

2005-06 Annual Report Department of Natural Resources

Honourable Kathy Dunderdale, Minister

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Message from the Minister



In accordance with government's commitment to accountability, I am pleased to submit the annual report for the Department of Natural Resources. The report was prepared under my direction and documents the activities and outcomes of the Department of Natural Resources from April 1, 2005 to March 31, 2006.

KATHY DUNDERDALE, MHA Minister

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Departmental Overview

The Department of Natural Resources (the Department) encompasses five Branches; Forestry Services, Agrifoods, Mines, Industrial Benefits and Energy. In addition it is responsible for the provision of corporate services for both itself and the Department of Fisheries and Aquaculture.

Vision

The vision of the Department of Natural Resources is of a Province that is realizing the full benefit from its forestry, agrifoods, mineral and energy resources in a sustainable manner.

Mission

The Department of Natural Resources promotes and facilitates the sustainable development of the Province's natural resources through its resources management, development and assessment activities for the citizens of Newfoundland and Labrador. The lines of business and mandate for each Branch of the Department are set out below.

Primary Clients

The clients of the Department are natural resource industries and stakeholders and citizens of the Province.

Budget

The total budget for the Department of Natural Resources in fiscal year 2005-06 was \$63,992,200. A Statement of Expenditure and Related Revenue for the Year Ended March 31, 2006, is given in Appendix 1.

Forestry Services Branch

Lines of Business

Management of the Forest Resource: The Forestry Services Branch is headquartered in Corner Brook and is responsible for policy, legislation, programs and forest management planning. These programs include silviculture, resource roads construction, forest inventory, forest fire suppression, forest insect control, forest management planning, enforcement/compliance and industry development. The Department implements tree planting operations which in 2005-06 saw the planting of 12.5 million seedlings. In addition, each year the Department delivers an extensive precommercial thinning program and constructs a number of resource roads. In 2005-06 a total of 55 new resource roads were constructed (78 km of new construction, 33 km of re-construction and 12 bridges).

Regional Services: Regional Services are responsible for the delivery of the silviculture, resource roads, forest fire suppression and enforcement/compliance programs. In addition, regional services is responsible for dealing with wildlife issues (road kills, injured animals, etc.), public awareness programs (presentations to schools, service clubs, etc.), addressing public concerns on other forest resource management issues and the development of district sustainable forest management plans. Enforcement of legislated require-

ments: The enforcement of the Province's Forestry and Wildlife Acts is delivered through regional services. In addition, the Forestry Services Branch collaborates with other government departments and agencies in the enforcement of the *Federal Fisheries Act* (*Inland Fish*), *All-Terrain Vehicle* (*ATV*) *Regulations* and the *Migratory Bird Convention Act*. The Forestry Services Branch is responsible for monitoring timber harvesting operations and patrolling inland waters and hunting areas for compliance with the Regulations under the various Acts.

Licensing and Permitting: The regional and district offices issue licences and permits for: cutting timber, sawmilling, burning of brush, operating harvesting equipment during the fire season, exporting timber, timber scaling, purchase of timber, possession permits for wildlife, beaver traplines, transportation of firearms, export of game and management of nuisance animals(eg. moose) on farmlands.

The Branch employs approximately 510 permanent, temporary and seasonal people in the delivery of its programs. Of this number approximately 14% are women.

Forestry Services delivers its programs through three regional offices located in Gander (Eastern Region), Corner Brook (Western Region) and Labrador (Labrador Region). Programs, policy and legislation are developed through headquarters located in Corner Brook and the executive offices located in St.John's. In addition, the Province is divided into 24 forest management districts: 18 are located on the Island portion of the Province and six are located in Labrador. The Branch also operates tree nurseries in Wooddale near Bishop Falls and in Goose Bay, Labrador. In 2005- 06, these nurseries produced 11.6 million and 842,099 seedlings, respectively.

<u>Mines, Energy, Industrial Benefits and</u> <u>Agrifoods</u>

Lines of Business

The Mines, Energy and Industrial Benefits Branches pursued five lines of business in 2005-06: resource assessment, resource development, resource management, project benefits optimization and policy and executive support.

The Mines Branch is responsible for the assessment, promotion, development and management of the Province's geology, mineral resources and mineral potential in a manner that maximizes the contribution of this sector to the economic well-being of the Province. The objective of the Branch is to attain a high level of sustained investment in mineral exploration and investment to ensure responsible management of the Province's mineral resources.

The Energy Branch is responsible for promoting and facilitating the effective and efficient management of the Province's electricity and petroleum resources from assessment through to development and production. The Branch is also responsible for the monitoring and auditing of royalties from the oil and gas sector. Principally, branch activities support the maximization of Provincial benefits from energy resource production. The Newfoundland and Labrador Hydro Group of Companies and the Canada-Newfoundland and Labrador Offshore Petroleum Board support the mandate of the Branch through the select management and administration of the electricity and oil and gas sectors.

Large scale resource development projects in the mining, petroleum and energy sectors often provide significant business and technology transfer opportunities for companies operating within Newfoundland and Labrador. The goal of the Industrial Benefits Branch is to maximize the benefits to the local economy from the development of these major projects. Focus is placed on securing a major share of value-added activities. Strategic positioning, benefits commitments, negotiation and monitoring, strategic development and implementation, and the identification, enhancement and international promotion of industrial capabilities are essential industrial benefits activities.

The Mines, Energy and Industrial Benefits Branches are primarily located in St. John's, with the exception of Mines Branch front-line activities located in Pasadena, Grand Falls-Windsor, Happy Valley-Goose Bay and Wabush.

The Agrifoods Branch is responsible for promoting the continued development, expansion and diversification of the primary and value-added agrifoods sector. Agrifoods programs are delivered through eight regional offices located in St. John's, Carbonear, Clarenville, Gander, Bishop Falls, Pynn's Brook, Mckays and Happy Valley-Goose Bay. The headquarters is in Corner Brook, while the executive office is located in St. John's.

