-06. Locating, cataloging, and describing aggregate resources, especially in areas of the province where aggregate resources are needed to support economic development opportunities, will result in an increase in the value of this measure.



Compliance with the Wildlife Habitat and Watercourses Protection Regulations

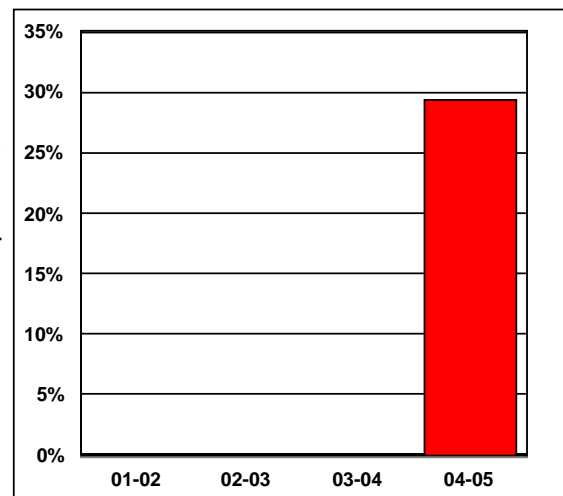
The *Wildlife Habitat and Watercourses Protection Regulations* (under the *Forests Act*) were developed to maintain fish and wildlife habitats and water quality, in and near forest harvesting operations on all lands. There are three requirements in the Regulations: reduced harvesting along watercourses in Special Management Zones, clumps of living trees left standing in the harvest site and large pieces of woody debris left evenly scattered over the site.

What does the measure tell us?

The percentage of harvesting operations that meet the legal standards is a measure of how well natural environments are being protected and also a measure of the forest operators' knowledge of the Regulations and their commitment to environmental stewardship. A sample of harvest sites is visited to measure compliance with the Regulations.

Where are we now?

The Regulations came into effect January 14, 2002. During 2002-03 the department concentrated on extension activities to explain the regulations. No data is available for 2003-04. Hurricane Juan and the need to fine-tune the methodology to be used to determine compliance contributed to the delay in data collection. Harvest site visits took place in 2004-05. The level of compliance for the harvest sites in the sample was 29% in full compliance.



Where do we want to be?

The department's target was to have 90% compliance by 2004-05. The department's new target for this measure is 90% compliance by 2007-08. Over 80% of the monitored sites had legacy clumps and over 90% had special management zones (where required). However many of the legacy clumps were not in compliance with the Regulations because not enough trees had been left or they were the wrong species and many of the special management zones were too narrow. The department is attempting to increase the level of compliance by carrying out more on-site educational visits and by being less lenient when violations are discovered.

Park Area Meeting IUCN Protection and Natural Areas Criteria

The International Union for Conservation of Nature and Natural Resources' (IUCN) is a worldwide organization whose mission is "to influence, encourage and assist societies throughout the world to conserve the integrity and diversity of nature and to ensure that any use of natural resources is equitable and ecologically sustainable".

What does this measure tell us?

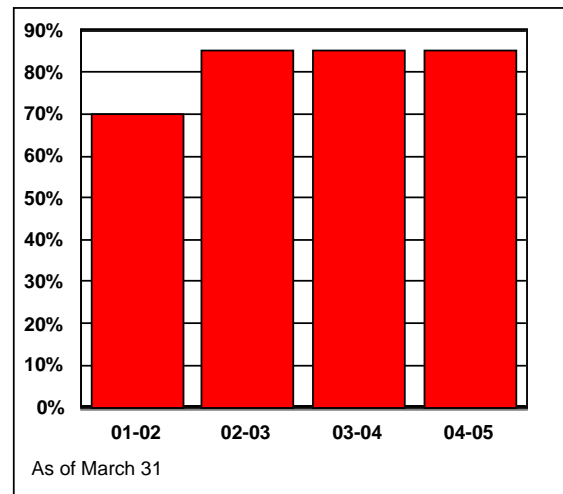
The commitment to land conservation is reflected in the percentage of designated provincial parks land that meets the IUCN criteria for contributing to the protection of natural areas. The IUCN criteria is an international standard for ecosystem conservation.

Where are we now?

As of March 31, 2005, 85% of provincial park area met the IUCN criteria, which was unchanged from the previous year.

Where do we want to be?

The department had a target of 70% for this measure for 2004-05. This target is based on maintaining the existing level of ecosystem conservation contributed by the provincial parks. Additional park properties will be evaluated using the IUCN criteria as they are considered for designation under the *Provincial Parks Act*.



Active Mine Sites Practicing Progressive Reclamation

Reclamation activities allow the restoration of natural ecosystems. Progressive reclamation is continuous reclamation and rehabilitation of mining lands as mining operations continue. Final reclamation is conducted after mining is completed. Progressive reclamation dramatically reduces the amount of land that must be reclaimed at the end of a mining operation.

What does the measure tell us?

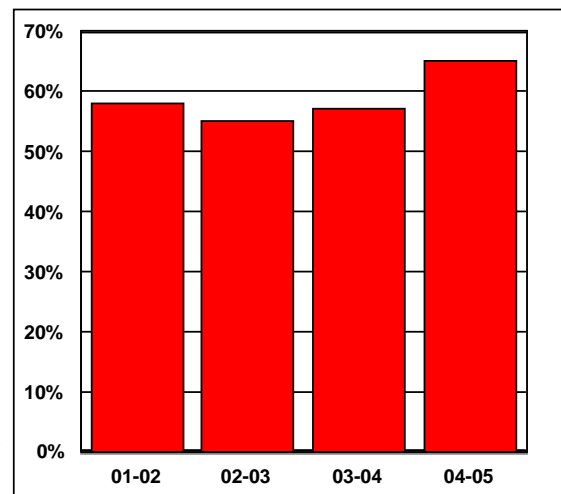
The measure represents the percentage of mining operations conducting some form of progressive reclamation. It is a comparison of the number of operating mines in Nova Scotia that are undertaking land reclamation compared to the total number of mines operating in the province. Operating mines are defined under the *Mineral Resources Act* and do not include pits and quarries used for extracting sand and gravel or crushed rock.

