

**Nova Scotia Department  
of Natural Resources**

**Annual Accountability Report For  
The Fiscal Year 2005-06**

Report DNR 2006-02  
December 2006

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## 1 Accountability Statement

The accountability report of the Department of Natural Resources, for the year ended March 31, 2006, 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 2005-06.

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 - David Morse

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, 2006. This is the department's sixth accountability report. It is an opportunity for us to make information available to the public on our 2005-06 accomplishments, relative to the commitments that we made at the start of the year in our 2005-06 Business Plan. Information is also provided on actions taken by the department in response to other significant issues that arose throughout the year.

Although I only became Minister of Natural Resources in June 2006, I would like to thank department staff for their efforts during the previous year to deliver programs and services related to our forest, mineral and wildlife resources, our provincial parks system, and our Crown land base on behalf of all Nova Scotians. Readers are welcome to visit the departmental website at [www.gov.ns.ca/natr](http://www.gov.ns.ca/natr) to learn more about the many programs delivered by the department and to view more detailed information on the many facets of the department's operations.

I hope you find the information provided in this report interesting and useful.

### 3 Introduction

This document reports on the priorities and performance measures identified in the department's 2005-06 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. Increasingly high public expectations and numerous competing demands for the use of this limited public land and resource base has created ongoing challenges that the department must address in creative and collaborative ways. 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 and our climate.

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.

#### **4 Department Progress and Accomplishments**

The department's broad goals that were included in the 2005-06 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 our three core business areas. These core business areas are:

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

The following paragraphs report on accomplishments during 2005-06 for each priority listed for each of the three core business areas in the department's 2005-06 Business Plan.

##### **4.1 Natural Resources Management**

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

##### **4.1.1 Strategy Renewal and Development**

One of the department's most important priorities for 2005-06 was to work on a renewal of the department's forest and mineral strategies, to develop and implement a comprehensive system strategy and plan for our provincial parks, and prepare a provincial biodiversity strategy. Action on these strategies was started late in 2004-05; however, the timing of the consultation process and the appropriate model to be used is yet to be determined. Internal planning for this initiative and the

preparation of background documents and other supporting material continued throughout 2005-06 and were at various stages of development at the end of the year.

#### **4.1.2 Manage the Province's Forest Resources**

The 2005 provincial wood supply analysis was completed and a public report providing initial results was presented at the 2006 Forest Products Association of Nova Scotia annual meeting. Final analysis of scenarios, and for each region, were in progress, but not fully complete at the end of 2005-06.

Considerable progress was made by department staff to develop initial drafts for each of the four Code of Forest Practice Guidebook sections. The four sections are: Forest Ecosystems, Forest Products, Wildlife Habitat, and Integrated Forest Use. During the final three months of the year, the drafts were undergoing a comprehensive review and re-write by the Forest Technical Advisory Committee.

A comprehensive review of the *Forest Sustainability Regulations* was undertaken through the Forest Technical Advisory Committee. The Ecology Action Centre conducted an independent review and a report with recommendations was submitted to the department. Proposed amendments to the Regulations were being prepared following these reviews in preparation for their eventual implementation.

Preparation of the State of the Forest report continued with an expected completion date of sometime during the first half of 2007.

During 2005-06, work on a renewal of the Forest Strategy proceeded internally, with planning for the initiative and the preparation of background documents and other supporting material undertaken.

#### **4.1.3 Manage the Province's Mineral Resources**

In December 2005, Xstrata Donkin Coal Mine Alliance was announced as the successful proponent to the Call for Proposals for the exclusive right to make application for a mineral right over the Donkin Coal Resource Block. The work extended into the next fiscal year, when the company applied for, and on May 1, 2006 was issued, a Special License to conduct exploration and verify the viability of developing the Donkin Resource.

On December 28, 2005 the Minister of Environment and Labour approved the Environmental Assessment for the Pioneer Coal Limited Prince Mine and Reclamation Project. The company holds a Special Lease for coal. The company

requires an Industrial Approval from Environment and Labour prior to starting work at the site.

CBDC met regularly with DNR officials to provide updates on the remediation work being conducted by CBDC in the Sydney coalfield.

The mineral impact study was completed and delivered to the department in early 2006. The strategy discussion document was largely completed, and awaits internal review and editing. Further work on the strategy awaits direction on when consultation can be undertaken.

During 2005-06 the department coordinated One-Window Mine Development Project meetings for four new mine proposals.

During the year, 109 geophysical maps of central Nova Scotia, six bedrock maps in central Nova Scotia, and four bedrock geological maps for the Cobequid Highlands were completed and published. Three digital database products were also published to accompany the geophysical and bedrock maps. These maps provided geoscience information users with new information on the province's geological resources.

The department has been working with the Department of Tourism, Culture, and Heritage and the Cumberland Regional Economic Development Association to develop the Joggins fossil cliffs as a world class tourism attraction and site of outstanding heritage significance. A department representative continued to sit on the project advisory board and provided input and advice to the process. The department also continued to provide scientific leadership to the project, technical advice and input to the design consultants regarding the interpretive centre and program, and has been involved in a leadership role in beginning to prepare the nomination document for the site for UNESCO.

#### **4.1.4 Integrated Resource Management Planning on Crown Lands**

The department defines Integrated Resource Management, or IRM, to be “a planning and decision-making process that involves the coordination of resource management policies, programs and activities so that long-term sustainable benefits are optimized and conflicts among resource users are minimized.”

Nova Scotia is categorized into 39 separate ecodistricts. Eventually each ecodistrict will be covered by a Long Range Management Framework (LRMF), which is an ecologically based land use planning document.

A LRMF for the Mulgrave Plateau ecodistrict, undertaken as a pilot project, was completed during the year ending March 31, 2006. An assessment of the pilot project was also completed during the year and the LRMF Guidelines were being revised as of the end of the year. This assessment of the Mulgrave Plateau pilot project identified the need for the development and documentation of contributing ecological management processes to the IRM process.

Prior to the end of the year, preliminary work on the LRMF process had begun for an ecodistrict in each of the three regions of the province. These three ecodistricts were the Clare ecodistrict in the Western region, the Chignecto Ridges ecodistrict in the Central region, and the Atlantic Coastal ecodistrict in the Eastern region.

#### **4.1.5 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 2005-06 the Province acquired several properties that support the continued development and enhancement of the department's parks and recreation program. The acquisitions included lands at Iona and Kingsburg Beach.

Within individual provincial parks, management plans are used to set broad development and management objectives. Work continued on several plans, including the inventorying and analysis of site data for Cape Split and Long Lake, and presentation of a draft plan for Second Lake Park Reserve. Management planning for West Mabou will be brought forward as a priority in the upcoming year.

Partnerships are a key aspect of furthering community involvement and commitment to park development and are another avenue in securing the long-term sustainability of parks. To support the development of partnerships, the department developed guidelines for the establishment of "Friends of... Provincial Parks" and adopted them as a working draft. These guidelines are provided to any groups expressing an interest in forming a "Friends of ..." organization.

The department worked, through the Shubenacadie Canal Commission, to provide a license for the Halifax Regional Municipality to place its trails group in the Fairbanks Centre. The discussion started in February 2006, but continued into 2006-07, concluding during the summer. The license with the Canal Commission for Crown land along the canal and waterway remains active. In March 2006, the

province provided the Canal Commission with a one-time grant to assist in the development of a business plan, as well as the annual operating grant.

In January 2006, a tender was awarded to provide the department with a new camping park registration and reservation system. Phase I included only the registration program. This component was implemented in the 2006 camping season, with full implementation expected in 2007.

The department delivered a successful Parks Are For People program with more than 91 events attracting in excess of 30,600 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 different camping parks over the summer.

Over 25 parks benefitted from new investment during 2005-06. Winter storms and aging of infrastructure resulted in a focus on beach front parks with repairs being made to several key properties, including Melmerby Beach, Clam Harbour, Rushtons and Caribou. In addition, the newly designed Porters Lake Camping Park was reopened on July 29, 2005, with the completion of repairs needed as a result of the severe damage caused by Hurricane Juan in the fall of 2003.

Public and stakeholder consultations needed for the renewal of the department’s parks and recreation strategy did not proceed during the year. However, internal planning for this initiative and the preparation of background documents and other supporting material was underway.

#### **4.1.6 Conserve Wildlife and Wildlife Habitat**

The promotion and implementation of the principles and ethics of conservation and sustainable use of wildlife populations, habitats and ecosystems in Nova Scotia is a priority of the department. This includes research, development and delivery of programs, policies, and legislation, including species at risk initiatives. Information on wildlife populations and their habitat is collected in order to obtain the scientific information required for sound decision-making. Also included is the provision of educational and viewing opportunities at the provincial wildlife park in Shubenacadie.

During 2005-06, the department continued to work with provincial and federal government departments and other partners to implement the Nova Scotia *Endangered Species Act*, the federal *Species at Risk Act*, and the National Accord for the Protection of Species at Risk. Improved implementation and

coordination on the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessments and recovery was undertaken through enhanced partnerships with the Department of Fisheries and Aquaculture. Extended partnerships with Environment Canada and Parks Canada resulted in significant gains in recovery plan development. Yellow Lamp Mussel, Eastern White Cedar and Eastern Lilaeopsis were legally listed (under the *Endangered Species Act*). Species known to be extirpated or extinct were also listed.