In September 2005, an Executive Office, staffed with an Executive Director, was placed in Labrador West with a primary focus on mining, energy and agricultural sectors in Labrador. The Department's senior Labrador official, the Executive Director is responsible for monitoring, reporting and providing senior level advice on Labrador-based natural resources issues within the mandate of the Department. The Executive Director works with all Labrador stakeholders to identify and pursue primary and valueadded resource opportunities.

Shared Commitments

The Forestry Services, Mines, Energy, Industrial Benefits and Agrifoods Branches work closely with other government departments, industry and stakeholder groups in the development and implementation of programs.

The Department pursues an ongoing intergovernmental agenda across its areas of responsibility, working with other Provinces, the federal government and Northeastern States. This work has resulted in intergovernmental agreements and information exchange critical to the effective management of the Province's natural resources. During the past year, the Department has discharged its responsibilities with respect to a number of continuing government-wide initiatives, including Red Tape Reduction, the Provincial Development Plan and the Access to Information and Protection of Personal Privacy Act.

Highlights

Forestry Services

In 2005-06, the Department acknowledged a historic milestone as 2005 marked the 100th anniversary of the establishment of a structured forest fire patrol in the Province.

On July 27, 2005, Abitibi Consolidated Company of Canada Inc. announced that it was closing its paper mill in Stephenville and its number 7 papermaking machine in Grand Falls-Windsor. The Company later reversed its decision to close the number 7 machine in Grand Falls-Windsor during 2005, but the decision to close the Stephenville mill remained unchanged.



On January 19, 2006, the Forestry Services Branch released *The 2006 Wood*

Supply Analysis for public review and comment as part of the process to determine the amount of wood that can be cut over the next five years.

Agrifoods

Primary and secondary production is valued at \$500 million. Farm cash receipts in 2005 grew 3.7% to \$92.4 million. The major contributor to this increase was the dairy sector which increased 12% to \$34.5 million. Gains in value were also experienced in the cattle (+48%), fruits & berries (+11.6%), and sheep & lamb (+11.1%) sectors.



Gross Domestic Product (GDP) from agricultural activities grew 11.9% in 2005. This sector has experienced consistent growth since 2000. The GDP in 2005 was 27% higher than 5 years ago.

Average monthly on-farm paid employment reached its highest level in the past ten years at 2,150 persons. Peak employment occurred in October at 3,200 persons, well above the previous high of 2,200 set in September 2002.

The dairy industry in the Province continues to utilize its industrial milk allocation with 13.9 million litres of industrial milk produced in 2005-06. This industry has the potential to double in size by the year 2016.

The Canada - Newfoundland and Labrador Agricultural Policy Framework Agreement provided over \$7.1 million in 2005 to support agriculture projects in the Province.

The Land Consolidation Program had a \$2 million budget and 275 acres were purchased for allocation as Agricultural Crown Land leases this year.

The Provincial Agrifoods Assistance Program provided \$1.5 million in funds in 2005-06 to enhance the competitive capability of the primary and secondary processing agribusinesses.

The Fruit and Vegetable Storage Assistance Program invested \$206,000 to enhance the economic viability of horticultural producers in the Province during this fiscal year.

Energy and Industrial Benefits

Energy Plan

In 2005, the Energy Branch commenced the development of a comprehensive Energy Plan for the Province. This plan will set out an integrated approach to the development and utilization of our energy resources to achieve government's long term and strategic objectives. A comprehensive plan will ensure that critical energy decisions are not made on an ad-hoc or project by project basis, but in such a way that considers and advances government's strategic objectives for the energy sector as a whole. It will consider the environmental, social and economic benefits and impacts of the energy sector and will examine domestic and export markets.

On November 10, 2005, government released a discussion paper that was the basis of an extensive consultation process on the development of a comprehensive Energy Plan for Newfoundland and Labrador.

Throughout January and February 2006, the Department held public consultations in Labrador City, Happy Valley-Goose Bay, St. John's, Clarenville, Gander, Hawkes Bay, Stephenville, Corner Brook and Grand Falls.

Petroleum Sector

Work expenditure commitments by operators totaled about \$800 million in future exploration activities. Ongoing production activities represent a \$1 billion per year industry, of which 60% of annual expenditures occur in Newfoundland and Labrador. The oil and gas sector directly employed upwards of 3000 persons at the end of 2005, approximately 1.3% of total employment in the Province. Indirectly the industry accounted for almost 3% of total employment in the Province. As well, royalty revenues from offshore oil production were approximately \$500 million (cash basis) in 2005/06.

In April 2005, the Chevron led partnership of the Hebron project announced that they had reached a joint operating agreement and that the gravity base structure option would be pursued. The Department worked closely with the proponents of the Hebron-Ben Nevis oil field in an effort to secure a deal that would provide a fair return to the Province. Progress was made but a final deal was unable to be reached.

In June 2005, the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) released *Decision 2005-01* approving Petro-Canada's amendment to the *Terra Nova Development Plan* allowing exploitation of the Far East Area of the Terra Nova Field subject to specified terms and conditions.

The C-NLOPB issued draft *Canada*-*Newfoundland and Labrador Benefits Guidelines* for consultations with governments and industry in 2005. The Industrial Benefits Division reviewed and analyzed these guidelines and, subsequent to these consultations, the Board approved and issued the *Canada*-*Newfoundland and Labrador Plan Guidelines* in February 2006. The new guidelines reflect the lessons learned from experience with past Benefits Plan submission approvals.

On June 21, 2005, the C-NLOPB announced that jack-up rigs would be permited to drill wells on the Grand Banks in the Newfoundland and Labrador offshore area at certain times of the year.

In August 2005, the C-NLOPB released *Decision 2005-02* approving Petro-Canada's Amendment to the *Terra Nova Development Plan* allowing exploitation of the North Graben Area of the Terra Nova Field subject to specified terms and conditions.



