

Department of Natural Resources



**Annual Performance Report
2011-12**

Report prepared by:

Department of Natural Resources
Strategic Planning and Policy Coordination Division
50 Elizabeth Avenue
P.O. Box 8700
St. John's, NL, A1B 4J6
Phone:1-709-729-3214

Table of Contents

Message from the Minister

Performance Reporting

Report Outline

I. MINES AND ENERGY	<u>PAGE</u>
<u>Section 1: The Department</u>	
Introduction	1
Overview of the Department	5
<u>Section 2: Accomplishments</u>	
2011-12 Year in Profile	12
Outcome of Objectives	22
Strategic Directions	46
Additional Highlights and Accomplishments	48
Shared Commitments	49
<u>Section 3: The Year Ahead</u>	
Opportunities and Challenges	50

II. FORESTRY AND AGRIFOODS	<u>PAGE</u>
<u>Section 1: The Agency</u>	
Introduction	55
Overview of the Agency	56
<u>Section 2: Accomplishments</u>	
2011-12 Year in Profile	63
Outcome of Objectives	67
Strategic Directions	77
Additional Highlights and Accomplishments	78
Shared Commitments	80
<u>Section 3: The Year Ahead</u>	
Opportunities and Challenges	81
Appendix I: Legislation	82
Appendix II: Statement of Revenues and Expenditures	87
Appendix III: Inactive Entities Reporting to the Minister	91

Message from the Minister



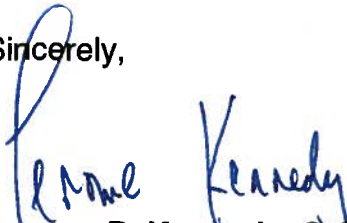
Speaker of the House of Assembly

Dear Mr. Speaker:

In accordance with the *Transparency and Accountability Act*, I hereby submit the 2011-12 Annual Performance Report for the Department of Natural Resources. The report includes the Mines and Energy Branches of the department and the Forestry and Agrifoods Agency.

The outcomes reported reflect government's strategic direction for the province's natural resources. My signature below is indicative of my accountability for the actual results reported.

Sincerely,

A handwritten signature in blue ink that reads "Jerome Kennedy". The signature is written in a cursive style with a large initial "J".

Jerome P. Kennedy, Q.C.
MHA, Carbonear – Harbour Grace
Minister of Natural Resources and
Minister Responsible for the Forestry and Agrifoods Agency



Mines and Energy Branches

Performance Reporting

The *Transparency and Accountability Act* requires government departments, agencies, boards and commissions to engage in a formal planning and reporting process. As part of this process, the department must prepare and publish a strategic plan every three years. The strategic plan identifies the goals and objectives chosen by the department to advance its priorities over the planning period. Under this planning model, goals represent targeted outcomes over a three-year cycle, while objectives cover smaller achievements targeted for each year within the planning period. The strategic plan also lays out the department's overall mission which represents its single most important focus area and is typically carried through two planning cycles (usually six years) and reflected in two, subsequent, strategic plans. When engaging in the strategic planning process, the department must step back from day-to-day operations and identify the areas of its mandate that are of strategic importance to clients and /or the province as a whole, and identify mechanisms for advancing work in these areas. By publishing these plans, the department is able to inform the citizens of the province of what these priority areas are and how it plans to move them forward.

After the strategic plan is finalized and published, the department is required to monitor performance and provide periodic updates to the public on progress towards the priorities identified. Each year, the department prepares an annual performance report which provides updates on the achievement of annual objectives. In the final year covered by a planning period, the department must also report on progress toward the goals set out in the strategic plan. In the last year of a mission period, the department must also provide an update on achievements toward its overall mission.

This past fiscal year was the first year in the Department of Natural Resources' 2011-14 strategic planning period. As a result, this report will provide an account of the department's performance towards its annual objectives for 2011-12. Reporting on the status of goal and mission achievements will appear in the department's annual performance reports for 2013-14 and 2016-17 respectively.