Where are we now?

During 2004-05, 65% of the province's active mining operations were utilizing some form of progressive reclamation, up slightly from 57% for the previous year.

Where do we want to be?

The department had identified a target of 65% for this measure for 2004-05. Ideally the department would like to see all mining operations utilizing progressive reclamation. However this expectation is unrealistic because underground mines do not operate on the surface, require access to all the facilities throughout the life of the mine, and cannot reclaim surface lands until mining operations are complete. Also, some surface mines started long before progressive reclamation became a common practice. These mines find themselves constrained by past mining plans and operations so that they cannot implement large scale progressive reclamation. The *Mineral Resources Act* requires that all active mines be reclaimed and the government holds a reclamation bond for each mining operation approved under the *Mineral Resources Act*.



Endangered and Threatened Species with Recovery Plans in Place

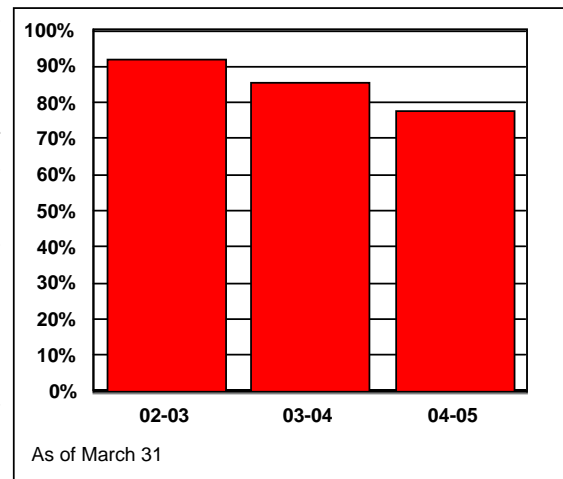
The department is committed to the conservation and protection of species at risk, provincially and nationally, through the *Nova Scotia Endangered Species Act* and the *Accord for the Protection of Species at Risk*.

What does the measure tell us?

The measure is a straight forward indication of how much work is being done on restoring the health of endangered (and threatened) species. Recovery plans are the focal instrument for addressing the recovery needs for species at risk and guide governments, recovery teams and others, in their conservation efforts, and are now being prepared as required in the *Endangered Species Act*. Recovery plans establish, for each endangered and threatened species, what needs to be done, how much it will cost, when it will be done and who will do the work. The plans also set goals for what is required to down-list a species at risk and establish a strategy for attaining these goals. (To down-list a species means to move it to a lower risk category, such as from endangered to threatened.)

Where are we now?

As of March 31, 2005, 19 species were listed as either endangered or threatened at that time. One of these species without a recovery plan in place at that time, was not required to have it in place until October 2005. Of the remaining 18 species, 14 of these, or 78% had a recovery plan in place as of March 31, 2005. This is down from 86% in the previous year because plans have not yet been put in place for two endangered species listed in the fall of 2003. Information on the province's species at risk can be found at <http://www.gov.ns.ca/natr/wildlife/endngrd/specieslist.htm>.



Where do we want to be?

Our target was to have recovery plans in place for all (100%) species listed under the Act by 2004-05 or sooner. There are still several species where recovery plans are not fully in place. New species are also periodically listed under the *Endangered Species Act*. Recovery plans are to be in place for each endangered species within one year after the species was listed as being endangered, and within two years for those species listed as being threatened. The new target for this measure will continue to be 100% and the target year is 2005-06.

Students Successfully Trained in Hunter and Trapper Safety

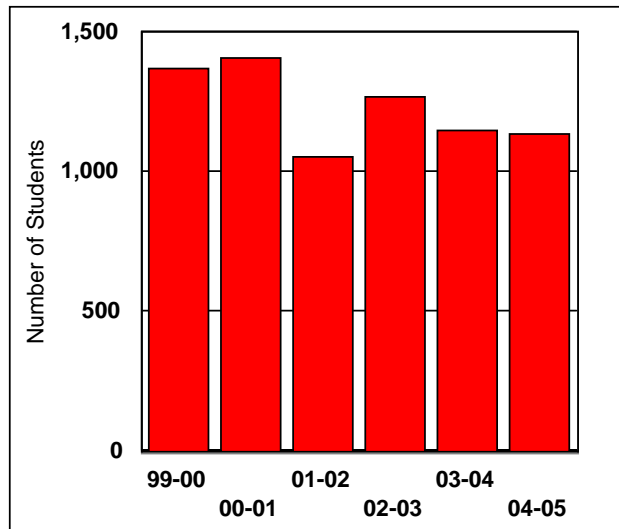
The mandatory training requirements for persons who wish to hunt provides for public safety by ensuring that persons who do hunt are trained in the safe handling, storage and transportation of a firearm or bow and that they understand the Provincial hunting laws. Additionally, these courses provide them with instruction in field safety, and wildlife conservation and identification, and promote respect for private lands and landowner concerns, as well as the development of positive hunter ethics.

What does the measure tell us?

This measure tracks the number of persons who are trained each year in hunter safety and trapper education courses. Any resident of Nova Scotia who wishes to hunt with a firearm or a bow in the province is required to take a hunter education course or a bowhunter education course. A trapper education course is required for those persons who wish to obtain a trappers license.