On September 2, 2005, the C-NLOPB invited the public to comment on a draft *Strategic Environmental Assessment for the Western Newfoundland Offshore Area.*

On September 14, 2005, the Department of Natural Resources publicly released two reports highlighting the petroleum potential of the offshore areas which were subject to the most recent call for bids.

The Bull Arm site remained active throughout 2005-06. In late 2005 North Eastern Constructors Limited was awarded the contract for the Terra Nova FPSO 40 bed additional living quarters and module support frame. The workforce for this contract peaked at over 300 with over 200,000 hours of project management and fabrication work performed. At the end of April 2005, the five year sheltered water survey and refit of the drill rig Henry Goodrich was completed by Penney Energy. This project was the site's premier rig modification project, bringing approximately 140,000 person hours of work to Bull Arm, and was successfully completed with zero lost time accidents.

The White Rose Project remained on schedule and within budget in 2005. Hookup and commissioning activities continued on the FPSO in Marystown from January 2005 until sailaway in August. Production commenced on November 12, 2005. Over 16 million person-hours were worked on this project as of December 31, 2005 with over 11.3 million occurring in Newfoundland and Labrador. Since project sanction, more than \$2.034 billion was spent on this development with 41% being spent in Newfoundland and Labrador. An additional \$57.4 million was expended on exploration and delineation during 2005 with \$16.2 million or 28% being captured by local companies.

Husky Energy announced first oil in November 2005 from the White Rose Project, making the \$2.3 billion development the Province's third producing project. With expected daily production peaking at 100,000 barrels per day and reserve estimates of 283 million barrels of oil, the field has a production lifespan of 10 to 15 years.

During 2005, Petro-Canada, as operator of the Terra Nova Development, created over 878 person-years of direct employment in the Province. Of the over \$300 million spent on the project in 2005, some 56% was credited as Newfoundland and Labrador content. As of the end of 2005, a total of 909 persons were employed, with 797 or 88% being residents of Newfoundland and Labrador at their time of hire. During 2005, the Hibernia Management and Development Company, as operator of the Hibernia Project, generated 804 person-years of employment in its onshore and offshore operations. Over \$300 million was spent during the year on operations, capital outlays and on drilling, with approximately 60% of this expenditure going into the local economy.

On December 1, 2005, the C-NLOPB announced the results of the 2005 Call for Bids for exploration rights in the Newfoundland and Labrador Offshore Area. Bids were received on five of the seven parcels offered. Three of the successful bid parcels are located in the Jeanne d'Arc Basin and the remaining two are located in the Western Newfoundland and Labrador Offshore Region. The total area is just over 300,000 hectares with commitments of just under \$40 million.

In 2005, \$91.4 million was spent on seismic programs, generating more than 110 person-years of employment. Throughout the fiscal year, the Department reviewed and analyzed exploration benefits plans for seismic exploration programs in the Laurentian Subbasin, Orphan Basin, Jeanne d'Arc Basin, South Whale Basin and offshore Labrador.

On February 9, 2006, Newfoundland and Labrador Refining Corporation began a feasibility study for establishing a new oil refinery in the Province in the upper Placentia Bay area. A three-stage feasibility study will include analysis of the appropriate slate of refined products, potential supplies of crude oil, refinery layout and its engineering requirements.

On February 2, 2006, the new Centre for Marine Compressed Natural Gas, opened on the south side of St. John's. The Centre is the world's first centre for marine compressed natural gas research and has its sights set on the Newfoundland and Labrador offshore and well beyond.

On March 8, 2006, the Department launched its collaborative program with the other energy departments in Atlantic Canada to encourage consumers to use energy more efficiently. Called *Shared Vision for Atlantic Energy Efficiency*, this three-year commitment will initially focus on a program of a broad-based public education campaign informing consumers about energy efficiency choices.

On March 22, 2006, the C-NLOPB announced details of three separate Call for Bids in the Newfoundland and Labrador Offshore Area. These parcels comprise a total of 1,712,758 hectares.

Electricity

On April 4, 2005, Newfoundland and Labrador Hydro (NLH) was chosen by the National Hydropower Association to receive the 2005 Outstanding Stewardship of America's Rivers Award for its environmental achievements with the Granite Canal Hydroelectric Development.

On June 22, 2005, NLH released its 2004 *Environmental Performance Report*. This was the fifth annual report highlighting

NLH's key environmental accomplishments and initiatives.

Government appointed Mr. Ed Martin as CEO and President of NLH and CF(L)Co in July 2005.

On August 8, 2005, the government announced that phase one of the call for Expression of Interest (EOI) and proposals for the development of the Lower Churchill hydro resource was complete. The EOI was issued on January 10, 2005.

On September 7, 2005, NLH announced it had restructured the company to pursue new business opportunities in areas such as hydro developments, alternative energy, and oil and gas investments, in line with the December 2004 government announcement of an expanded mandate for NLH. The expanded mandate continues to see NLH as the Provincial lead on the Lower Churchill development.

On December 5, 2005, NLH issued a request for proposals for 25MW of wind generation for its power system serving the island portion of the Province.

On December 9, 2005, NLH announced it will be investing over \$42 million in the Provincial electrical system in 2006 for upgrades and enhancements to improve safety and reliability.

On January 20, 2006, NLH announced that it will burn cleaner fuel at its Holyrood Thermal Generating Station by mid-2006. The move will reduce emissions and assist NLH in its environmental compliance requirements. The fuel currently used at the plant contains 2% sulphur while the new low sulphur fuel will contain just 1%.

On January 20, 2006, government and NLH announced that the Provincial Government had directed NLH, as the execution lead for the Lower Churchill development, to submit an application to Hydro-Québec TransÉnergie (Hydro-Québec's transmission division) for transmission service to transmit Lower Churchill power from the Labrador/ Quebec border to markets in Quebec, Ontario, the Maritime Provinces and the Northeast United States.