Mines and Energy Branches

Report Outline

A key part of the Provincial Government's overall economic strategy is to maximize the socio-economic opportunities that arise from the development of natural resources, while maintaining sound stewardship of the resource base. Toward this end, the Department of Natural Resources is responsible for regulating and encouraging sustainable development of the province's natural resources¹, namely minerals, energy (oil, gas, hydro, wind, biofuels), forest assets and agriculture/agrifoods resources.

The Department of Natural Resources was established under the *Executive Council Act* and is a category one government entity under the *Transparency and Accountability Act*. To carry out its duties, the department is divided into two main areas of operation: the Mines and Energy Branches, commonly referred to as "the department" in the remainder of this report, and the Forestry and Agrifoods Agency, commonly referred to as "the agency". These two areas share a number of central functions and collaborate on select initiatives but, otherwise, operate independently of one another, each offering a distinct set of programs and services for their respective natural resource sectors. As a result, this annual performance report is divided into two "sub-reports" setting out performance results for the Mines and Energy Branches and the Forestry and Agrifoods Agency respectively.

¹ Within the Government of Newfoundland and Labrador, fisheries resources are the responsibility of the Department of Fisheries and Aquaculture and wildlife resources are the responsibility of the Department of Environment and Conservation.



Mines and Energy Branches



Photo Credits, previous page:

Top: Teck Duck Pond Operations, Mine Site at Night (Teck)
Bottom: Terra Nova FPSO (Suncor)



Mines and Energy Branches

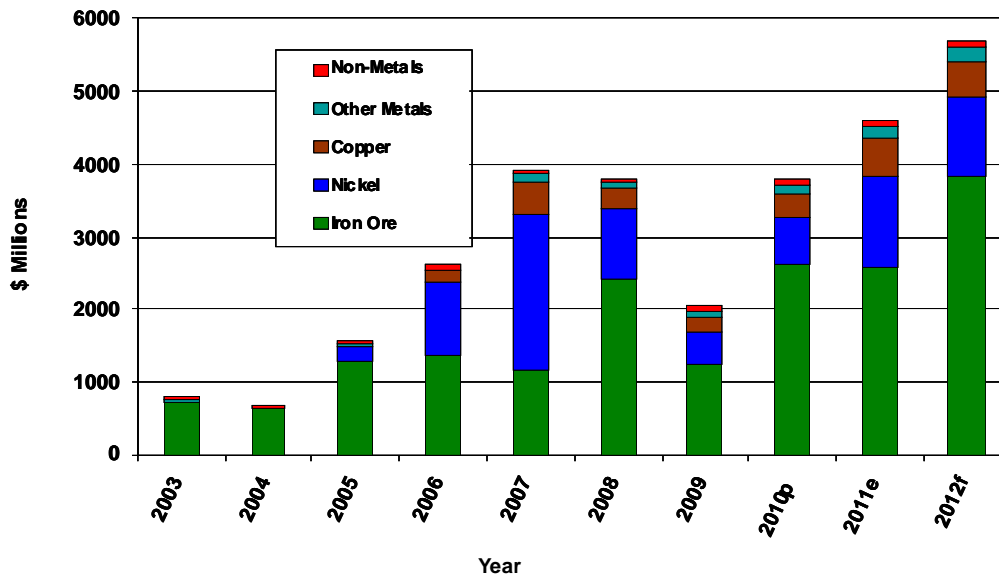
Introduction

The 2011-12 fiscal year marked a significant period for the Department of Natural Resources (the department) and the province as a whole with numerous accomplishments and milestones in the mines and energy sectors. The following section provides an introduction to these sectors which are of vital importance to Newfoundland and Labrador's overall economy.

Mining

The mining sector is a significant contributor to the provincial economy and in 2010 accounted for approximately 8.75 per cent, or about \$2.3 billion, of the province's nominal GDP in Newfoundland and Labrador. The effect on GDP will be strong again in 2012 as the forecasted Gross Value of Mineral Shipments (GVMS) from the province is \$5.7 billion, substantially higher than the previous record high of \$4.6 billion in 2011.