Where are we now?

The delivery of the Nova Scotia hunter education course is coordinated for the department by the Nova Scotia Federation of Anglers and Hunters while the bowhunter education course is delivered through the Bowhunter Instructors Association of Nova Scotia. The trapper education course is delivered through the Trappers Association. During 2004-05 there were 881 persons who completed the hunter education course training, 182 persons who completed the bowhunter education course, and 72 individuals who took the trapper education course. The total number trained was 1,135 persons during 2004-05, down marginally from the 1,149 persons who received training the previous year..



Where do we want to be?

The department had identified a target of 1,350 individuals receiving hunter and trapper training during 2004-05. This figure was based on the number of students seeking training in hunter education returning to traditional levels of approximately 1,000 students annually. The new target value for this measure is for 1,150 students to receive training in 2008-09.

High Risk Abandoned Mine Openings Remediated on Crown Lands

Remediation means securing the mine opening by capping, filling or fencing. By remediating abandoned mine openings, the department decreases the risk to those people traveling over or working on Crown lands.

What does the measure tell us?

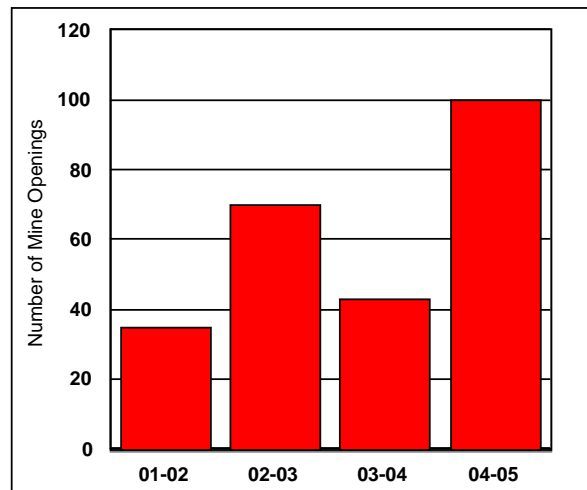
The department is working to locate abandoned mine openings and safeguard the public from the hazards associated with these openings. The measure of work performed is the number of abandoned mine openings remediated each year. The number of openings remediated may vary year to year depending on the site specific conditions of the openings.

Where are we now?

During 2004-05, 100 high risk abandoned mine openings were remediated. Work was done through the Abandoned Mine Openings Program, through partnerships with the private sector, and through cooperative efforts within government (with other departments). This figure was up significantly from the 43 mine openings remediated the previous year.

Where do we want to be?

Eventually the department would like to have all identified abandoned mine openings on Crown land remediated. In the short term we will concentrate on remediating the high risk abandoned mine openings located on Crown land. Originally the department identified a target of five mine openings to be remediated during 2004-05. This target was increased to 44 high risk abandoned mine openings to be remediated annually on Crown lands, reflecting an expanded definition of the measure (there was also a change in the terminology used, from mine shafts to mine openings).



Silviculture Investment on Private Land

This measure gives a quantitative measure of silviculture activity. Based on how the program that funds this silviculture activity operates, a silviculture credit value is used instead of a dollar amount.

What does the measure tell us?

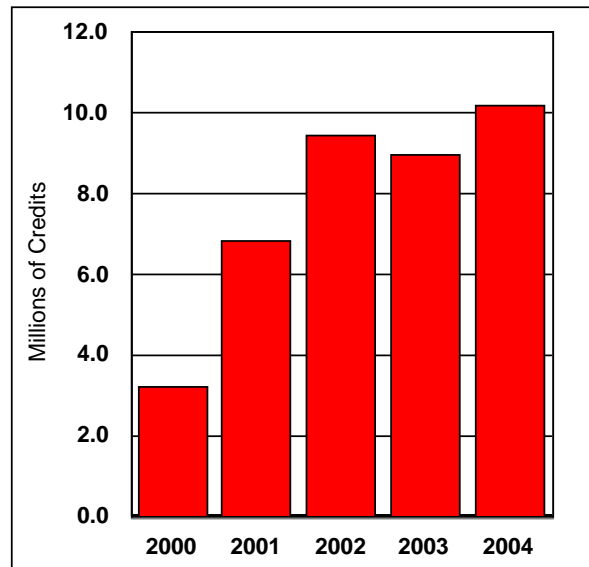
This measure has been modified to give a more accurate reflection of the level of silviculture activity taking place. The measure is a sum of completed silviculture claimed for private lands reported to the Registry of Wood Buyers, plus the amount of silviculture activity funded by the Association for Sustainable Forestry. The measure using silviculture credits indicates the value of total silviculture activity rather than the actual costs to achieve that level of silviculture activity. Different silviculture treatments are given different silviculture credit values on a per hectare basis.

Where are we now?

For 2004, there were 10.2 million silviculture credits for silviculture activities on small private woodlots. The 2003 value was 9.0 million credits. The 2004 figure was about 13% higher than the figure for the previous year.

Where do we want to be?

Our original target was to have forest sustainability agreements with a total value of 9.0 million silviculture credits in place by 2004-05 to support silviculture activities on small private woodlots. With this revised measure, a new target will need to be set that includes the expected level of silviculture claimed by Registered Wood Buyers for private land and funding through the Association for Sustainable Forestry.