On January 31, 2006, Newfoundland Power released its 2005 results, delivering a strong performance in the areas of reliability, customer service, safety and earnings. Customers experienced the best reliability on record in 2005, with a 17% decrease in the number of outages and 28% decrease in outage duration, compared to 2004. The Company continued to maintain a strong customer satisfaction rating, achieving an overall rating of 89% in 2005. The operating cost per customer was \$218, compared to \$220 in 2004.

On February 14, 2006, NLH announced that it had received 13 Expressions of Interest in response to its December 2005 request for proposals for the provision of 25 MW of wind generation to the Island Interconnected System.

Mines Branch

Newfoundland and Labrador is forecast to produce approximately \$2.6 billion worth of mineral shipments in 2006. This reflects a 244% increase in the value of Newfoundland and Labrador's mineral shipments during the past five years and a 82% increase since 2005 alone. Employment in the mining and exploration industries has risen to over 3,400 person-years of direct employment in 2006, up from 3,264 in 2005.

Newfoundland and Labrador remains Canada's leading producer of iron ore (67% by value) and, as Voisey's Bay reaches its first full year of production, will likely become the nation's second largest producer of nickel.

In line with increases in global metal prices and local production, the level of exploration investment in the Province is on the rise. Preliminary numbers indicate that in 2005 over \$48 million was spent in the Province on mineral exploration and deposit appraisal. Forecast numbers for 2006 indicate that number will increase to almost \$79 million.

New mining projects are being rolled out. Atlantic Barite, based in Buchans, entered production in mid 2006 and will be followed by the opening of the Duck Pond base metal mine in late 2006. Future developments for 2007 include processing of Greenland gold ore near Baie Verte, the Pine Cove gold mine (Baie Verte), and possible re-opening of the Beaver Brook antimony mine.

Nickel

Mining commenced at Voisey's Bay during 2005 with first ore removed from the Ovoid deposit on August 21. First concentrate was produced by the mill on September 15. During August 2005



Inco acquired mineral claims covering approximately 172,000 hectares just south of the Voisey's Bay deposit in Labrador. The Company stated it had continued confidence in the exploration potential at Voisey's Bay and planned to continue with its drilling and exploration program at the site.

The Inco Innovation Centre at Memorial University was officially opened in September 2005.

On October 20, 2005, the Hydromet Demonstration Facility at Argentia was officially commissioned and began processing Voisey's Bay ore. Approximately 150 people are employed by the facility.

Iron Ore

Both the Iron Ore Company of Canada and Wabush Mines continue to produce at near capacity and continued to benefit from strong iron ore prices.

The Iron Ore Company of Canada's planned Plateau Dolomite Quarry was released from environmental assessment on July 9, 2005. This will replace the Leila Wynne Dolomite Quarry and is expected to produce 200,000 tonnes per annum over its projected 20 year life. New Millennium Capital Corp.

extended its 2005 drilling program for its LabMag property in Labrador and continued to work on completing a prefeasibility study during 2005.

Base Metals

Aur Resources Inc. remains on schedule for the development of its copper-zinc deposit at Duck Pond. Throughout 2005 and 2006 the company continued to advance the underground ramp, construct surface facilities and transport mill equipment to the site. The mine is projected to begin production in the fourth quarter of 2006.

Gold

In April, 2005, Anaconda Gold Corp. announced the completion of a revised feasibility study for the Pine Cove Gold Project located near Baie Verte.

In 2005, Anaconda Gold Corp. reported that a consultant had been engaged to complete detailed plant engineering and a lease proposal for the Pine Cove Project.

Industrial Minerals

Hurley Slate Works Company Inc. continued to mine slate at its operation in Trinity Bay and is making investments in equipment which should result in improving recoveries.

Atlantic Barite Limited is reactivating the Buchans Barite Plant to produce barite for offshore drilling from the tailings of the former base-metal mine that operated during the 1980's. The Company produced a trial product batch in 2005.

Rehabilitation On March 16, 2006, the Department

announced that it is moving forward with Phase II Environmental Site Assessment at the former Baie Verte and Rambler Mines properties.

Accomplishments

Forestry Services

Forest Insect Control Program On-going infestations of two major forest insect defoliators continued in 2005 on the Northern Peninsula (hemlock looper) and on the west coast (balsam fir sawfly) of insular Newfoundland. A number of other insects caused some localized damage throughout the Province.

Hemlock Looper: In 2005, <u>Bacillus</u> <u>thuringiensis, kurstaki</u> (Btk) was the only control product proposed and used. Btk is a biological insecticide that was developed and used for over 30 years because of its efficacy and very low impact on the environment. The hemlock looper control program consisted of ten (10) blocks totaling 11,247 hectares. Generally, Btk treatments worked well and reduced larval population levels and prevented additional significant defoliation. Department and forest industry, did conduct an experiment/ research on the sawfly, using the naturally occurring balsam fir sawfly virus. Some 5,000 hectares were treated in western Newfoundland, on the north and northwestward to west side of Bonne Bay Big Pond. The results of this trial will determine future treatment.

Other Insects: There are no other major insect concerns at this time that warrant control programs though the Department is monitoring damage being caused by the bark beetle, the chronic balsam woolly adelgid, the yellowheaded spruce sawfly, the larch beetle, the spruce budmoth and balsam fir gall midge.

Forest Resource Roads

In 2005-06, the Department committed a total of \$3.5 million to the construction of forest resource roads in Newfound-land and Labrador. A total of 69 projects accounted for the construction of 78km of new resource road and the re-construction (upgrading) of an additional 33 km. In addition, 12 new bridges were installed and four old bridges were repaired. Table 1 shows a summary by

Balsam Fir Sawfly:

There was no operational control program against this saw-fly in 2005 as there is, as yet, no practical, registered control product that can be used. The Canadian Forest Service-Atlantic, in cooperation with and on behalf of the **Table 1.** Summary by Forestry Region of road constructionprojects carried out in 2005-06.