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*. The overall number of antlerless deer permits was reduced slightly, but it was increased slightly in the Bridgewater/Lunenburg area because of locally high populations. In collaboration with Cape Breton Highlands National Park and Unama'ki Institute of Natural Resources, an inventory of moose in the Cape Breton Highlands was completed.

The department's Significant Species and Habitats database was updated throughout the year based on observations by DNR staff or other naturalists. New sites were added and, where required, records were deleted if, for example, a plant's conservation status changed to secure. 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 Division's web site for other land managers. Some researchers or landowners received copies of data under license agreements.

A staff survey of 132 harvest sites revealed that over 80% of sites showed evidence that the forest operators tried to comply with the new *Wildlife Habitat and Watercourses Protection Regulations*, however, operators need help understanding the exact requirements of the law. A program of site visits and education regarding the regulations was planned to gain better compliance. No change to the current regulations is planned until the results of this educational effort are evaluated.

The department continued its leadership role in wetlands conservation at the provincial, national and international levels. The department collaborated with the Department of Environment and Labor in developing their *Wetland Designation Policy* and continue to provide advice on wetland related issues. The department was actively involved in the deliberations of the Management Boards for the Eastern Habitat and Black Duck Joint Ventures under the North American Waterfowl Management Plan; participated in preparing and presenting the report of the first 15 years of the EHJV to the comprehensive NAWMP Assessment; and agreed to serve on NAWMP's international Plan Committee. Internationally, the department was an official Canadian delegate to the triennial Ramsar Convention on Wetlands

of International Importance Conference of Parties, and completed a second three-year term on its Scientific and Technical Review Panel.

The department and its partners in the Eastern Habitat Joint Venture (EHJV) delivered projects and activities valued at more than \$1,340,000 to the wetland conservation program in Nova Scotia. A total of 317 acres were acquired through direct purchase and an additional 141 acres were restored / enhanced and brought under landowner agreements. The department also continued to identify parcels for acquisition under the Owners Unknown process.

Agricultural and coastal habitat stewardship to conserve valuable wetland habitat was the focus of the EHJV Wetland Stewardship Program; and several new partnerships were forged with industry and non-government organizations. Examples of projects included: work related to the promotion of sustainable agro-ecosystem management practices that conserve and restore species and ecosystem biodiversity at the watershed level; reaching an agreement to establish demonstration sites to promote riparian beneficial management practices, remote watering systems and shelterbelts; the development of education material for the use of teachers to promote shorebird conservation; collaborating with Environment Canada, the Canada Space Agency, Ducks Unlimited and other provinces to demonstrate the use of remote sensing technology to cost effectively update existing wetlands inventories; supporting research conducted by several university students related to agricultural growing and harvesting techniques to provide better wildlife protection and improve biodiversity; and partnering with Bowater Mersey to support a NSERC Industrial Research Fellowship examining peatland biodiversity in the working forest landscape, which will help to guide future habitat management and conservation initiatives in the agricultural and forested landscapes.

Sixteen projects were approved for funding under the Habitat Conservation Fund for a total of \$151,000. This money was used by conservation organizations and individuals for the protection and enhancement of wildlife habitat. Groundwork was also carried out to support the first allocation of funds under the Species at Risk Conservation Fund planned for early 2007.

The Shubenacadie Wildlife Park attracted over 76,000 regular visitors to the facility and provided educational programs for about 4,500 students, including the Ducks Unlimited "Adopt a Marsh" program. Construction for a cooperative undertaking at the Shubenacadie Provincial Wildlife Park with Ducks Unlimited Canada was undertaken with the grand opening scheduled for the summer of 2006. Funding for the project was raised by Ducks Unlimited and the Province has agreed to operate the facility for 20 years. This includes a new interpretive and educational centre,

several nearby wetlands and public access to an upgraded marsh which will enhance public awareness of wetland habitats and waterfowl.

A public review of the Wildlife Management Areas and Game Sanctuaries showed overwhelming public support for the continuation of all sanctuaries and wildlife management areas and the major restrictions regarding hunting and trapping. Support was also strong for the creation of nine new management areas. The Minister decided to retain all the currently designated areas and instructed staff to review the associated regulations to improve habitat protection measures and align them with current DNR programs.

The development of a Nova Scotia Biodiversity Strategy was started to address significant issues, identify required approaches and actions, and provide useful scientific information on the province's biological resources, including genes, species, ecosystems as well as its ecological processes and services. However, public consultations needed for the development of the biodiversity strategy did not proceed during 2005-06. Internal planning for this initiative and the preparation of background documents, the web site and other supporting material did continue throughout 2005-06. A provincial Biodiversity Working Group was struck whose mandate was to provide input from other provincial departments into the development of the strategy.

#### **4.1.7 Utilize Department Information and Expertise**

Department staff participated in the planning and development of the North American Natural Resources Monitoring Partnership in collaboration with the Association of Fish and Wildlife Agencies and many other government agencies, NGOs and academic institutions. This initiative will make available on the web information on geolocation of North American natural resource monitoring efforts together with standardized descriptions of associated monitoring protocols. Technology has been utilized to provide successful deer hunters with an on-line option to register their deer as an alternative to doing so at a Deer Registration Station.

A number of improvements in public safety were realized through the department's efforts to cap and/or fill abandoned mine openings on Crown lands. Seven shafts and pits located on Crown lands at Glenelg, Pleasant River Barrens, North Springhill and Molega were backfilled. In addition, significant repair work was conducted on fencing around historical mine shafts on Crown lands in Montague, which had been damaged during Hurricane Juan.

Several improvements in access to forest resource information occurred during the year. The placement of non-confidential components of the Nova Scotia GIS forestry database layer on the National Forest Information System (NFIS) website was completed. This digital and spatial forestry information is now publicly available to all users with the appropriate GIS systems software via the Internet. A new spatial GIS mapping layer of potential wetland areas in Nova Scotia was completed and resides on the department's forestry and wildlife GIS systems. This mapping product is a tool that assists forest practitioners in operational land-use planning and management. Finally, testing of a new digital, computer based system for interpreting aerial photos was underway during the year with testing to be completed in 2006.

Department staff continued to maintain the Geoscience Atlas and Mineral Resource and Land Use Atlas (MRLU) as an on-line, interactive geoscience map and data service. Staff continued to interact with Regional Development Agencies (RDA) and rural community groups throughout Nova Scotia to promote the use of DNR geoscience information and to explore economic development opportunities in their areas of the province. Many RDA members and representatives from the Office of Economic Development participated in the annual Mining Matters conference in November 2005.

During 2005-06, the department provided a range of educational materials to many different stakeholder groups. At the department's Natural Resources Education Centre in Musquodoboit, approximately 5,900 students, teachers, youth group leaders, community leaders and the general public received an exposure to responsible resource management practices. One thousand woodlot owners were exposed to responsible, sustainable forest management practices, including information on the *Wildlife Habitat and Watercourses Protection Regulations*, through DNR's woodlot owner of the year program, woodlot management home study program, and woodlot courses, and woodlot conferences. In collaboration with several Christmas tree grower associations, approximately 1,200 Christmas tree growers were provided information on responsible management practices. Finally, about 1,000 hunters were trained to hunt responsibly, with training provided for bows and for firearms.

#### **4.1.8 Meet National Obligations**

Nova Scotia continued as a partner in the Atlantic Canada Conservation Data Centre, who are in the process of adopting the new Biotics software, which is the standard being adopted across North America. This will make this conservation data compatible with other jurisdictions and better enable tracking of populations across their geographical range.

Department staff participated in Natural Resource Canada's Geoconnections national workshop to explore geospatial data management needs in various sectors including the environment and sustainable development.

Negotiations continued on a Bilateral Agreement with the Federal Government for national implementation of the species at risk legislation and programming, but the initiative was stalled at the federal level due to a focus on other jurisdictions. We are ready to continue negotiations and hope to finalize the agreement in 2006-07.

The department participated in various Canadian Council of Forest Ministers (CCFM) programs and initiatives during the year and was represented at the CCFM annual meetings that were organized and hosted by the Yukon Government.

In October 2005, the Minister of Natural Resources joined as a signatory with all other fire management agencies across Canada to support the principles of the Canadian Wildland Fire Strategy (CWFS) Declaration. Draft implementation plans for the CWFS are being prepared by committees of the Assistant Deputy Ministers for future presentations to the CCFM.

The Province is a partner in the Canadian Interagency Forest Fire Centre and the Northeast Forest Fire Compact, which both provide mutual aid support for forest fire suppression if needed. The department continued its invaluable cooperation with its national and international partners to ensure the best available resources in forest fire emergencies. The increasing risk of forest fires and the recognized limitations of our fire agencies continue to show the need for new cooperative initiatives regionally, nationally (such as the Canadian Wildland Fire Strategy) and internationally.

The department participates in the National Orphaned and Abandoned Mines Program, which 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-ups. The department continued to provide financial support for this program and provided information for the national inventory.