Required Value of Silviculture on Private and Industrial Lands Completed

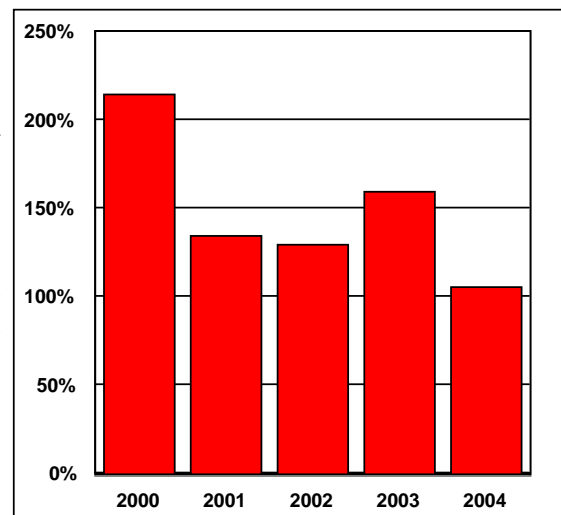
Wood supply sustainability can be managed effectively through an aggressive silviculture program. The department monitors wood harvesting and forecasts long term wood supply by incorporating both harvesting and silviculture data into the forecast. During the last decade there has been much pressure placed on private woodlots to support the provincial demand for wood. Maintaining an adequate level of silviculture will help to provide for a future supply of wood on private woodlots.

What does this measure tell us?

The measure helps to explain whether the level of silviculture activity being reported by wood buyers exceeds the required amount (as per the requirements of the *Forest Sustainability Regulations*). A ratio of 100% means that the level of silviculture reported equals the amount of silviculture activity required under the *Forest Sustainability Regulations*.

Where are we now?

During 2004, approximately 16.6 million silviculture credits were required and about 17.5 million credits were claimed. As a result, completed silviculture was 106% of the amount required under the *Forest Sustainability Regulations*. The ratio of silviculture work reported as a percentage of the amount required was especially high in 2000 and 2003 due to a phase-in of the requirements when the regulations were first implemented and a one-time adjustment to reflect changes to the regulations made in 2003.



Where do we want to be?

The department's target for this measure for 2004 was 100% or greater (this measure is calculated on a calendar year basis). As long as this measure exceeds 100%, the amount of actual silviculture work being reported is greater than the amount which is required (under the *Forest Sustainability Regulations*). Each year the target for this measure will remain at 100%.

Area of Forest Resource Lost to Fires

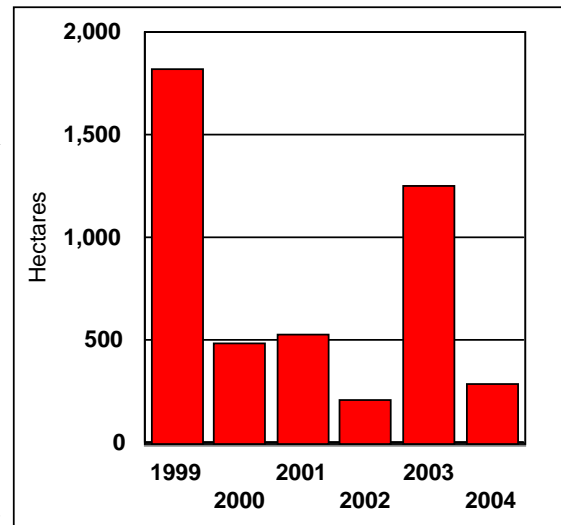
Forest fires are a regular occurrence in Nova Scotia resulting in the loss of forest resources. The provincial government is responsible for forest fire protection on all land tenures. The importance of reduction of loss to fire is particularly important on private land where woodlots supply more than 50% of the provincial wood supply.

What does this measure tell us?

An important strategy in reducing the loss of wood supply to forest fires is to respond quickly and keep fires small. While the number of forest fires in Nova Scotia is often similar from year to year, the number of large fires can vary considerably. The measure represents the total area lost to fires annually.

Where are we now?

During 2004 the area lost to forest fires was 290 hectares, which was down significantly from the 1,257 hectares lost the previous year. The graph to the right shows the extreme variations that can occur from year to year and the difficulty in arriving at a reasonable yet meaningful target for this measure.



Where do we want to be?

The target identified for 2004-05 for this measure was 1,014 hectares. The new “target” for this measure is 793 hectares during 2005. Note that with this particular measure, we want to be as far below the target as possible. Since the target is based on a historical average, some years will exceed the target (or average) and other years will be less than the target (or average). Response time of fire suppression crews in combination with early reporting are key factors to maintaining small fire size. Weather conditions also have a significant influence on the number of fires and the area burned.

Review of Hunting / Trapping Regulations

The sustainable and equitable use of harvested wildlife species can be partially achieved with a frequent review of the wildlife regulations which provide the legal framework for hunting and trapping activities.

What does the measure tell us?

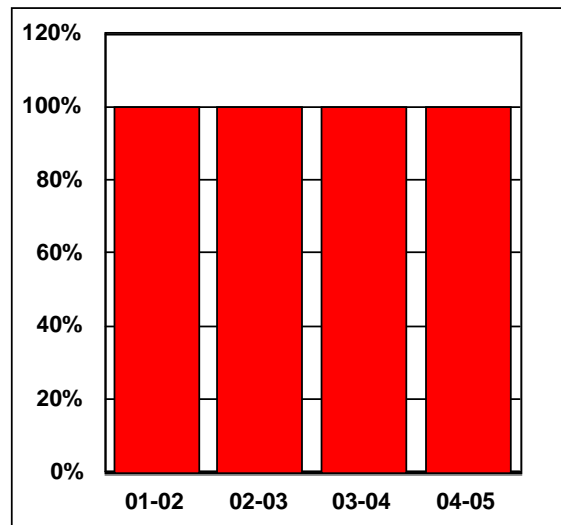
The outcome is expressed as the percent of the total regulations under the *Wildlife Act* which were reviewed during the fiscal year. This review is based on the monitoring of wildlife populations, consultations with stakeholders and feedback from DNR staff and is carried out by an internal committee composed of wildlife managers, enforcement personnel, licensing and legal staff. This wildlife regulations committee reviews these inputs for all regulations under the *Wildlife Act* and provides recommendations for changes to provide for the conservation and sustainable use of wildlife. Hunting and trapping opportunities contribute to provincial economic activity and quality of life for Nova Scotians while providing sustainable wildlife populations.