Region	New Construction (km)	Reconstruction (km)	Bridges (New)
Eastern	24	10	7
Western	42	9	2
Labrador	12	14	3
Total	78	33	12

Forestry Region of road construction projects carried out in 2005-06.

Assessing Windthrow in NL

In 2005, the Department conducted surveys of riparian zones associated with historical harvesting operations to determine the effects of windthrow or blowdown of trees. Work will continue on this project in 2006.

Harvesting Insect Infested Precommercial Thinning Areas

In the winter of 2005, a harvesting trial was initiated in a 40 year old aphid infested balsam fir stand which had been previously thinned in the Bauld Mountain area of Western Newfoundland in Forest Ecosystem Management District 14. The aim of the trial was to determine an accurate estimate of machine productivity when operating in a managed stand. Follow up utilization, ground disturbance surveys and intensive time studies while operating in a natural stand shall be conducted by the Department in the spring of 2006 with a report to be published shortly thereafter.

Harvesting Utilization Survey Program During the 2005 field season, Departmental staff continued to train



district personnel in the procedures used to carry out harvesting utilization surveys. This work was done in combination with completing utilization surveys on 36 harvesting areas on both crown and company limits.

Forest Inventory Adjustments for 2006-2010 Wood Supply Analysis

In 2005, work continued on developing adjustments to the Annual Allowable Cuts based on fire damage, insect infestation and utilization measures.

Silviculture

During the 2005-06 fiscal year, approximately 13,600 hectares (ha) were silviculturally treated. Silviculture treatments included tree planting, site preparation, thinning, vegetation management, fertilization and plantation maintenance. During the same year a total of 12.5 million trees were shipped from the Province's tree nurseries in Wooddale and Goose Bay to planting sites throughout the Province. This work resulted in 149% of the tree planting and 63% of the thinning annual requirements being completed towards maintaining the Province's annual allowable cut levels.

Forest Fire Control

In 2005, a total of 145 fires were attended to by the Department. The total area burned was 22,834.0 ha of which only 31.3 ha was on productive forest land. The productive area burned is well below the past 10 year average for the Province of 3,828.7 ha.

Wood Supply Analysis

During 2005-06, the Department completed the *Provincial Wood Supply*

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Analysis. Government is required by legislation to undertake a wood supply analysis every five years.

The amount of softwood timber that can be harvested over the next five years is approximately 11.6 million cubic meters, or about 2.3 million cubic meters per year between 2006 and 2010. This is a reduction of approximately 3.2 per cent from the previous annual allowable cut set in 2001.

A significant addition to the process in 2005-06 is the calculation of harvest levels for hardwood. The total allowable cut for hardwood is 224,250 cubic meters over the next five years.

Legislation and Compliance

In 2005-06, there were a total of 856 charges laid in the form of written warnings, summary offence tickets and court informations under the *Wildlife Act, Forestry Act, Federal Fisheries Act(Inland), All-Terrain Vehicle Regulations* and *Migratory Bird Convention Act.* In 2005-06, there were a total of 2,693 enforcement and nonenforcement (nuisance wildlife animals etc.) complaints received and attended to by the Forestry Services Branch.

Agrifoods

Agriculture Business Development The Canada-Newfoundland and Labrador Agricultural Policy Framework (APF) Implementation Agreement is a 5-year \$32 million dollar federal-provincial cost shared agreement for the development of the agrifoods industry in the Province. In 2005-06, the APF Agreement provided \$7,107,000 to support 188 projects in the Province.



The Provincial Agrifoods Assistance Program (AAP) was initiated in 2004-05 to provide financial assistance to primary and secondary processing activities in the Province to improve the economic viability of the agrifoods industry; promote commercialization and growth in the sector; and enhance the competitive capability of the industry. In deference to its high success in 2004-05, AAP funding was increased from \$1.1 million in 2004-05 to \$1.5 million in 2005-06 to support 168 agriculture projects in the Province.

The Canada-Newfoundland and Labrador Production Insurance Program is a comprehensive all-risk insurance program that provides compensation to vegetable growers who suffer crop loss through uncontrollable natural perils. This program provided coverage on 354 acres of vegetables in 2005-2006 with the federal and provincial governments contributing 70% of the premium costs for producers.

During the fiscal year, the Provincial share for premiums was \$21,767 with indemnity payments to producers because of drought conditions during the crop season totaling \$26,075.

The Canadian Agricultural Income Stabilization (CAIS) program, which integrates stabilization and disaster protection into a single program, helps producers protect their farm income from both small and large declines. The CAIS is a federal-provincial cost shared program (60/40) with the Province contributing \$204,454 in direct CAIS payments to Newfoundland and Labrador producers in 2005-06.

To improve productivity and usage of community pastures throughout the Province, assistance in 2005-06 covered 16 community pastures with funding assistance increased to \$185,375.

Animal Health

Professional veterinary services are provided to serve the routine and emergency needs of our livestock and poultry industries. A complete review of the activities of this division in its service and regulatory activities was performed in 05/06 under the program renewal process which reaffirmed the Provincial government's commitment to this program.

The Animal Health Division's diagnostic laboratory provided services for livestock owners, regulatory agencies and the general public. As well, it provides reference service for affiliated groups such as wildlife agencies, public health, private veterinarians and researchers. Submission numbers increase every year as more testing programs are initiated. In agreement with the dairy industry, the Division's food quality laboratory has expanded its testing in support of national multi-component pricing objectives. A part of this process this laboratory is undergoing ISO 17025 accreditation under the Standards Council of Canada.

Land Resource Stewardship

This past year saw significant progress in the development of a Province wide soils geodatabase to make soils information readily available to staff, farmers, government departments and other agencies. Also, a pilot project to create a digital peatlands database was carried out in partnership with Agriculture and Agri-Food Canada staff in the Province.