Department staff participated in a national workshop in Ottawa to share ideas and solutions for the acquisition and delivery of digital datasets to clients. The department also completed an update to the Nova Scotia geoscience metadata catalogue, and continued to maintain the catalogue.

The department continued to participate in discussions pertaining to the proposed Canadian Geological Mapping Strategies (CGMS), however, this initiative was not

endorsed by the Federal government. The department continued to prepare for CGMS by preparing a comprehensive set of project plans.

The department participated in a national working group to assess how changes to the federal tax system affect the mineral resource industry. Department representatives participated in this working group through several conference calls and in workshops in Vancouver in January, and Toronto in March. A report on the subject was tabled at the annual Mines Ministers Conference in St. Andrews, NB, in September 2005.

#### **4.1.9 Provide Forest Protection Services**

Protection of Nova Scotia forests from fire, pests and disease is mandated through the *Forests Act*. Preparations started in the fall of 2003 to set in place a three-year plan of initiatives to better prepare for the high fire hazard left in the aftermath of hurricane Juan. Examples included: increased multi-agency communications plans/information, an early alert preparedness plan, enhanced training sessions, and various sessions with emergency service providers.

Numerous pest detection surveys were completed to assess the level and severity of insect infestations. Specific attention was being paid to the first discovery in 2004 of the jack pine budworm, the expansion of the pale winged gray (PWG), as well as the whitemarked tussock moth, hemlock looper, spruce beetle, and the brown spruce longhorn beetle. All infestations will have to be monitored closely for significant changes. The Canadian Forest Service conducted research on the PWG for possible treatment options with Btk.

Large populations of the blackheaded budworm had been discovered in woodlands in the Cape Breton Highlands. However, results of surveys carried out in late 2005 showed a significant drop in blackheaded budworm numbers and lower expectations for 2006. However, Canadian Forest Service research plots showed a possible impact from other defoliating insects and a treatment option to protect the integrity of the sample plots was discussed.

#### **4.1.10 Off-highway Vehicle Initiative**

An Interdepartmental Committee, coordinated by the Department of Natural Resources, was established by the Province in November 2004. An Action Plan, developed to respond to the recommendations made by the Voluntary Planning Off-highway Vehicle Task Force, accepted all 39 recommendations and provided a 24-month period in which to move the OHV program forward.

In December 2005, government passed Bill 275, which accelerated the time line for completing key parts of the Action Plan. As a result, several regulations were required by April 1, 2006. Work was completed on the OHV Safety and Training Regulations, the OHV Vulnerable Areas Licensing Regulations, the OHV Fees Regulations, and the OHV General Regulations.

Additional resources were allocated to allow the department to provide increased OHV enforcement services during 2005-06. Additional staff resources were secured that allowed twelve enforcement officers to be assigned to an OHV Unit and stationed across the province. They have met with the media, conducted patrols on a regular basis, been present at OHV rallies, conducted extension activities with exhibits and staff at fairs, made presentations at schools, conducted special operations, and have worked with other agencies in enforcing the *OHV Act* and regulations.

## **4.2 Crown Lands Administration**

Accomplishments for this core business area 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**

The effective administration of Crown land depends upon the existence of an up-to-date legislative and policy framework. Recommended legislative changes were developed during the year to allow the Crown to express a "non-interest" in certain parcels of land where the migration of Crown lands into the Nova Scotia Property Records Database resulted in what appeared to be Crown land encroachment.

The department also worked closely with the Department of Environment and Labour, to prepare draft procedures for the acquisition of Wilderness Area inholdings and adjacent lands, and for the administration of inland submerged lands. Department staff also participated on the Private Land Conservation Enhancements (PLACES) Committee, which worked to identify steps that could be taken to encourage more conservation initiatives on private lands and development of an action plan.

#### **4.2.2 Improve Opportunities for Land Acquisition**

During 2005-06, the department acquired lands in Lunenburg, Yarmouth, and Antigonish counties, including a 30 hectare coastal property at Cape George in Antigonish County.

A partnership agreement with the Nova Scotia Nature Trust (NSNT) was announced in April 2005, where the province agreed to provide financial assistance of \$300,000 over three years to the NSNT. In return, the NSNT agreed to 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.

The department also entered into a community partnership arrangement with the Mahone Island Conservation Association for the purchase of Andrews Island, Mahone Bay.

#### **4.2.3 Streamline Land Administration Processes**

Changes to the Ministerial Land Transactions Regulations were approved late in March 2005 that allowed the Minister of Natural Resources increased authority to acquire real property or an interest in real property pursuant to the *Crown Lands Act* and *Wildlife Act*, and the issuance of certificates of non-interest pursuant to the *Crown Lands Act*, subject to certain limitations. This authority included the majority of routine land transactions. The effects, which began to be felt during 2005-06, have been significantly increased efficiency, reduced processing time frames, an improved level of public service delivery, an opportunity to deal with the backlog of over 3,000 active files, and the ability to accommodate new projects.

#### **4.2.4 Improve Access to Land Information**

The department holds a considerable amount of land information. However, much of it is paper-based, which has limited the information's usefulness. The department's GIS information system has been improved by the continued conversion of paper-based records. The department's Crown Land Information Management Centre's website, identifying Crown ownership on-line, was made available to DNR staff across the province.

Additional staff were added during the year, who were responsible for the migration of Crown land into the Nova Scotia Property Records Database and to clarify those land parcels affected by Crown land encroachment.

Through a cooperative effort between Service Nova Scotia and Municipal Relations (SNSMR) and DNR, an efficient process has been implemented to reduce the Parcel

Descriptor Certification Approval (PDCA) and the Approval for First Registration (AFR) (for entry of information into the Nova Scotia Property Records Database).

### **4.3 Infrastructure and Support Services**

These accomplishments relate to the department's investment in buildings, equipment, systems, and staff.

#### **4.3.1 Infrastructure / Equipment Maintenance and Replacement**

A review of the department's vehicle fleet was completed. The department maintained a close relationship with staff at the Department of Transportation and Public Works to ensure vehicle purchases were at the best prices. New standard specifications for vehicle tenders were completed. A long-term vehicle information tracking system was under development to allow for more accurate vehicle life planning. Long-term plans include a move to the vehicle maintenance and planning component of SAP, which is the software used to run the government-wide financial system.

A computer refresh plan was adopted in the department's field offices, where all computers are scheduled for replacement on a four-year cycle. This was necessary to reduce the ongoing maintenance costs of IT hardware and also to ensure that the computer equipment used by staff is capable of using new software that is introduced. Approximately 80 new computers were purchased in 2005-06 by the department's three regions in accordance with this computer refresh plans.

The three regions also replaced some older motorized equipment, which included primarily snowmobiles, ATV's, ride-on lawn mowers, and gators. Approximately 15 new units were purchased to bring the fleet up to an adequate level. A refresh plan is being developed to ensure that the appropriate number of units are replaced each year to maintain an efficient motorized equipment fleet.

#### **4.3.2 Implementation of Initiatives to Improve Internal Efficiency**

The department is very decentralized with offices located throughout the province. A number of initiatives were undertaken throughout the year to allow most of our offices to access various corporate and departmental applications needed to operate effectively. All of the remaining DNR offices (nine additional offices) were connected to the Provincial Data Network during the year, which allowed staff in these offices to access corporate systems and departmental databases.

The department continued to view information as a corporate asset to be accounted for and managed. The department made significant progress on standardizing how

its information assets are managed. STAR/STOR, the government classification system for records management, was completed for all regional offices and all DNR offices have now have access to the department's records management software. Staff training on records management was ongoing throughout the year and information on the department's records management program was made available on the department's intranet site.

An implementation of the Department of Transportation and Public Works' Government Services for Inventory Control (GSIC) system was planned for 2005-06 to provide a department-wide asset management system. Assets in the Founders Square office had been transferred to the GSIC system in 2004 and work had begun to prepare for providing access to our field offices. However, the implementation of the GSIC system was halted in the summer of 2005 due to a government decision to phase out the use of the mainframe computer system, which was required to operate the GSIC system. An alternate asset management system is now under development as a replacement for GSIC and will be implemented in the department when it is completed.

The human resources portion of an orientation package for new employees was completed. Templates were developed for use as part of customizable training programs. Staff continued to participate in the government-wide implementation of the human resources component of SAP, including providing resources for testing. A number of initiatives related to healthy workplaces and employee wellness were undertaken during the year; these included health risk assessments for head office staff, an analysis of physical job demands for several forest fire fighting positions, and participation in flu shot clinics.

#### **4.3.3 Departmental Implementation of Corporate Initiatives**

During 2005-06 a number of department staff received French language training. Several documents were translated into French, including "in case of emergency and rules" sheet that is available to visitors to the provincial parks system.

The government's Affirmative Action Policy required that each department, agency, board, and commission develop a three-year affirmative action plan. An action plan was developed for the department and a number of components of the action plan were implemented during 2005-06 including:

- contracting with consultants to deliver Aboriginal awareness and diversity training programs to staff. Ninety-six staff attended Aboriginal awareness sessions and 15 staff received diversity training;
- providing an affirmative action pool for managers to fill temporary positions with diversity candidates if available;
- completing necessary transactions to designate three conservation officer positions to be filled by Aboriginal candidates; and

- participating, as part of government's HR community, in a review of healthy workplace programs, and reaching agreement that the HR community will collaborate on the delivery of one corporate program.