Where are we now?

For 2004-05, 100% of the regulations were reviewed.

Where do we want to be?

The department’s target was 100% for this measure for 2004-05 and will remain at 100% for 2005-06. A mechanism is currently in place to review 100% of the relevant wildlife regulations on an annual basis and our target for this measure is to maintain our capacity to review 100% of the regulations with meaningful information related to biological, stakeholder and public inputs. Wildlife population data, stakeholder interests and public demands need to be effectively collected and analyzed in order to make effective recommendations for changes.



Review of Mineral Related Acts and Regulations

The province's mineral resources are administered using a number of acts and regulations.

What does this measure tell us?

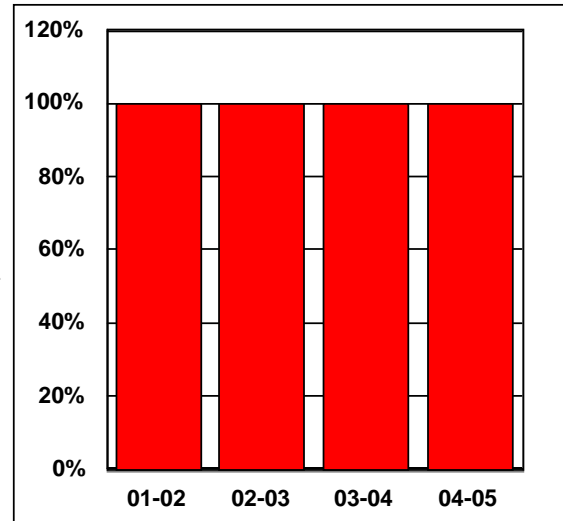
Ensuring that the department's regulatory framework for minerals is as up to date as possible will result in efficient and streamlined processes for the department and its clients.

Where are we now?

During 2004-05, 100% of the department's mineral related acts and regulations had been reviewed during the previous five years.

Where do we want to be?

The department's target for this measure for 2004-05 was to maintain a level of 100%. The target for this measure will remain at 100% for the new target year of 2005-06.



“One Window” Meetings Held Within Three Weeks of Receipt of Request

The “One Window” process formalizes how the various government departments, involved in reviewing mine development activities, function as a committee to make the review process more efficient and effective for both government and the mining industry. The process includes initial meetings with government representatives; registration and completion of the Environmental Assessment process; and application and submission of information for the necessary mineral rights, permits, and approvals. The "One Window" process also monitors ongoing mining operations through regular meetings of government representatives.

What does this measure tell us?

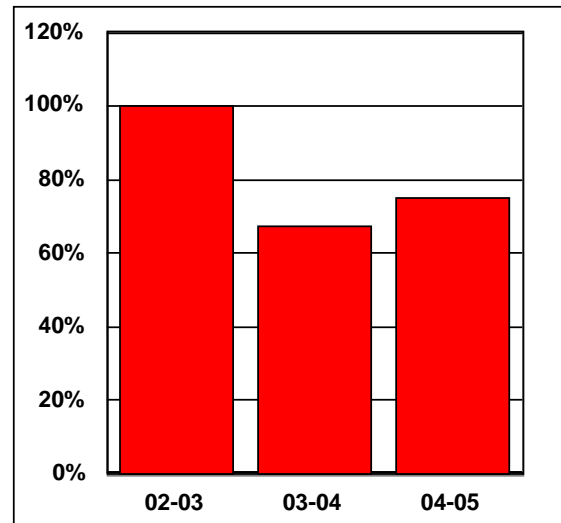
This measure tells us the department’s success at providing timely decision making with respect to mineral development projects. The measure reports the percentage of “One Window” Interdepartmental Committee meetings held within three weeks of receipt of a request.

Where are we now?

During 2004-05, 75% of the “One Window” Interdepartmental Committee meetings were held within three weeks of the receipt of a request.

Where do we want to be?

The department’s target for this measure for 2004-05 was to be at 100%. The department’s target for this measure for 2005-06 will remain at 100%.



Parks Related Partnerships

Through promoting and arranging parks related partnership agreements, and tracking the number in existence, the department can measure the growth in the availability of outdoor recreation opportunities.

What does the measure tell us?

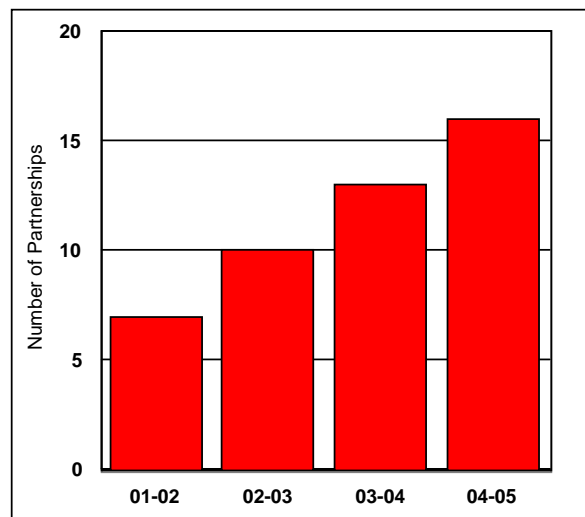
The number of parks related partnerships indicates the level of community participation in partnership arrangements with the department to develop the province's natural outdoor recreation resources.