Gross Value of Mineral Shipments



Sources: Department of Natural Resources and NRCan
p: Preliminary; e: Estimate; f: Forecast

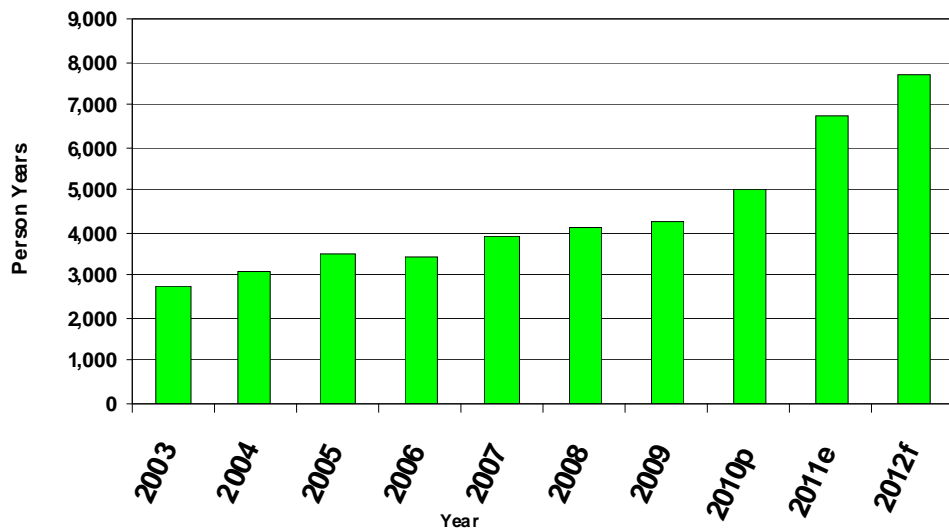


Mines and Energy Branches

The increase will be driven, in large part, by an rise in iron ore shipments. While the Iron Ore Company of Canada will be responsible for the greatest increase, other players who will contribute to the increase include Wabush Mines, Labrador Iron Mines (LIM), and Rambler Metals and Mining Canada Ltd. The 2012 forecast also include shipments of other significant mining commodities such as antimony, nickel, copper, cobalt, zinc, gold, pyrophyllite, limestone, dolomite, peat, sand/gravel and stone. Mineral exploration expenditures are also on the rise with approximately \$172 million spent in 2011, up from \$105 million in 2010. These expenditures are forecasted to reach \$234 million in 2012.

In 2011 employment in the mineral industry amounted to 6,755 person years and is projected to reach 7,684 person years in 2012. The increase in employment in 2012 will be driven largely by an increase in hiring for the construction of Vale's hydromet nickel processing facility at Long Harbour, expansion at IOC for its Carol Lake project, the start of construction at the fluorspar mine in St. Lawrence, and increased activity at LIM.

Mining Industry Average Employment



Sources: Department of Natural Resources and NR Can

p: Preliminary; e: Estimate f: Forecast



Mines and Energy Branches

“...approximately \$15 billion of mining investment is possible in our province over the next five to 10 years. Ongoing mineral exploration and investment activity in Newfoundland and Labrador will contribute to future sustainability for the industry, and growth and prosperity for our province. The future is bright for the mining sector. We are committed to the long-term development of the industry, and responsible development in the best interests of Newfoundland and Labrador.”

– Minister Kennedy in the House of Assembly, March 7, 2012

Energy

Newfoundland and Labrador is an established, significant and growing net energy producer. Few jurisdictions in North America can match the combined value of the province's energy resources that include oil, gas, hydroelectricity, wind and other sources.

The province's oil and gas resources include discovered reserves of 3.1 billion barrels of oil and 11 trillion cubic feet of natural gas. The potential for further discoveries exists within its onshore and offshore basins as undiscovered resources are estimated to total 6 billion barrels of oil and 60 trillion cubic feet of natural gas.

The oil and gas industry has become an increasingly important part of Newfoundland and Labrador's economy since production began at the Hibernia oil field. Between 1997 and 2010 provincial real GDP grew by 58.8 per cent; it is estimated that approximately half of this growth was directly attributable to oil and gas production. In 2010, oil extraction and support activities accounted for 30.4 per cent of the province's nominal GDP², at just over \$8 billion. In 2011, these same activities resulted in 3.1 per cent, of roughly 7,000 person years, of provincial employment.