In addition to the soils inventory, the GIS mapping project, with funding from the APF, has also made significant progress in creating a digital inventory of farmland in the Province. It is estimated that more than 80% of developed farmland are now entered in the database.

Approximately 1,500 soil, plant, manure and feed samples were analyzed for recommendations to farmers and partnership projects such as nutrient management planning and corn research.

Nutrient management plans, with assistance from APF, were prepared for 16 dairy farms and one beef operation in order to increase productivity with efficient fertilizer application and provide for enhanced environmental stewardship.

A total of 7,295 m (23,933 ft) of sub surface tile drainage, with assistance from APF, was installed on three sites in the Province to improve land for forage/hay and silage corn production.

The Peatland Drainage Program, with assistance from APF, completed 13.7 ha (34 acres) of new development for five producers. Peatland Maintenance development was also completed on 24.2 ha (79.5 acres) for 11 producers for turf grass, vegetables, cranberries and forage/hay.

The Environmental Farm Plan (EFP) Program, funded by APF, has seen the highest number of producers in 2005-06 attending winter workshops than in the previous two years. Since the inception of the program in 2003 more than 500 producers have been involved, 23 workshops have been conducted Province wide, and more than 200 producers have completed an EFP for their farm. February 2005 brought the introduction of the 4th Edition of the EFP Workbook as well as the continued posting of EFP signs at farms that have completed their plans.

Last year the Land Consolidation Program was expanded out of the St. John's area and now applies to the entire Province. The budget was increased from \$300,000 to \$2,000,000. In 2005-06, 12 properties consisting of 275 acres were purchased for allocation as Agricultural Crown Land leases. Twenty-two road projects and five electrical projects were constructed. In addition the Agrifoods Branch provided maintenance services, throughout its approximately 350 km roads inventory, including grading and culvert installation. In 05/06 the Branch responded to several emergencies involving washouts on the west coast as a result of flooding. Seven farmland development projects totalling 2000 acres were advertised at locations throughout the Province seeking applications for agricultural development.

The Provincial Agriculture Limestone Program was increased from \$142,000 to \$292,000, through the addition of \$150,000 of funding from APF. This funding increase reflects the importance of agricultural limestone to enhance soil productivity.

Production and Market Development The Agrifoods Branch continues to participate in agriculture fairs and trade shows throughout the Province year round including Open Farm Day each fall, and attracting in excess of 23,000 visitors while various brochures and recipe booklets were made available to the public.

Working with industry, the Agrifoods Branch is developing a Post Farm Food Safety and Food Quality Strategy for secondary processors. There are 11 non-supplied managed and 3 supplied managed On Farm Food Safety and Food Quality programs being utilized by farmers in the Province.

The first commercial honey facility was constructed in 2005-06 and is scheduled to open in late fall of 2006. This is a major break-through in the Provincial honey bee industry in producing wild flower honey, hand/body cream, lip balms, sore muscle rub, leather waterproofer, food safe wood polish, massage bars, and sticky grip (for base ball and golf players). The mink industry in the Province has expanded with 4 new farms from Denmark and a local farmer. This interest in the mink industry has overflowed into expansion by local farmers throughout the Province. This industry is expected to be worth in excess of \$25 million by 2008.

Significant developments have taken place in the vegetable sector with the renovation of older facilities and the construction of a new 60,000 square foot potato storage in Deer Lake resulting in



major increases in capacity for storing and packing vegetables. Potato acreage in the Province has increased by approximately 25% with several farmers having invested in new potato

harvesting equipment, permitting them to plant larger acreages of crops. Large investments in planting and harvesting technology have increased plantings of carrots, particularly in Central Newfoundland.

Applied research projects such as silage corn under plastic (2,000 acres planted in 2005), carrot variety trials in Southern Labrador, forage production in Central Labrador, on-farm lingonberry trials, and sea buckthorn trials continue to break ground within the Province with new innovative science and technologies.

The Pesticide Applicator Safety Program provides producers with training to enhance their pest management skills and knowledge. The Agrifoods Branch administered 8 courses across the Province and provided training to 86 participants. APF funding was provided to all of the above production and market development activities.

The Fruit and Vegetable Storage Assistance Program will invest \$1.0 million over a four year period beginning in 2004-05. In 2005-06, the program invested \$206,000 on 25 fruit and vegetable farms throughout the Province.

Energy and Industrial Benefits *Increasing Exploration Investment in Newfoundland and Labrador*

In 2005-06, the Department aggressively pursued investors, encouraging them to establish and invest in Newfoundland and Labrador. Current resource estimates indicate solid investment opportunities now and into the future.

The potential of the petroleum resources offshore Newfoundland and Labrador and the ability of local companies to support and service the industry were highlighted during international events such as: the 2005 Offshore Technology Conference in Houston, Texas; the North American Prospectors Exhibition Expo also in Houston, Texas: the Offshore Europe Conference in Aberdeen, Scotland; and Go Expo: Gas and Oil Exposition in Calgary Alberta.

As well, the Department participated in local events such as: the Newfoundland and Labrador Ocean Industries Association Conference and Offshore Newfoundland Petroleum Show in St. John's; the "Partnerships in Progress" Conference and Exhibition, sponsored by the Marystown-Burin Area Chamber of Commerce; and the 1st International Symposium on Western Newfoundland Oil and Gas Resources, sponsored by Greater Corner Brook Board of Trade.

The Department released two separate geological reports on the oil and gas potential of the Grand Banks and Western Newfoundland and Labrador regions.

A record 381,227 cmp km of 3-D seismic data and 14,737 line km of 2-D data were collected in 2005. Seismic programs were conducted on the Orphan Basin, Laurentian Basin, Northern Jeanne d'Arc Basin and Offshore Labrador.