Where are we now?

As of March 31, 2005 there were 16 partnership arrangements in place to assist the department in managing and delivering various outdoor recreation opportunities, up from 13 at the end of the previous year.

Where do we want to be?

No specific numeric target was originally set for this measure. However, directionally, the department had wanted to increase the number of parks related partnership arrangements in place. Additional partners at the community level will contribute to an expansion of the provincial park system and provide new economic development related opportunities throughout the province. For 2005-06, the



department hopes to at least maintain the same number of partnerships that were in place in 2004-05.

Requests for Geoscience Related Technical Information and Assistance

The level of exploration in Nova Scotia by the private sector for new mineral and hydrocarbon resources at any given time is a reflection of the interaction of a number of variables, with many of these variables outside the province's sphere of influence. What can be done is to monitor activities which are intended to increase the awareness by government departments, regional development agencies, prospectors, developers, and mining companies of mineral and hydrocarbon resource development opportunities in the province.

What does this measure tell us?

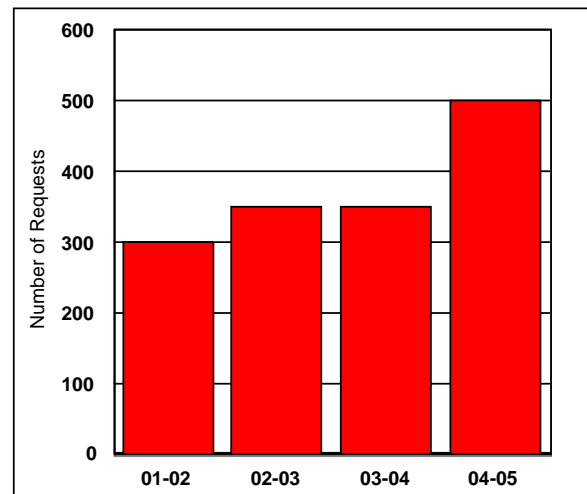
One such activity is promoting and providing easy access to the professional expertise of departmental geologists, who provide information, advice and counsel. By recording the levels of this activity, the department measures the awareness of the province's mineral and hydrocarbon potential by the resource industry and their level of interest. Year-by-year increases in requests for information are indications that (1) more clients are aware of the department's expertise and (2) clients consider the information and advice to be credible and useful.

Where are we now?

During 2004-05, 500 requests for information and technical assistance were received by staff, which exceeded the 2004-05 target of 400 requests received..

Where do we want to be?

The department's target for this measure for 2004-05 was 400 requests. For 2005-06, the target for this measure will remain at 400 requests.



Downloads of Technical Geoscience Information from the Departmental Website

The level of exploration in Nova Scotia by the private sector for new mineral and hydrocarbon resources at any given time is a reflection of the interaction of a number of variables, with many of these variables outside the province's sphere of influence. What can be done is to monitor activities which are intended to increase the awareness by prospectors, developers, and mining companies of mineral and hydrocarbon resource development opportunities in the province. One such activity is promoting and providing easy access to a comprehensive provincial geological and mineral deposit database, which is required by the private sector for the selection of exploration targets and development of exploration strategies.

What does this measure tell us?

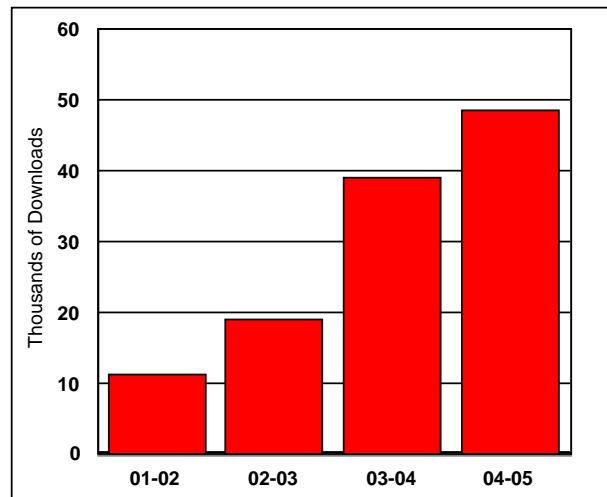
By recording the levels of this activity, the department measures the awareness of the province's mineral and hydrocarbon potential by the resource industry and their level of interest. The significance of monitoring downloads of data, rather than the number of visits to the website, is that it is an indication that explorationists are using the database in making decisions about their exploration targets and plans.

Where are we now?

Approximately 48.7 thousand digital data downloads were recorded in 2004-05, significantly higher than the 2004-05 target of 15.0 thousand downloads..

Where do we want to be?

The department's target for this measure for 2004-05 was 15.0 thousand digital downloads. A new target of 30.0 thousand downloads annually has been set for 2005-06 which is believed to more accurately reflect the volume of geoscience information available to be accessed and the level of interest in accessing this information..



Area of Designated Provincial Parks

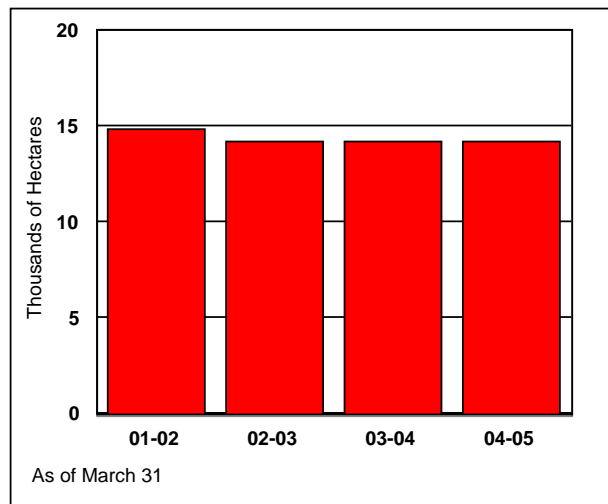
The availability of outdoor recreational opportunities. This measure reports how much land has been designated for park use.