## 5 Financial Results

The department's 2005-06 net program expenditures estimate (after chargeables, fees and recoveries) was \$63.1 million. Actual expenditures for the same period were \$63.7 million.

Department of Natural Resources - Estimated Budget Expenditures *		
	2005-06	
	Estimate	Actual
	\$'000	\$'000
TCA Purchase Requirements	\$2,100	\$2,374
Net Program Expenses:		
• Senior Management	\$628	\$575
• Corporate Services Unit	\$7,102	\$7,050
• Renewable Resources	\$9,573	\$9,540
• Mineral Resources	\$3,278	\$3,300
• Regional Services	\$35,411	\$36,711
• Planning Secretariat	\$4,305	\$4,031
• Land Services	\$2,801	\$2,535
Total - Net Program Expenses	\$63,098	\$63,742
Funded Staff (Full Time Equivalents)	867	832

\* 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 (2005-06 results), and where we want to be for each measure (future target values and target years) is provided in this appendix. The data for each of these measures is generated within the department.

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 2005-06, 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 - 2005-06 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. The LRMF for the Mulgrave Plateau eco-district was complete as of the end of March 2006. This LRMF was prepared as a pilot project and is being 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. Our current 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?**

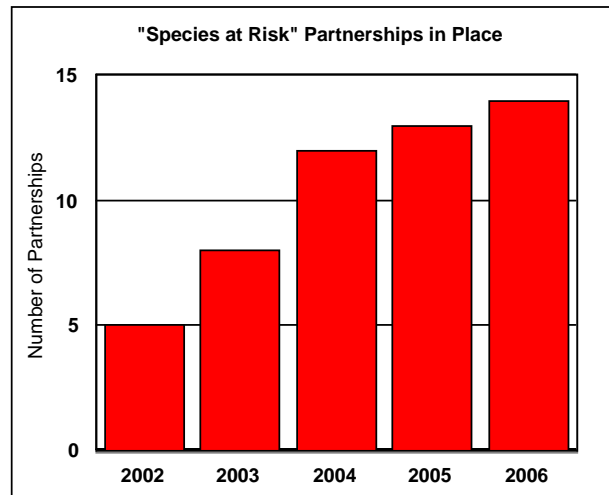
This measure is an indicator of our efforts to build and maintain stewardship partnerships for species at risk. As more groups and individuals are engaged in our formal efforts to conserve and protect species at risk we have an increased capacity to provide for their maintenance and recovery. The measure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

#### **Where Are We Now?**

The department had 14 major stewardship partnerships for species at risk in place as of March 31, 2006, up one from the same time the previous year.

#### **Where Do We Want To Be?**

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*. Our target for this measure is to have at least 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?

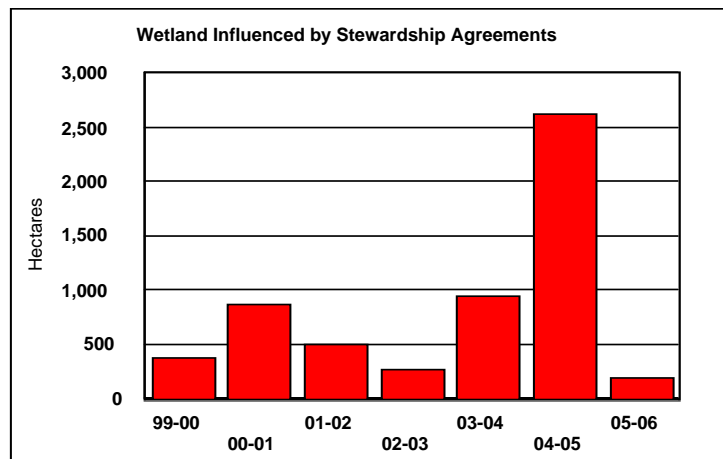
The measure is the area of wetland and associated wildlife habitat influenced by stewardship agreements concluded during that year, expressed in hectares annually. It provides information on agreements with private landowners related to restoration and/or management of wetlands, or the transfer of land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

#### Where are we now?

There were 185 hectares of wetlands influenced by wetland stewardship agreements concluded during 2005-06. The owners unknown process contributed to a significant jump in the 2004-05 value.

#### Where do we want to be?

A target of 284 hectares had been identified for 2005-06. However, these stewardship agreements frequently involve large, discrete blocks of land so it is difficult to accurately forecast where we want to be in the future, other than



increasing the area covered by agreements. A target of 243 hectares has been set for 2006-07.

Nova Scotia's wetland conservation initiatives benefit through the department's 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?

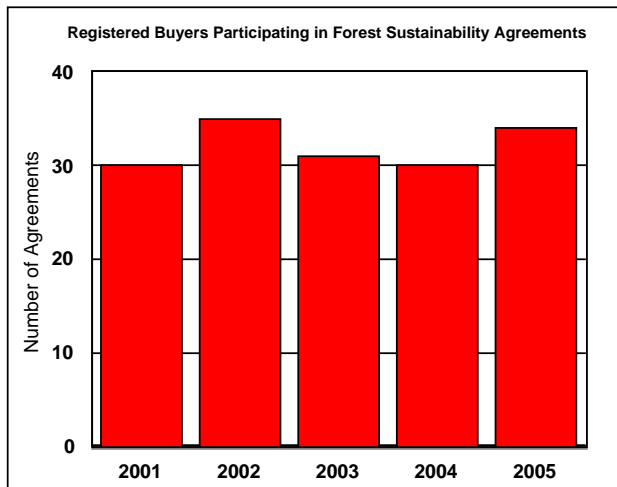
Registered buyers, under the Forest Sustainability Regulations of the *Forests Act*, are responsible to ensure that the required amount of silviculture work is completed on private lands. Forest sustainability agreements are government/private sector funded silviculture programs that offer funding to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

#### Where are we now?

For the calendar year 2005, there were 34 registered buyers that participated in forest sustainability agreements.

#### Where do we want to be?

The target for this measure is 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 relevant issues helps to promote sound natural resources stewardship.

#### What does this measure tell us?

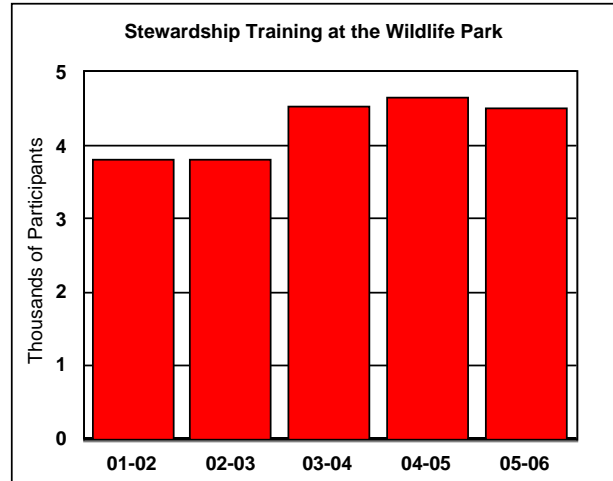
This measure records the number of teachers and students who receive training in wildlife education programs at the Provincial Wildlife Park in Shubenacadie. This training is delivered on-site in a classroom at the Wildlife Park in combination with the captive indigenous wildlife at the Park and is an 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 2005-06 was approximately 4,600 individuals, down slightly from the number trained the previous year.

#### Where do we want to be?

A target of 10,000 individuals receiving training during 2009-10 has been set for this measure. It is anticipated 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.



**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?**

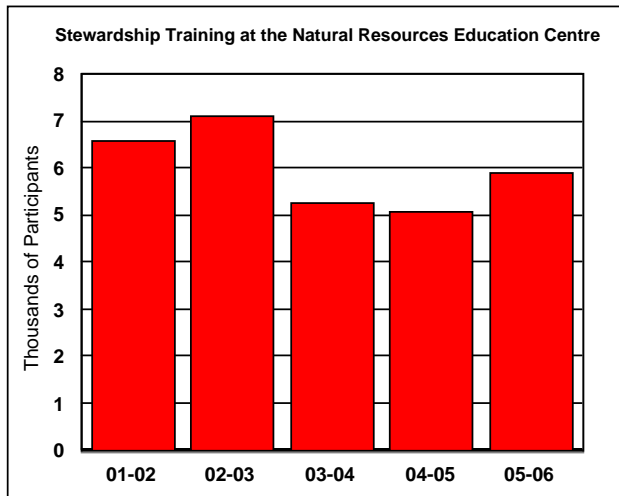
The measure reflects the number of teachers, adult leaders, students and youth who have participated in one of the natural resources programs at the Natural Resources Education Centre (NREC) annually. The programs involve pre- and post-visit activities as well as interactive activities as part of the 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 2005-06, there were 5,898 persons who participated in training through the Natural Resources Education Centre, up 16% from the previous year.

**Where do we want to be?**

The department’s target for this measure is 8,000 individuals annually by 2009-10. While a sustained increase in the number of participants is desirable in future years, an 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.