Exploration drilling in 2005 included work by Husky Energy on its Lewis Hill property in the South Whale Basin and the spudding of a well on exploration licence EL-1093 by the Hibernia Management and Development Company from the Hibernia platform.

The Province continued to work with government and regulators to renew and modernize our offshore petroleum regulations. Regulatory renewal will improve the Province's competitive positioning and promote this Province



as an investment destination for business.

Optimizing Benefits from Resource Development

The Department continued to work with Voisey's Bay Nickel Corporation and petroleum operators in order to enhance local involvement and to ensure that these companies live up to their stated commitments. Work on the Voisey's Bay project resulted in the expenditure of \$460.3 million between April 2005 and March 2006 of which \$376.6 million(82%) was spent on goods and commercial services in Newfoundland and Labrador. Employment averaged 1,829 persons of which 1635 (89%) were located in this province. During this period, 41 contracts were awarded, indicating the significant benefits from this development. In addition, in support of research and development efforts in Newfoundland and Labrador, INCO pledged \$20 million to the INCO Innovation Centre at Memorial University. The Centre officially opened in the third quarter of 2005.

Benefits continued to accrue from the White Rose project. There were a total of 990 management, engineering, technical, skilled trades, and support and consultant employees of Husky and its contractors working directly on the project as of March 31, 2006. Of this 809 or 81.7% were residents of the Province when hired.

Natural Gas Development

The Department continues to assess options to get our natural gas resources to market and is actively engaged in the promotion of exploration opportuni-

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ties to aid additional resource discoveries.

Our offshore natural gas resources could provide at least part of the supply solution for the northeast North American region. To date, over 10 trillion cubic feet of recoverable natural gas and 478 million barrels of natural gas liquids have been discovered in the offshore area of Newfoundland and Labrador.

Mines Branch

Increasing Exploration Investment in Newfoundland and Labrador

The following activities were undertaken in 2005-06 to promote exploration:

The Mineral Rights Administration system - MIRIAD was refined and became fully operational during the planning period. Since its inception, 80,000 mineral claims have been staked Province wide. Newfoundland and Labrador is one of only three Canadian jurisdictions to provide this service.

In 2005 the Mineral Lands Division added 15,088 metres of new drill core samples to its archived collections in the six Provincial core libraries.

The Mineral Incentive Program continued to receive funding this fiscal year with a budget of \$1,628,000. 175 Junior Exploration Assistance Grants were awarded.

Ten field projects cataloguing the Province's geological resources were successfully completed and information



released through the Open House, Current Research Volume and Open File reports.

The release of three open file reports describing till and lake sediment geochemistry in Western Labrador and the Central Mineral Belt resulted in significant staking activity by exploration companies based on the results obtained.

The Geological Survey Division improved access to geoscience information and compilation data by accelerating delivery via internet-based systems in 2005. In partnership with the government's Office of the Chief Information Officer, the Division launched a major project to scan its large and comprehensive collection of mineral assessment reports to *pdf* format.

The Department continued its active participation in major Canadian mining and investment conferences this year, generating an increased awareness of mineral exploration opportunities in the Province and of the wide array of geoscience information that is available to support mineral exploration. In 2005-06, the Geological Survey Division, in partnership with the Newfoundland and Labrador Chamber of Mineral Resources, and with additional support of the Mineral Development Division, delivered mentoring, technical support and promotional assistance to Provincial prospectors through its innovative Matty Mitchell Prospectors Resource Room Project.

While an increased level of its geoscience information is available by download from the Mines Branch website, the Geological Survey Division continued to provide traditional, overthe-counter service required by a large proportion of its diverse client base. More than three thousand requests for information, received by phone, fax, email and office visits, were assessed and processed this year. In addition, numerous requests were received from educators and students around the Province. Again this year, the Mineral Exploration Consultant's Office provided confidential mineral identification and a limited number of free assays through prospector assistance.

The Geological Survey Division produced more than forty aggregate, surficial geology and bedrock geology maps in 2005-6, as well as the *Annual Current Research* and *Report of Activities Volumes*, and a variety of *Short Open-Files*. The results of investigations of the *Geological Survey of Newfoundland and Labrador (the Survey)* were also presented in the serial literature, conference proceedings and field guides in 2005. This year *the Survey* re-released a number of its earlier memoirs and its post-1997 Current Research Reports in CD-ROM and as *pdfs* for viewing on the Departmental webpage. New posters on both geoscience and exploration promotion themes were produced in 2005 to support the Department's participation at mining shows in St. John's, Toronto and Vancouver, and in outreach initiatives around Newfoundland and Labrador. In 2005, cartographic, publication, editorial and web-related assistance was provided to the Matty Mitchell Prospectors Resource Room and to other divisions of the Department on an opportunity basis.

The Department also entered into cooperation with the *Geological Survey of Canada* (*GSC*) on a new five-year Targeted Geoscience Initiative (TG13) designed to conduct new geological mapping and associated support studies in support of base metal exploration. Target areas include Buchans and the Baie Verte Peninsula. The first year of field work under this program took place in 2006. During 2005-2006, government authorized an extra \$150,000 to the *Geological Survey's* budget to facilitate its collaboration with the *GSC* on the TG13 project.

Promoting and Enhancing Mineral and Energy Resource Assessment, Development and Management

The Department annually participates in provincial, national and international resource-development conferences, trade shows and exhibitions to promote the Province's mineral and energy resources. Opportunities are also taken to raise public awareness of the importance of the Province's geological resources and their development. School visits, educational materials, field trips, museum contributions, public displays and public lectures all convey the essential role of the sustainable use of earth resources in a modern society.

Government-sponsored (public) geoscience, through the Department's *Geological Survey*, continues to provide the Province with a competitive advantage in attracting investment for resource development.

Other Entities

The following entities report to the Minister of Natural Resources and are required under the Transparency and Accountability Act, to prepare Annual Performance Reports:

1. Timber Scalers Board

The Timber Scalers Board is responsible for hearing appeals to timber scaling disputes in the Province. The Board was inactive in 2005-06 as there were no disputes reported to the Board.