Newfoundland and Labrador currently produces about 32 per cent of Canada's conventional light crude oil and the province's three large-scale oil producing projects have produced more than 1.2 billion barrels³ of oil since Hibernia first came on-stream. In 2011, the province's offshore region produced an average of over 266,000 barrels of oil per day. Total oil production is expected to decline by approximately 21 per cent in 2012 due to natural declines and extended maintenance shutdowns of the Terra Nova

² The Economy, 2012.

³ As of 2011 calendar year-end.



Mines and Energy Branches

and White Rose platforms. New production is on the horizon, however, as the existing Hibernia, Terra Nova, White Rose and North Amethyst oil fields⁴ will soon be joined by a fifth field – Hebron – in the offshore region. The Hebron development is scheduled to enter the construction phase in 2012 with first oil expected in 2017.

In addition to oil and gas, the province is home to large stores of clean, renewable hydro and wind energy. The generating capacity of the Upper Churchill hydroelectric facility in Labrador is 5,428 megawatts (MW), with the bulk of production going to export markets. Newfoundland and Labrador Hydro (Hydro) operates the 604 MW Bay d’Espoir hydro plant and numerous smaller hydro facilities. The province is also home to the Lower Churchill Project, the most attractive undeveloped hydro project in North America, and is making great strides towards its development. Throughout 2011-12, the province’s energy corporation - Nalcor Energy (Nalcor) - with legislative and policy support from the department, continued to work toward official sanction of Phase I of the project which includes the development of Muskrat Falls (824MW), a Labrador-Island transmission link and a Maritime transmission link from Newfoundland to Nova Scotia. Nalcor has partnered with Emera Inc. of Nova Scotia on the development of Phase I. The province continues to work towards development of Phase II of the project, to take place at Gull Island (2,250 MW), for a total Lower Churchill generation capacity of 3,074 MW.

⁴ The White Rose and North Amethyst oil fields are both being produced under the White Rose project.



Mines and Energy Branches

Overview of the Department

The Department of Natural Resources was established under the *Executive Council Act* and is a category one government entity under the *Transparency and Accountability Act*. The department's responsibilities for natural resource development in the mining and energy sectors are executed by staff in two branches, the Mineral Resources Branch and the Energy Branch.

Vision

The vision of the Department of Natural Resources is a province that realizes the full benefit from the sustainable development of its natural resources.

Mission Statement

By March 31, 2017, the Department of Natural Resources will have supported the growth of the energy and mineral resource industries in a sustainable manner for the benefit of future generations.

Mandate

The mandate of the Mines and Energy Branches includes supervision, control and direction of all matters relating to promotion, exploration and development of mineral and energy resources and related industry developments including:

- Mines, minerals, quarries, and quarry materials;
- Onshore petroleum resources;
- Offshore petroleum resources, managed jointly with the federal government;
- Electrical generation and transmission;
- Overall responsibility for provincial energy supply and demand;
- Development, monitoring, supervision, assistance or other government intervention into any of the industries as described above;
- Petroleum royalties and associated matters, within or outside the province; and,
- Identifying, assessing and monitoring industrial benefits commitments from major resource development projects.



Mines and Energy Branches

For a complete list of all legislative responsibilities that inform the departmental mandate, please refer to Appendix I and/or the House of Assembly website at www.assembly.nl.ca.

Primary Clients

The department is, ultimately, accountable to the residents of the province. Other primary clients include:

- Exploration and resource development companies;
- Electrical generation and supply distribution companies;
- Industrial and residential electricity customers;
- Supply and service companies in the resource and electricity sector; and,
- Other provincial government departments, crown corporations and agencies.

Mineral Resources Branch

The Mineral Resources Branch has three divisions:

The **Mineral Development Division** is responsible for the approval and permitting of mining operations through the *Mining Act*; the administration of the Mineral Incentive Program; the collection, analysis and publication of mineral production data; and the assessment and rehabilitation of abandoned mine sites across the province.

The **Mineral Lands Division** is responsible for the administration of mineral land tenure through the *Mineral Act* and the *Mineral Holdings Impost Act*, that includes the issuance of exploration licenses and production leases; the administration of quarry material rights and developments through the *Quarry Materials Act*; the issuance of exploration approvals and follow-up inspections; and the maintenance of the core library system.