What does the measure tell us?

This measure tracks the area of land designated under the *Provincial Parks Act*. The amount of area of designated parks indicates the provincial commitment to maintaining lands for recreational opportunities and managing these lands accordingly.

Where are we now?

As of March 31, 2005 there were 14,200 hectares of lands that were designated as either parks or park reserves under the *Provincial Parks Act*, which was unchanged from the previous year. This figure is slightly lower than the 2001-02 figure however this is due to a recalculation of the number of park properties and their areas in the database that tracks this information.



Where do we want to be?

No specific numeric target was originally set for this measure for 2004-05. However directionally the department's target was to increase the area. The new target is to either maintain or increase the area designated for 2005. Through continued community involvement and management planning, additional properties will be identified for designation under the *Provincial Parks Act*.

Length of Trails in Parks and on Crown Lands

The availability of land for trails and the effort put into developing trails provides an indication of trail infrastructure available to provide Nova Scotians and visitors to the province with opportunities to participate in outdoor recreational activities that require recreational trails.

What does the measure tell us?

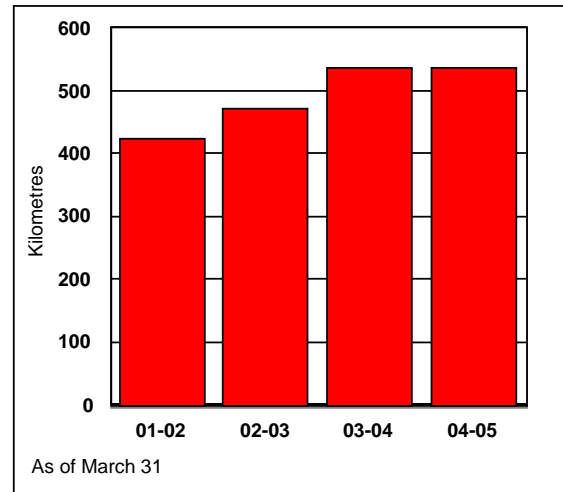
This measure tracks the length of trails occurring on Crown lands, including trails within provincial parks. The measure indicates specific support for hiking and other outdoor recreational activities. Trail development also measures the level of community support for putting outdoor recreational opportunities in place.

Where are we now?

As of March 31, 2005, 536 kilometres of developed trails were available for use on Crown lands, unchanged from the previous year.

Where do we want to be?

The department's target for this measure was 540 kilometres by the end of 2004-05. The new target for this measure is to either maintain or increase the length of trails available for 2005. The length of trails are expected to continue to increase as more opportunities are identified and as government, community groups, and other partners cooperate to create new trails as part of future trail development projects.



Shubenacadie Wildlife Park Visitors

A key role of the department is to promote *public appreciation of natural resources* through participation in *nature related activities*. The Provincial Wildlife Park at Shubenacadie uses animal enclosures in natural settings and educational messages to ensure the visiting public gets a good understanding of Nova Scotia wildlife.

What does this measure tell us?

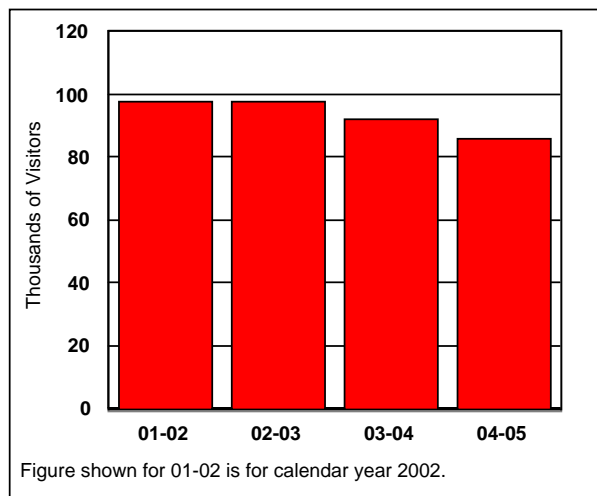
Annual attendance figures give an indication of the level of interest of Nova Scotians and visitors to our province in viewing Nova Scotia's wildlife in natural settings. This provides visitors to the Park with both a recreational experience and an opportunity to learn more about the province's wildlife. However a number of factors, including weather, travel trends, and economic conditions, have an effect on visitation.

Where are we now?

Attendance at the Wildlife Park during 2004-05 was approximately 86 thousand people, down 7% from the previous year

Where do we want to be?

The department's target for 2004-05 for this measure was 100 thousand visitors. The new target for this measure is 110,000 visitors for 2009-10. It is hoped that the addition of a new interpretative centre, in partnership with Ducks Unlimited Canada, will help to attract more visitors to the park.



Occupancy Rates at Provincial Camping Parks

The annual occupancy rate for our provincial camping parks measures the degree of utilization of our provincial camping parks and provides an indication of Nova Scotians' (and our visitors') interest in camping.

What does the measure tell us?