### 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?

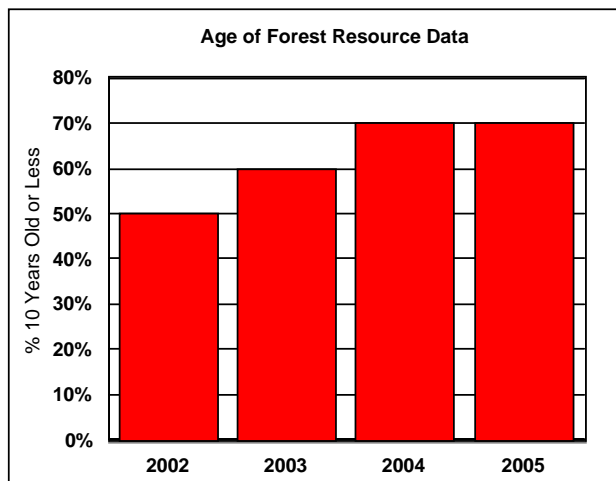
The frequency that forest information is updated is important. This measure tells how much of the province is meeting the target update cycle of every ten years. Updating the forest resource data consists of three major activities: aerial photographs are taken of approximately 10% of the province, staff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

#### Where are we now?

For the calendar year 2005, 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 target value for this measure is 100% of the province with forest resource data ten years or less old and we anticipate attaining 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. The percentage of the province with forest resource data less than ten



years old is 70% because there was a larger area than normal area that was photo interpreted in the earlier 1990s under a Federal/Provincial Agreement. It is taking longer to do the update of this area because it is being spread out over a longer period of time since all costs are now borne by the province.

**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?**

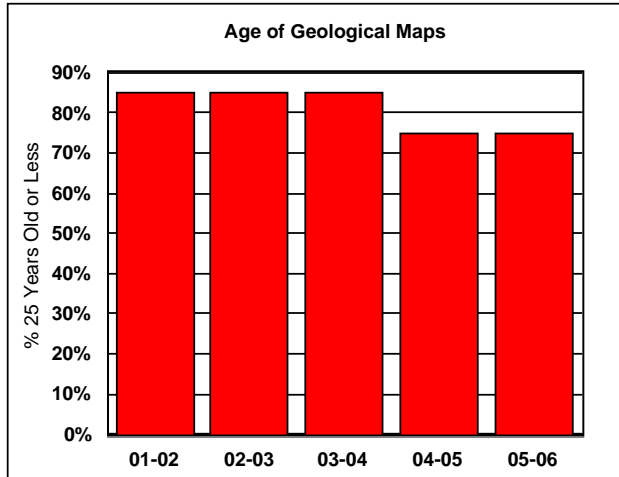
This measure tells us the degree of currency of geological maps produced by the department, which are based on geoscience mapping projects throughout the province. These maps are used by private sector companies to support their exploration programs.

**Where are we now?**

During 2005-06, 75% of the province was covered by geological maps less than 25 years old, the same figure that was reported for 2004-05.

**Where do we want to be?**

The department’s target for 2005-06 was for 80% of the province to be covered by geological maps less than 25 years old so the actual figure of 75% fell slightly below the target. The new target for this measure for 2006-07 is 85%.



### 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?

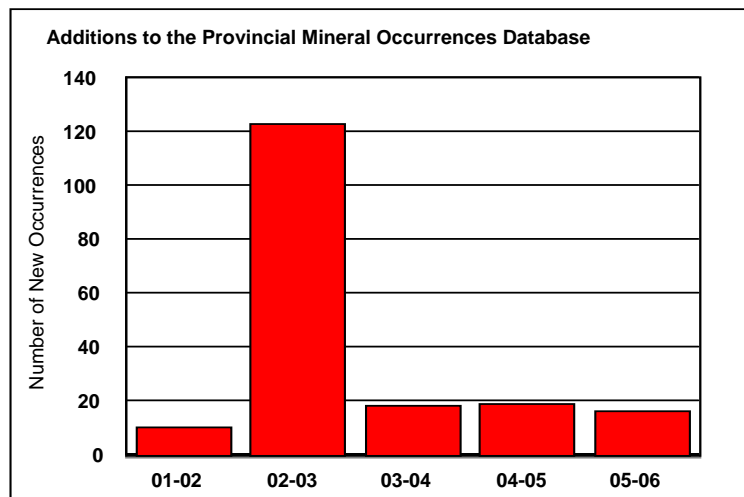
This is a measure of the department's level of annual progress in acquiring information on newly discovered mineral occurrences throughout the province and the level of effort devoted to entering this information in the occurrences database.

#### Where are we now?

During 2005-06, 16 new mineral occurrences were added to the provincial mineral occurrences database, which was less than the target of 20 occurrences for the year. During 2002-03 the number of occurrences entered jumped significantly as a number of previously discovered occurrences were entered into the database.

#### Where do we want to be?

The department had a target of 20 new occurrences for 2005-06 (note that there is the potential for large variations from year to year in this measure). Although this target was not reached for new occurrences, there were 71 updates made to existing occurrences in the database, and many of these updates require as much effort as new occurrences. The target for 2006-07 is for 16 new occurrences to be added to the provincial mineral occurrences database.



**Age of Aggregate Resource Information**

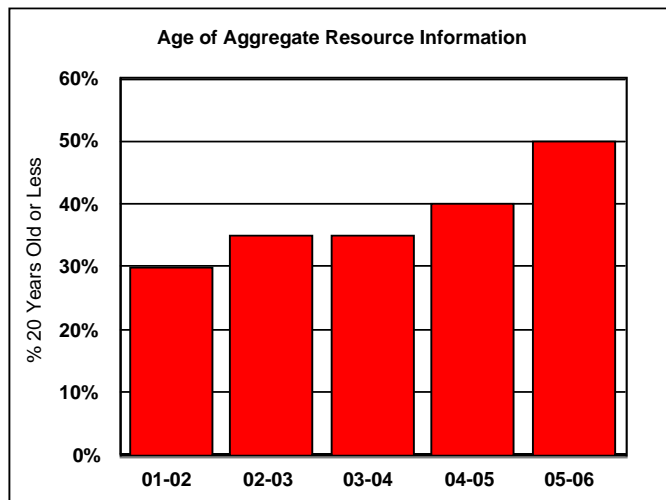
Aggregate is a key commodity used by the construction industry and supports economic development throughout the province. Forecasts for infrastructure development (highways, urban roads, residential and commercial construction) suggest that the demand for high quality aggregate will increase markedly 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 2005-06, the percentage of the province for which aggregate resource information was less than 20 years old was 50%, up from the figure of 40% reported for 2004-05. This increase was achieved as a result of the addition of several aggregate maps covering parts of the Annapolis Valley.



**Where do we want to be?**

The department’s target for 2005-06 was for 50% of the province to have information on aggregate resources less than 20 years old. This target was achieved. The target for 2006-07 remains at 50%. 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. Visits to a random sample of sites in 2004-05 (sites harvested shortly after implementation of the regulations) showed 29% in full compliance. The next random site monitoring is planned for 2007-08. In the meantime, an intensive program of landowner and forest operator contact is taking place to ensure knowledge of the regulations is as high as possible

#### **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?**

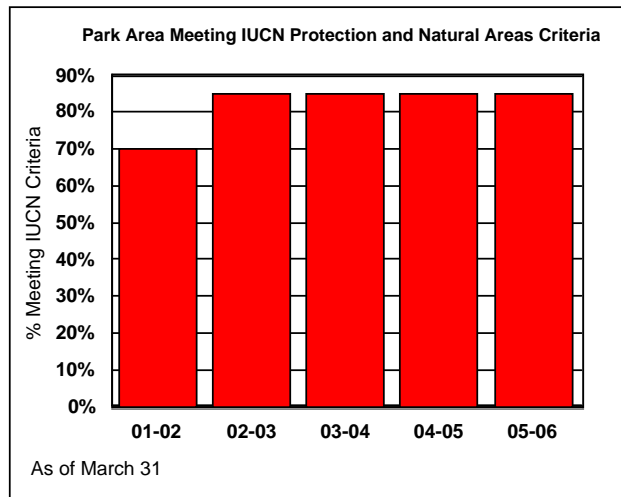
The commitment to land conservation is reflected in the percentage of designated provincial parks land that meets the IUCN criteria for contributing to the protection of natural areas. The IUCN criteria is an international standard for ecosystem conservation.

**Where are we now?**

As of March 31, 2006, 85% of provincial park area met the IUCN criteria, which was unchanged from the previous year.