The **Geological Survey Division** is responsible for mapping and interpreting the province's bedrock geology; conducting geochemical and geophysical surveys; conducting mineral deposit studies; maintaining and publishing maps, reports and databases concerning the geological and mineral endowment, including Geographic Information System (GIS) based databases and web-delivery; and promoting the province's mineral potential.



Mines and Energy Branches

Energy Branch

The Energy Branch is divided into three main sections, each made up of several divisions.

The **Petroleum Development Section** is responsible for fostering the exploration, development and production of the province's hydrocarbon resources and provides geological, geophysical, engineering, and regulatory services. Responsibilities include:

- The provision of technical services in the areas of petroleum geoscience, petroleum engineering and petroleum operations to facilitate sustainable development and management of petroleum resources both onshore and offshore; and,
- The provision of marketing and promotional services, both nationally and internationally, to foster the exploration, development and production of the province's hydrocarbon resources.

The **Royalties and Benefits Section** is responsible for maximizing the benefits to the local economy from the development of major resource projects. Responsibilities include:

- The maximization of fiscal benefits to the province from petroleum resource development and new mineral resource development through the negotiation, development, administration and monitoring of project agreements and legislation;
- The auditing of project costs and revenues to verify the accuracy of royalties paid to the province;
- The provision of energy-related economic/financial and supply/demand information review, analysis and advice to inform resource management decisions; and,
- The maximization of industrial benefits to the local economy from the development of major mining and energy projects through negotiation of benefits commitments, benefits monitoring and international promotion of the province's industrial capacity and capabilities.

The **Energy Policy Section** is responsible for developing, planning and coordinating policy matters relating to the province's energy sector. Responsibilities include:

- The management/co-management of onshore and offshore petroleum exploration and development and regulatory compliance and development;
- Electricity industry governance and structure, electricity industry markets, alternative energy, and responsibility for the *Electrical Power Control Act*;



Mines and Energy Branches

- The provision of technical, economic, analytical and program design expertise to government to enable informed decisions on matters relating to energy efficiency;
- General policy, planning and coordination in the energy sector, including a lead role in the implementation of the province's Energy Plan; and,
- The design and/or delivery of specific energy efficiency programs and services.

Employees

In the last quarter of 2011-12, the Department of Natural Resources' Mines and Energy Branches had 187 staff members.

Branch	Female	Male	Total
Mineral Resources	32	65	97
Energy	25	30	55
Financial Operations ¹	8	6	14
Executive Support ²	14	7	21
Total³	79	108	187

1. Financial Operations staff are shared with the Forestry and Agrifoods Agency and the Department of Fisheries and Aquaculture.
2. A number of employees in Executive Support are shared with the Forestry and Agrifoods Agency.
3. Excludes vacant positions and contractual arrangements.

Table 1 – Employee Breakdown (department)

Physical Location and Web Site

The department's main office is located in the Natural Resources Building at 50 Elizabeth Avenue, St. John's, Newfoundland and Labrador. The mailing address is as follows:

Department of Natural Resources
 P.O. Box 8700
 St. John's, NL, A1B 4J6

The Department of Natural Resources web site address is www.gov.nl.ca/nr. A link to the department's web site is also provided in the main web site for the Government of Newfoundland and Labrador at www.gov.nl.ca.