2. Forest Land Tax Appeals Board

The Forest Land Tax Appeals Board is responsible for hearing appeals to forest land tax levies in the Province. The Appeals Board was inactive during 2005-06 as there were no appeals reported to the Board.

3. Bull Arm Site Corporation

4. Newfoundland and Labrador Hydro Corporation

5. Churchill Falls (Labrador) Corporation

6. Agricultural Development Area of the St. John's Urban Region Appeal Board

7. Agricultural Products Marketing Board

8. Farm Industry Review Board

9. Land Consolidation Review Committee

10. Land Development Advisory Authority

11. Livestock Owners Compensation Board

12. Newfoundland Chicken Marketing Board

13. Newfoundland and Labrador Crop Insurance Agency

14. Newfoundland Labrador Farm Products Corporation

The following entities report to the Minister of Natural Resources but are not captured by the Transparency and Accountability Act:

15. Canada-Newfoundland and Labrador Offshore Petroleum Board

16. Newfoundland and Labrador College of Veterinarians

Appendix 1 Department of Natural Resources Statement of Expenditures and Related Revenue Summary of for the Year Ended March 31, 2006(unaudited)

DEPARTMENT OF NATURAL RESOURCES

	Actual \$	Amended	Original \$
EXECUTIVE AND SUPPORT SERVICES	• • • • • • •		
1.1.01 Minister's Office	290,076	297,400	297,400
1.2.01 Executive Support	1,514,409	1,519,200	1,489,200
1.2.02 Administrative Support	1,663,536	1,665,350	1,787,450
Less: Revenue	(79,433)	(10,000)	(10,000)
1.2.03 Administrative Support Capital	694,520	851,000	801,000
Total Executive and Support Services	4,083,108	4,322,950	4,365,050
FOREST MANAGEMENT			
Forest Management			
2.1.01 Administration and Program Planning	7,828,524	7,843,850	6,840,850
Less: Revenue	(95,780)	(300,000)	(300,000)
2.1.02 Operations and Implementation	9,956,273	9,970,100	9,998,300
Less: Revenue	(1,108)	0	0
2.1.03 Silviculture Development	7,350,393	7,354,500	7,334,600
Less: Revenue	(14,964)	(5,000)	(5,000)
2.1.04 Resource Roads Construction	3,479,716	3,500,000	3,500,000
Forest Protection			
2.2.01 Insect Control	2,071,425	2,203,500	3,500,000
Less: Revenue	(1,201,983)	(2,864,600)	(2,864,600)
2.2.02 Fire Suppression and Communications	3,836,841	3,845,800	2,867,800
Less: Revenue	(420)	0	0
Total Forest Management	33,208,917	31,548,150	30,871,950
AGRIFOODS DEVELOPMENT			
Land Resource Stewardship			
3.1.01 Land Resource Stewardship - Admin.	1,357,538	1,366,200	1,208,200
Less: Revenue	(9,217)	(33,000)	(33,000)
3.1.02 Limestone Sales	142,300	142,300	142,300
Less: Revenue	(121,346)	(70,000)	(70,000)
3.1.03 Land Development	2,790,064	2,800,000	2,000,000
Production and Marketing Development			
3.2.01 Production and Marketing Dev Admin.	2,039,226	2,094,100	2,051,600
Less: Revenue	(14,033)	(54,700)	(54,700)
3.2.02 Marketing Board	82,330	82,600	81,800
Agricultural Business Development			
3.3.01 Agriculture Business Development - Admin.	1,326,715	1,333,000	1,277,000
3.3.02 Production and Livestock Insurance	234,479	324,800	324,800
Less: Revenue	0	(145,800)	(145,800)
3.3.03 Agriculture Initiatives	1,475,281	1,500,000	1,500,000
3.3.05 Agriculture Policy Framework	7,311,491	8,713,100	9,811,800
Less: Revenue	(3,290,656)	(5,964,200)	(5,964,200)

	Animal Health			
3.4.01	Administration and Support Services	1,751,678	1,753,500	1,533,400
	Less: Revenue	(488,619)	(530,000)	(530,000)
	Total Agrifoods Development	14,587,231	13,311,900	13,133,200
MINE	RAL RESOURCE MANAGEMENT			
4.1.01	0 5	3,629,464	3,630,100	3,531,500
	Less: Revenue	(105,999)	(34,000)	(34,000)
4.1.02	Mineral Lands	862,116	863,900	921,100
	Less: Revenue	0	(5,000)	(5,000)
4.1.03	Mineral Development	3,221,289	3,284,100	3,394,200
	Total Mineral Resource Management	7,606,870	7,739,100	7,807,800
	GY RESOURCES MANAGEMENT			
	Policy and Strategic Planning	413,093	436,800	600,900
	Petroleum Resource Development	567,334	573,200	910,700
5.1.03	Canada-Newfoundland and Labrador Offshore			
	Petroleum Board	3,881,500	3,950,000	3,950,000
	Less: Revenue	(1,899,250)	(1,975,000)	(1,975,000)
5.1.04	Petroleum Projects Monitoring	1,292,976	1,295,400	1,378,800
	Less: Revenue	(38,843)	(15,000)	(15,000)
5.1.05	Electricity Industry Development	1,068,375	1,071,000	832,700
	Total Energy Resources Management	5,285,185	5,336,400	5,683,100
	CTDIAL DENIEEITC MANIA CEMENIT			
	STRIAL BENEFITS MANAGEMENT	1.005.00/	1 020 200	225(100)
6.1.01	Industrial Benefits	1,825,996	1,939,200	2,356,100
	Less: Revenue	(106,489)	(225,000)	(225,000)
	Total Industrial Benefits Management	1,719,507	1,714,200	2,131,100
	TOTAL DEPT	66,490,818	63,972,700	63,992,200