**Where do we want to be?**

The department’s target for this measure is 85% and is based on maintaining the existing level of ecosystem conservation contributed by the provincial parks at its current level. 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

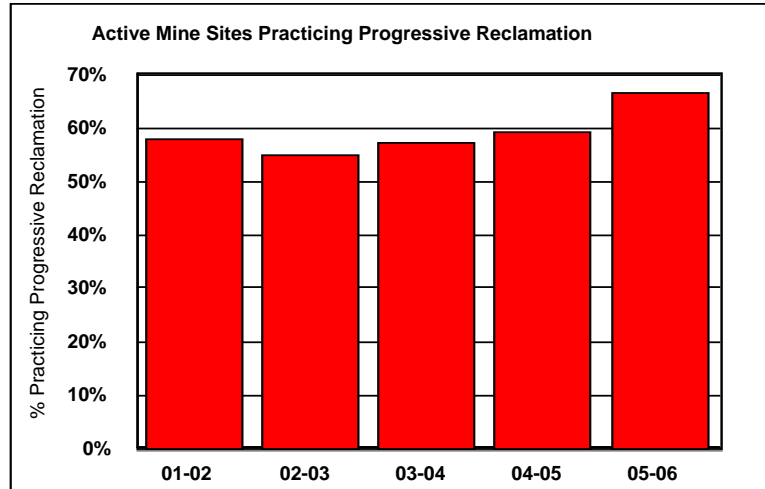
Reclamation activities allow the restoration of natural ecosystems. Progressive reclamation is continuous reclamation and rehabilitation of mining lands as mining operations continue. Final reclamation is conducted after mining is completed. Progressive reclamation dramatically reduces the amount of 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 2005-06, 67% of the province's active mining operations were utilizing some form of progressive reclamation, up from 59% for the previous year (note that the 2004-05 figure was revised from 65% to 59%). The 2005-06 figure includes mine sites where progressive reclamation is part of the operating plan.



#### Where do we want to be?

The department had identified a target of 65% for this measure for 2005-06 and the target will remain at 65% for 2006-07. 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?

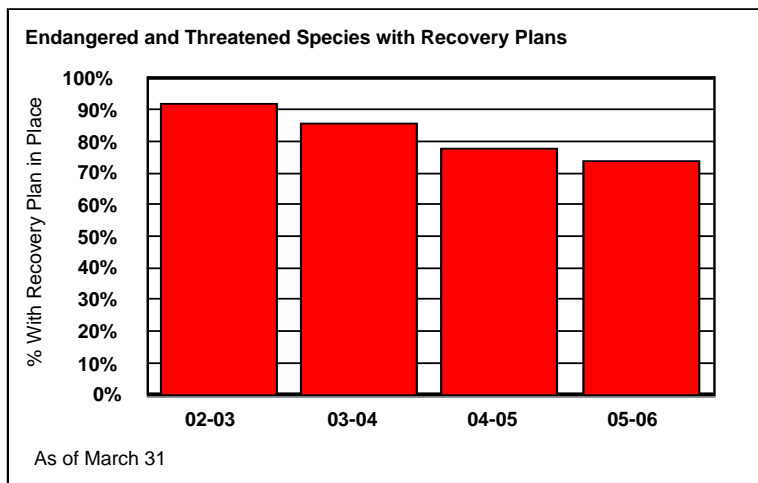
The measure is a straight forward indication of how much work is being done on restoring the health of endangered (and threatened) species. Recovery plans are the focal instrument for addressing the recovery needs for species at risk and guide governments, recovery teams and others, in their conservation 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, 2006, 19 species were listed as either endangered or threatened at that time. Of these species, 14 of them or 74%, had a recovery plan in place as of March 31, 2006. Information on the province's species at risk can be found at <http://www.gov.ns.ca/natr/wildlife/biodiv/specieslist.htm>.

#### Where do we want to be?

Our target was to have required recovery plans in place for all (100%) species listed under the Act by 2005-06 or sooner. Our target for future years is also 100%. However, there were still several species where recovery plans were not fully in place. New species are 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.



**Students Successfully Trained in Hunter and Trapper Safety**

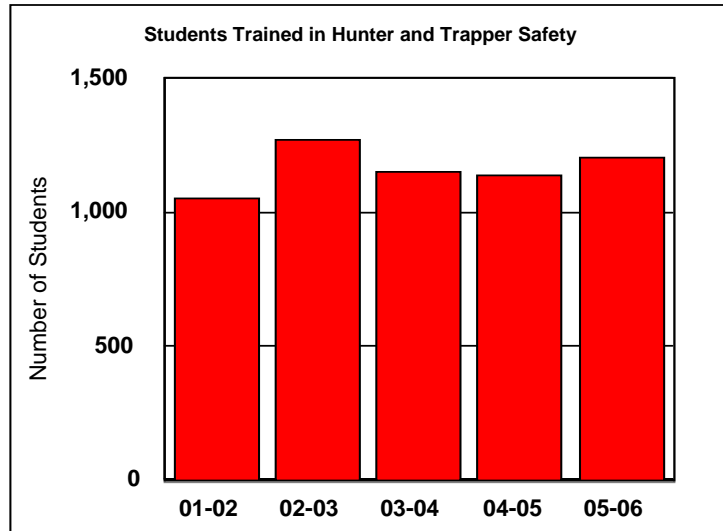
The mandatory training requirements for persons who wish to hunt provides for public safety by ensuring that persons who do hunt are trained in the safe handling, storage and transportation of a firearm or bow and that they understand the Provincial hunting laws. Additionally, these courses provide them 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 2005-06 there were 975 persons who completed the hunter education course training, 164 persons who completed the bowhunter education course, and 65 individuals who took the trapper education course. The total number trained was 1,204 persons during 2005-06, up approximately 6% from the 1,135 persons who received training the previous year.



**Where do we want to be?**

The department has identified a target of 1,150 individuals receiving hunter and trapper training in 2008-09.

### High Risk Abandoned Mine Openings Remediated on Crown Lands

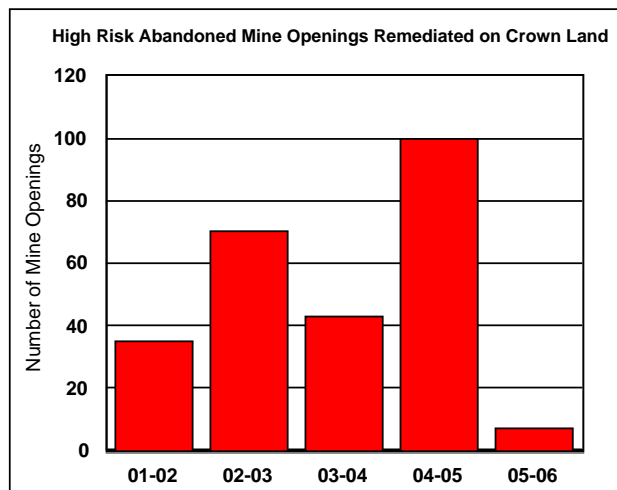
Remediation means securing the mine opening by capping, filling or fencing. By remediating abandoned mine openings, the department decreases the risk to those people traveling over or working on Crown lands.

#### 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 2005-06, seven high risk abandoned mine openings were remediated, down significantly in number from 100 during 2004-05 and our target for 2005-06 of 40 mine openings. There were several reasons for the drop from 2004-05. In 2004-05 an abnormally high number - 70 mine openings - were remediated through a partnership arrangement with a company conducting forest harvesting operations on an area of Crown land that was a former mining area. Only three mine openings were remediated in 2005-06 through similar partnership work. In addition, fewer mine openings were done under the Abandoned Mine Openings program; however, several of those done during 2005-06 were more technically challenging and expensive than those remediated under the Program during 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 are concentrating on remediating the high risk abandoned mine openings located on Crown land. The department's target is 16 mine openings remediated during 2006-07.

**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?**

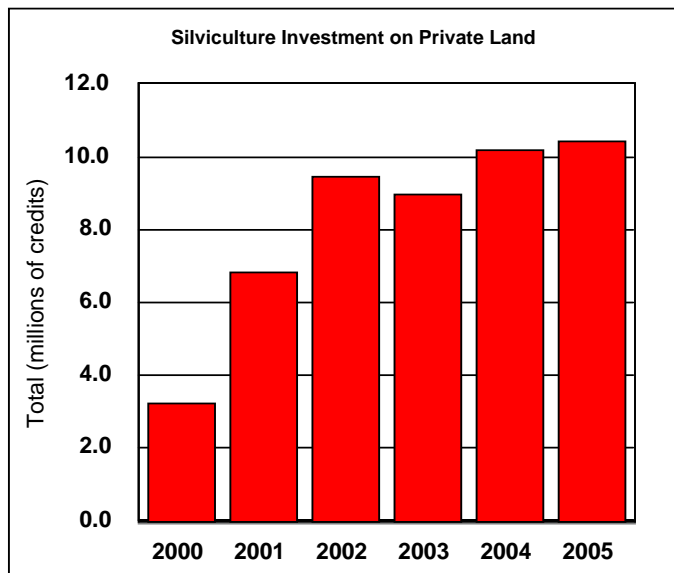
This measure has been modified to give a more accurate reflection of the level of silviculture activity taking place. The measure is a sum of completed silviculture claimed for private lands reported to the Registry of Wood Buyers, plus the amount of silviculture activity funded by the Association for 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 the calendar year 2005, there were 10.4 million silviculture credits for silviculture activities on small private woodlots, marginally higher than the 10.2 million credits recorded in 2004.

**Where do we want to be?**

Our target for this measure for 2006 is a total value of 9.0 million silviculture credits to support silviculture activities on small private woodlots. However, a new target will need to be set for subsequent years since this measure has been revised slightly to include 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?