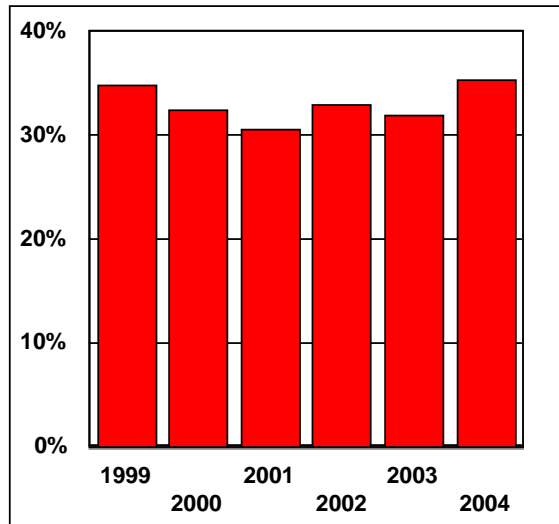
The occupancy rate is the percent of total campsites available for use that are actually occupied. This number reflects overall use of our campgrounds and also helps us identify possible new opportunities that can be taken advantage of, and deficiencies that can be corrected, through park planning and development.

Where are we now?

For the 2004 camping season, the occupancy rate was 35%, up from the 32% in 2003, but not reaching the target level of 38% that had been originally set.

Where do we want to be?

The department identified a target of 38% for the provincial camping park occupancy rate in 2004-05. Increased occupancy at our provincial parks can be achieved through improved client services, marketing and working with other departments and industry stakeholders. Weather is a key determinant of the occupancy rate, as cool or rainy weather during the weekend and at key times of the camping season can drastically reduce the occupancy rate. Beginning in 2005-06, this measure will report occupancy during the core period of July and August. This change has been made to get a more consistent measure by eliminating the effects of the greater variability in park attendance earlier and later in the camping season (during the "shoulder" seasons). A target of 46% occupancy (based on this new measure) was set for 2005.



Review of Land Related Acts, Regulations and Policies

As custodian of the Province’s Crown lands, a key component is an up to date regulatory structure for these lands.

What does the measure tell us?

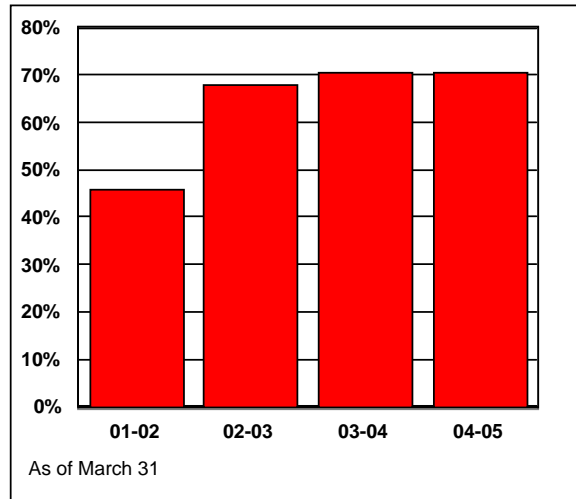
Crown land is administered using a number of acts, regulations and policies. Some acts relate to private land issues as well. Ensuring that they are as up to date as possible will result in efficient and streamlined processes for the department and its clients.

Where are we now?

As of March 31, 2005, 70% of the acts and policies used to administer Crown lands (and some aspects of private lands) had been reviewed (completely or partially) at least once in the previous five years.

Where do we want to be?

The department originally identified a target of 50% for 2004-05. This target was increased to 65% due to the implementation of a number of new policies in recent years, which have been included in the measure. The new target value for this measure is to be at 70% at the end of the 2008-09 fiscal year.



Main DNR Offices Able to Access Crown Land Information Electronically

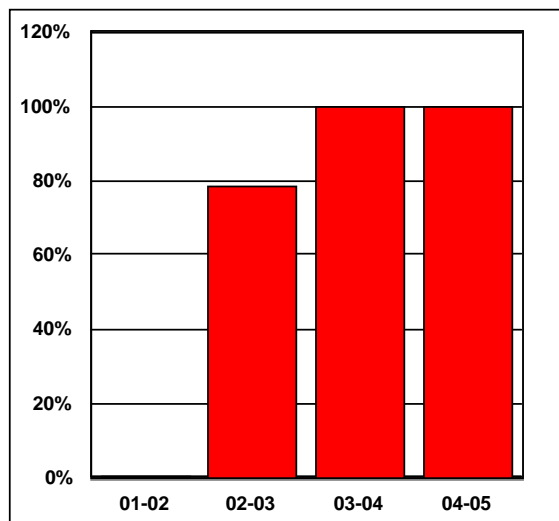
The department is the custodian of most of the Province's Crown lands, so it is important for staff to be able to electronically access accurate, up to date information on these lands.

What does the measure tell us?

Information is crucial to all Crown land administration activities. Historically, the storage and dissemination of information about Crown land has been accomplished through a paper based system. As more and more Crown land information is created, stored and available electronically, land administration will be more modern and efficient.

Where are we now?

As of March 31, 2005, Crown land information (GIS) was available to staff in the department's Head Office in Halifax, the three regional offices (in Bridgewater, Coxheath, and Truro), three main program offices (in Kentville, Truro, and Belmont) and seven other locations where Crown Land Survey offices are situated, or 100% of the 14 target offices.



Where do we want to be?

The department originally identified a target of 100% of seven main departmental office locations by 2004-05. Office locations included were: DNR's head office in Halifax, the three regional offices in Bridgewater, Truro, and Coxheath, respectively, the Wildlife Division in Kentville, the Forestry Division in Truro, and the Parks and Recreation Division in Belmont. This measure was increased to 14 offices by including seven other Crown Land Survey offices. Since 100% of the desired offices were completed, this measure has replaced by a different land related measure in the 2005-06 Business Plan.