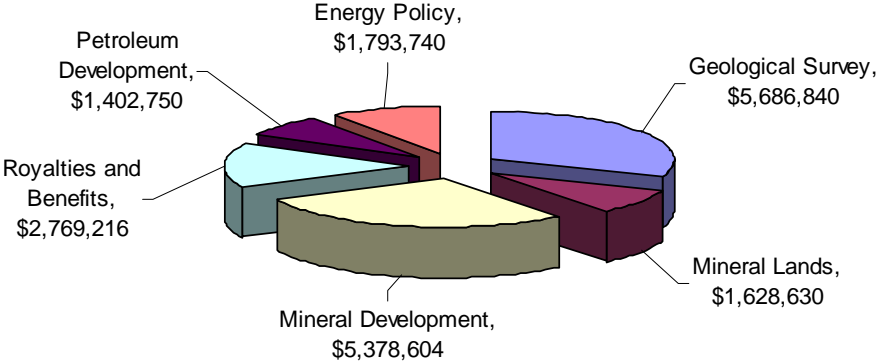


Mines and Energy Branches

Budget

Operational expenditures for the Mines and Energy Branches for fiscal year 2011-12 were \$18.7 million. The chart below illustrates expenditures for the divisions of the Mines Branch as well as the three sections of the Energy Branch. These figures do not include \$6.04 million related to executive and support services that were shared with the Forestry and Agrifoods Agency.

2011-12 Expenditures by Division/Section



In addition to these amounts, another \$54.9 million was spent on energy-related programs, subsidies, and legal/redress agreement costs. For more information on expenditures for the year, refer to Appendix II.



Mines and Energy Branches

Lines of Business

Resource Policy

Working closely with key stakeholders, the department develops resource policy, and coordinates and facilitates sustainable development and management. In doing so, the department directly and indirectly develops, monitors and/or initiates supporting regulatory and benefits optimization activities.

Resource Management

In the onshore area of the province, the department ensures industries follow appropriate resource management practices and comply with mines and energy regulations. The department facilitates well-planned, responsible resource management activities and is responsible for monitoring almost all aspects of these activities. Mineral and petroleum resource management activities also include title allocation, administration and ensuring compliance with site development and rehabilitation requirements⁵.

In the offshore area, the department discharges its operational management and administration functions for offshore petroleum activity under a joint federal-provincial regime administered by the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB).

In the electricity resource area, involvement in resource management is indirect and implemented through the Board of Commissioners of Public Utilities and Hydro, a subsidiary of Nalcor Energy.

The department is also responsible for petroleum royalty regime development and the administration of onshore and offshore petroleum royalties.

⁵ A number of onshore resource management activities are carried out by the Department of Environment and Conservation (e.g., monitoring compliance with environmental regulations and land use management, etc.) and the Department of Government Services (e.g., monitoring compliance with occupational health and safety regulations).



Mines and Energy Branches

Resource Exploration and Assessment

This line of business includes several activities that precede resource development, including the gathering, interpretation and dissemination of geoscience data and the provision of exploration incentives. The activities of the department in this area are designed to support and encourage exploration, investment decisions, permitting and development opportunities.

Promotion and Facilitation of Resource Development

Resource development projects generally tend to be long term and capital intensive and generate significant economic and employment benefits. These projects can be important catalysts of growth, particularly for rural areas, as well as for the development of industrial infrastructure and the province's supply and service capabilities. Activities are specifically directed to negotiating, promoting and facilitating well-planned, responsible mineral and energy development and associated business and employment opportunities.



Mines and Energy Branches

2011-12 Year in Profile

The following section highlights major accomplishments by the department and/or its industry sectors during the 2011-12 fiscal year.

1. Continued growth of the provincial mining industry

Newfoundland and Labrador's mining industry experienced strong growth during 2011-12 with major capital investments in new and expanding projects, and exploration successes in a wide range of producing projects. The \$4.7 billion dollar value of mineral shipments for 2011 was the highest on record with employment also at one of the highest levels recorded. Iron ore projects in Labrador West led industry growth again but advances were also made on projects at other locations around the province. The Department of Natural Resources regulates the mining development industry and works with operators to ensure compliance with provincial mining/mineral regulations. The department also works with project operators in the negotiation of project benefits agreements. The following section provides an overview of some of the year's mining development highlights.

- Rio Tinto IOC started phase two of a Concentrate Expansion Program at its Labrador City operation that will bring the annual concentrate capacity to 23.3 million tonnes. This is the second of three planned stages of expansion, to increase annual capacity to 26 million tonnes.
- Labrador Iron Mines Holdings Ltd. (LIM) became the first new producer of iron ore in western Labrador in almost 50 years, when they shipped concentrate from the Schefferville Direct Shipping Ore (DSO) Project in June.
- Tata Steel Minerals Canada Ltd. continued to advance a DSO project near Schefferville. The project was released from environmental assessment and first production is expected in 2012.
- Anaconda Mining Inc. achieved full commercial production at its Pine Cove gold mine on the Baie Verte Peninsula. Continued improvements in the mill resulted in steady increases in throughput, gold recovery and sales.
- Rambler Metals and Mining plc started production at the Ming copper-gold mine, also on the Baie Verte Peninsula and poured its first gold doré.