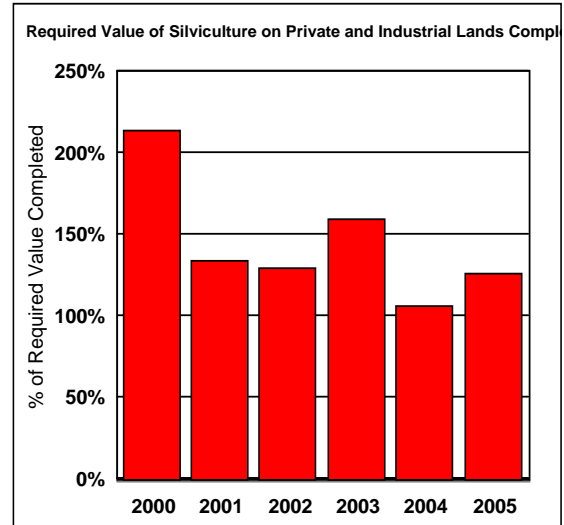
The measure helps to explain whether the level of silviculture activity being reported by wood buyers exceeds the required amount (as per the requirements of the *Forest Sustainability Regulations*). A ratio of 100% means that the level of silviculture reported equals the amount of silviculture activity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

#### Where are we now?

During the calendar year 2005, approximately 14.6 million silviculture credits were required and about 18.5 million credits were claimed. As a result, completed silviculture was 127% of the amount required under the *Forest Sustainability Regulations*.

#### Where do we want to be?

The department's target for this measure for 2005 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 claimed 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

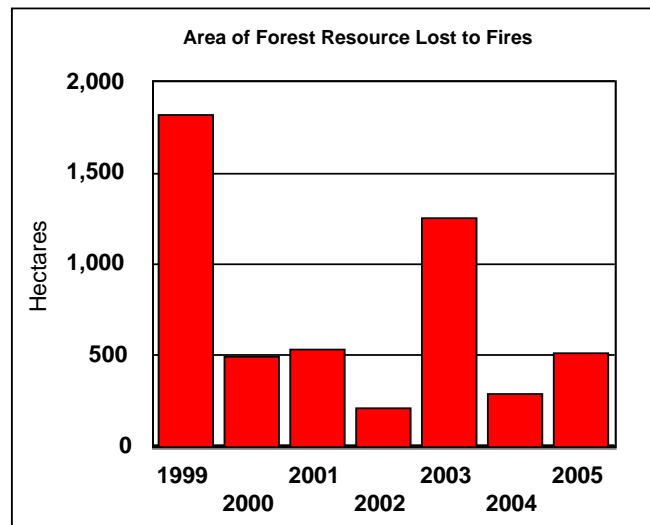
Forest fires are a regular occurrence in Nova Scotia resulting in the loss of forest resources. The provincial government is responsible for forest fire protection on all land tenures. The importance of reduction of loss to fire is particularly important on private land where woodlots supply more than 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 proper fire management. A quick response helps to keep fires confined to relatively small areas. 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 the calendar year 2005 the area lost to forest fires was approximately 517 hectares, up significantly from the area lost in 2004, but much less than the area lost in 2003. 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” for this measure is 793 hectares during 2005 and the actual result was well under the target. 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 2005-06, 100% of the regulations were reviewed.

#### **Where do we want to be?**

The department's target was 100% for this measure 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 2005-06, 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 2005-06 was to maintain a level of 100%. The target for this measure will continue to be 100% in subsequent years.

**“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?**

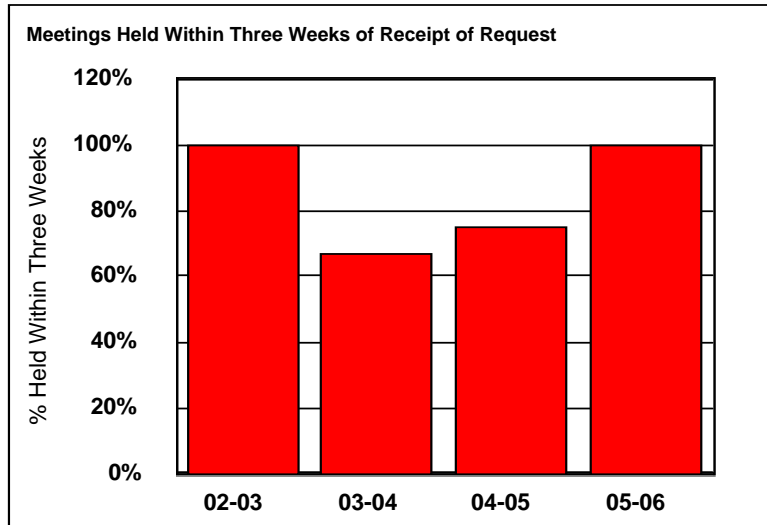
This measure tells us the department’s success at providing timely decision making with respect to mineral development projects. The measure reports the percentage of “One Window” Interdepartmental Committee meetings held within three weeks of receipt of a request.

**Where are we now?**

During 2005-06, 100% of the “One Window” Interdepartmental Committee meetings were held within three weeks of the receipt of a request (or on dates later than three weeks that were specifically requested by proponents in order to accommodate their schedule).

**Where do we want to be?**

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



**Parks Related Partnerships**

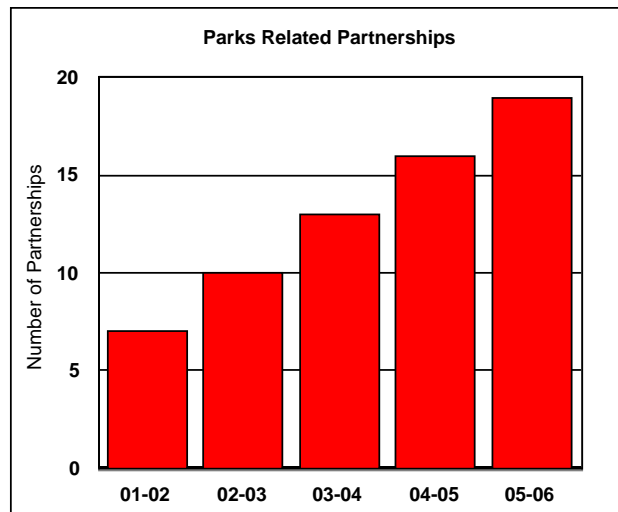
Through promoting and arranging parks related partnership agreements, and tracking the number in existence, the department can measure the growth in the availability of outdoor recreation opportunities.

**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, 2006 there were 19 partnership arrangements in place to assist the department in managing and delivering various outdoor recreation opportunities, up from 16 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 anticipated at least maintaining the same number of partnerships that were in place in 2004-05 and this was accomplished.

**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?**

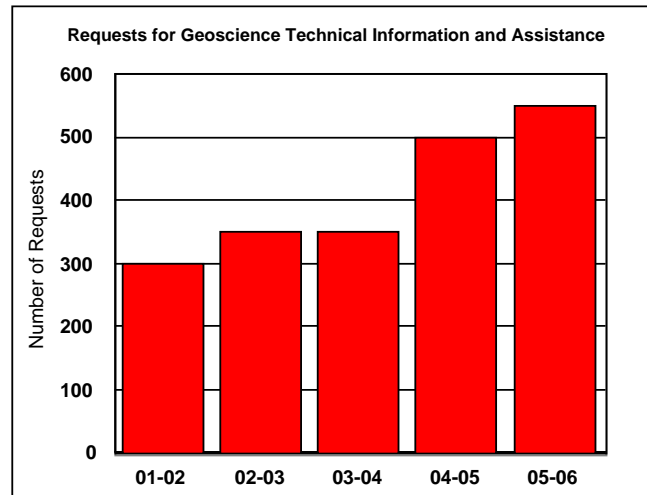
One such activity is promoting and providing easy access to the professional expertise of departmental geologists, who provide information, advice and counsel. By recording the levels of this activity, the department measures the awareness of the province’s mineral and hydrocarbon potential by the resource 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 2005-06, 550 requests for information and technical assistance were received by staff, up slightly from the previous year. The figure exceeded the 2005-06 target of 400 requests received, and is one indicator of the increased interest in the province’s geological resources seen in recent years.

**Where do we want to be?**

The department’s target for this measure for 2006-07 remains 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?

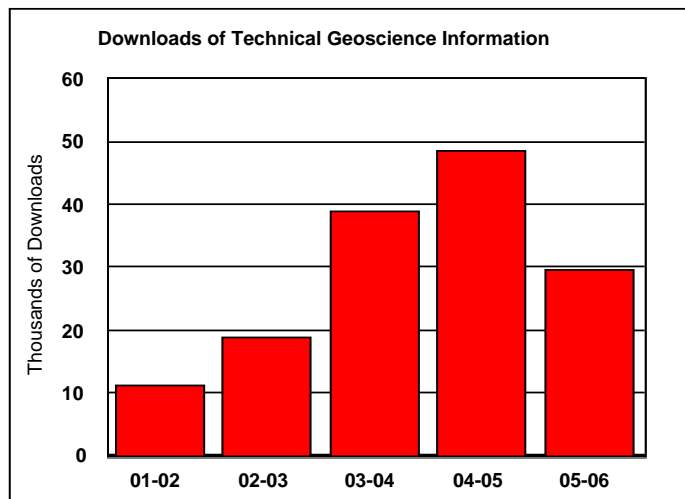
By recording the levels of this activity, the department measures the awareness of the province's mineral and hydrocarbon potential by the resource industry and their level of interest. The significance of monitoring downloads of data, rather than the number of visits to the website, is that it is an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

#### Where are we now?

Approximately 29.6 thousand digital data downloads were recorded in 2005-06. This is down significantly from the figure of 48.7 thousand reported for 2004-05; however, the data for previous years includes people who viewed but didn't necessarily download information.

#### Where do we want to be?

The department's target for this measure for 2005-06 was 30.0 thousand digital downloads annually and the same target has been set for 2006-07. This target is believed to be an accurate reflection of 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?**

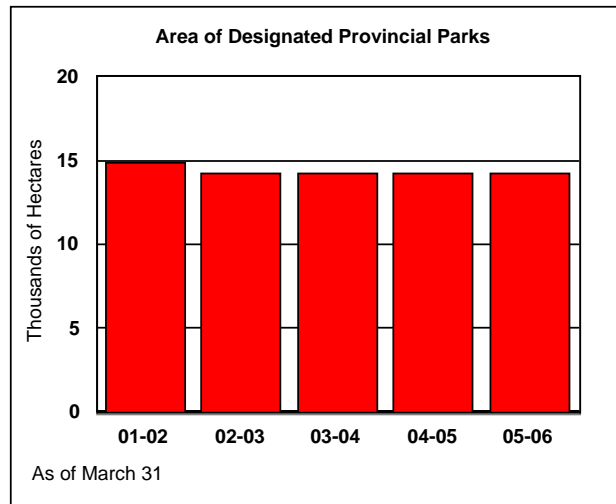
This measure tracks the area of land designated under the *Provincial Parks Act*. The amount of area of designated parks indicates the provincial commitment to maintaining lands for recreational opportunities and managing these lands accordingly.

**Where are we now?**

As of March 31, 2006 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 2005-06. However, directionally the department’s target was to maintain or increase the area. There may be slight increases to this figure over time with the addition of purchased properties adjacent to existing park properties.



### 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?

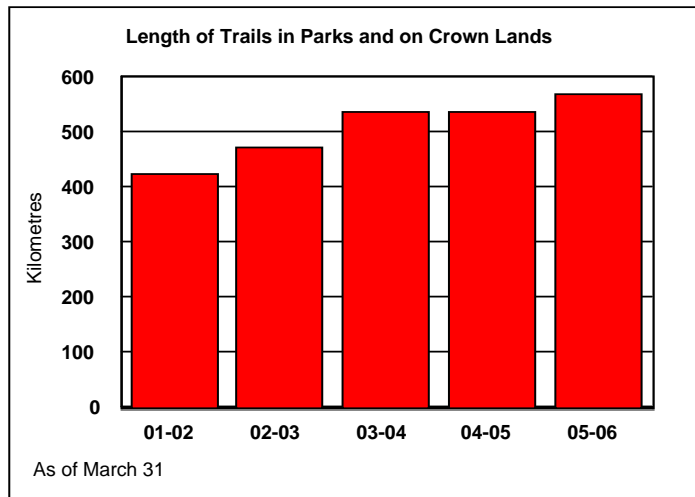
This measure tracks the length of trails occurring on Crown lands, including trails within provincial parks. The measure indicates specific support for hiking and other outdoor recreational activities. Trail development also measures the level of community support for putting outdoor recreational opportunities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

#### Where are we now?

As of March 31, 2006, 570 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 is 546 kilometres by the end of 2006-07, and the March 31, 2006 figure of 570 kilometres already exceeds the 2006-07 target. The length of trails is 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 for a range of uses.



### 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?

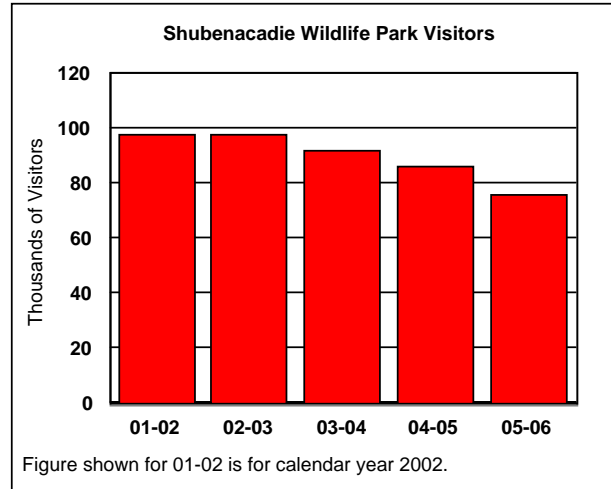
Annual attendance figures give an indication of the level of interest of Nova Scotians and visitors to our province in viewing Nova Scotia's wildlife in natural settings. This provides visitors to the Park with both a recreational experience and an opportunity to learn more about the province's wildlife. 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 2005-06 was approximately 76 thousand people, down about 12% from the previous year

#### Where do we want to be?

The new target for this measure is 110 thousand 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.

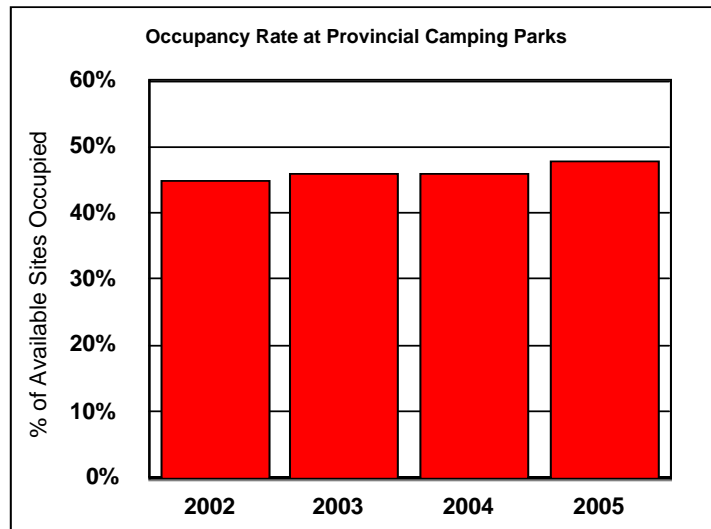
#### Where are we now?

For the 2005 camping season, the occupancy rate during the core season of July and August was 48%, up slightly from 46% in 2004.

#### Where do we want to be?

The department had identified a target of 46% for the provincial camping park occupancy rate in 2005. 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 is only reporting on 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).



### Review of Land Related Acts, Regulations and Policies

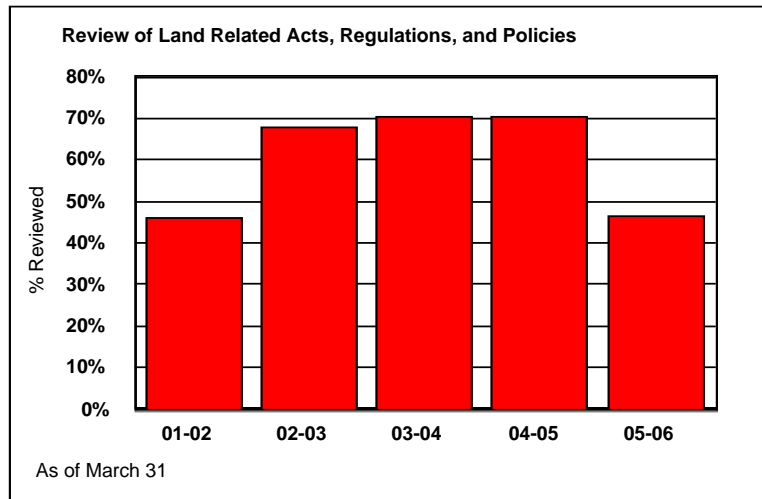
As custodian of the Province’s Crown lands, a key component is an up-to-date regulatory structure for these lands.

#### 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, 2006, 46% 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. This figure had been in the 65% to 70% range; however, it declined in 2005-06 since a number of land related policies that fell in the five year review window last year have now not been reviewed in the five years.



#### Where do we want to be?

The target value for this measure is to be at 70% at the end of the 2008-09 fiscal year.

**Migration of Crown Land and Resolution of Issues**

As public trustee of Crown land, it is the Department of Natural Resources' responsibility to ensure the quality and extent of title to the Crown land base.

**What does the measure tell us?**

This measure is the number of resolved Property Identification numbers (PIDs) affected by the ungranted Crown 40,000 series being transferred to the new Land Registration System. The measure provides an indication of the amount of Crown land that has been successfully migrated or that has had issues successfully resolved.

**Where are we now?**

During 2005-06, there were 1,798 PID issues successfully resolved. This was the first year for this measure and it was directly impacted by staff hiring and the implementation of a process to resolve the PID issues. A graph will be added next year, when there is more than one data point to report.

**Where do we want to be?**

The target value for 2006-07 is 2,000 PID issues successfully resolved.