Mines and Energy Branches

- Canada Fluorspar (NL) Inc. progressed efforts to re-activate the underground St. Lawrence Fluorspar mine on the Burin Peninsula. Production of fluorspar is estimated to average 122,000 tonnes per year over a fifteen year mine life.
- The Beaver Brook Antimony mine in central Newfoundland operated at full production in 2011. Development of the main ramp to access ore lower in the resource was a major focus during the year.
- Teck Resources Limited continued with a feasibility study on its Boundary open pit project at its Duck Pond copper-zinc mine in central Newfoundland, with a goal to initiate production in 2013. Process improvements at the existing mill to improve product quality were ongoing.



Teck Duck Pond Operations

Photo: Teck Resources

In addition to mining development projects, exploration activity was also strong. Grassroots and advanced exploration projects targeted a broad range of commodities - iron ore, nickel, copper, gold, and rare earth elements - reflecting the province's geological diversity and mineral potential. There was also renewed interest and activity surrounding commodities such as antimony, fluorspar, and uranium. The department regulates the mineral exploration industry and provides information and resources to support prospectors and exploration companies. For more detail on exploration and development highlights, refer to the department's web site.



Mines and Energy Branches

2. Advances toward the proposed development of Muskrat Falls

Plans and arrangements for the proposed Muskrat Falls Project continued during 2011-12 as Nalcor prepared for a project sanction decision. Throughout the year, the Department of Natural Resources continued to provide support towards project advancement. Some of the most noteworthy achievements during the year are outlined below.



Graphic of proposed dam at Muskrat Falls

Photo: Nalcor Energy

Project Financing

- In August, 2011 a Memorandum of Agreement (MOA) was signed among the Governments of Newfoundland and Labrador, Canada and Nova Scotia on a loan guarantee for the Lower Churchill Project. Once finalized, the loan guarantee will lower project costs through reduced interest rates, and this benefit will flow directly to electricity consumers in the province.
- Nalcor began the multi-year finance-raising process for the project. During this process, Nalcor must provide credit rating agencies, the Federal Government



Mines and Energy Branches

and potential lenders with confidence in the project's business case and its ability to cover all debt payments and other costs over the life of the loans.

Environmental Assessment (EA) Processes

Generation

- A Joint Review Panel was mandated in 2009 to conduct an examination of the environmental and economic impacts of the Lower Churchill Hydroelectric Generation Project and to consider comments from the public.
- In March 2012, the federal and provincial governments released the project from the environmental assessment process. In their decision, the governments weighed all of the identified benefits, effects, risks and uncertainties and found that the project is justified on both economic and environmental grounds. In responding to the panel's recommendations, the governments' respective responses committed to ensuring the implementation of mitigation measures to reduce the adverse environmental impacts identified by the panel.

“Today’s release from the environmental assessment process represents another important milestone and a major step forward as we move towards our decision on final project sanction of Muskrat Falls. Development of the Muskrat Falls hydroelectric project will result in countless benefits to our province, the most important being the provision of reliable, least-cost power to meet the growing demand for electricity.”
- Minister Kennedy, News Release, March 15, 2012

Labrador-Island Transmission Link (LIL)

- Nalcor registered the LIL EA February 2, 2009 and the process is continuing. The Environmental Impact Statement (EIS) Guidelines were issued in May 2011 and, by year-end, Nalcor was nearing completion on its EIS submission.



Mines and Energy Branches

Maritime Link

- In December 2011, Emera registered its Maritime Link Project with the Canadian Environmental Assessment Agency and Newfoundland and Labrador's Department of Environment and Conservation.
- In February 2012, Emera was informed that an Environmental Preview Report is required for the project to address additional information requirements in the registration document in an effort to determine the significance of any environmental effects. In March 2012, an Environmental Assessment Committee was appointed.

Legal Agreements

- Nalcor continued negotiating formal commercial agreements with Emera as contemplated in the 2010 Nalcor-Emera Term Sheet with negotiations nearing completion during 2011-12.
- Negotiations began on Nalcor-Hydro agreements that will govern the purchase and sale of power between the Nalcor entities responsible for the Muskrat Falls Project and Hydro.

Acceptance of New Dawn Agreements

- During the year, the New Dawn Agreements were accepted by the Labrador Innu Nation. The acceptance will introduce tremendous benefits to the Innu people of Labrador, and represents a major step forward for the development of Muskrat Falls.
- The New Dawn Agreement includes three elements: the Upper Churchill Redress Agreement, the bilateral NL-Innu Nation land claims agreement-in-principle, and the Lower Churchill Impacts and Benefits Agreement (IBA). The Upper Churchill Redress Agreement will provide compensation to the Labrador Innu for impacts associated with the Upper Churchill Falls development, and settles the outstanding grievances of the Innu Nation with respect to damages suffered to Innu lands and properties as a result of the flooding caused by this development in the 1960s. Key elements of the IBA include a structured royalty regime and implementation funding to support the Innu Nation's involvement in the project during construction.



Mines and Energy Branches

Business and Employment Benefits

- The Government of Newfoundland and Labrador completed a Memorandum of Understanding (MOU) with the Government of Nova Scotia.
- The MOU identifies the employment and business benefits for each province associated with the construction phase of the Lower Churchill Project which includes construction employment on the hydroelectric generation facilities at Muskrat Falls and Gull Island, the Labrador-Island Transmission Link, and the Maritime Link.



Mines and Energy Branches

3. Continued interest in Western Newfoundland petroleum potential

The sedimentary basins located in Western Newfoundland are part of the Appalachian Structural Front. This front is a fault zone that extends from Texas, through the mid-United States, across eastern Canada and then directly through Western Newfoundland. There are many oil and gas discoveries along all parts of the front with significant levels of production. As part of the Appalachian Front, Western Newfoundland has similar geological structures and, therefore, holds great potential for material discoveries.

Over the past several years both the onshore and offshore regions of Western Newfoundland have experienced significant levels of exploration activity. As of March 31, 2012 there were nine exploration permits and one production lease in operation onshore, and seven exploration licenses in operation offshore. As the regulator of the onshore petroleum industry, the Department of Natural Resources is responsible for issuing permits, leases, etc. for onshore activity and for monitoring activity to ensure operators are compliant with legislative/regulatory requirements. The C-NLOPB is the regulator for the offshore area, issuing licenses and monitoring activities for compliance. The department and the C-NLOPB work collaboratively on matters of mutual responsibility or concern.

Following two exploration wells drilled onshore in the Parson's Pond area by Nalcor Energy – Oil and Gas Inc. and one well in Deer Lake by Deer Lake Oil and Gas Inc. in 2010, additional exploration work continued throughout 2011-12. Some of the main projects or activities undertaken over the past year included the following.

- Ptarmigan Energy Inc., a Canadian-based junior oil and gas exploration company, was awarded two new offshore exploration licenses in the 2011 Call for Bids round conducted by the C-NLOPB. Ptarmigan submitted the highest work commitment bid totaling slightly in excess of \$2.0 million. The company also holds another offshore license in the area which it acquired in the 2010 Call for Bids. Ptarmigan has applied for approval to conduct 2D and 3D seismic programs scheduled to commence as early as 2012. This new data will complement existing 2D data it acquired and had reprocessed in 2011.
- Investcan Energy, a subsidiary of SCDM, a French-based investment company, announced that they would be purchasing the remaining shares from Vulcan Minerals for three onshore exploration permits located in the Bay St. George area. Following an extensive 3D seismic survey in 2010 and the drilling of six core test holes in 2011, Investcan has announced plans for an appraisal pilot



Mines and Energy Branches

- program for the area in 2012. Subject to regulatory approval, Investcan will drill four wells including three producer wells and one water injection well. This program will evaluate a shallow oil reservoir target in Flat Bay.
- Shoal Point Energy Ltd, a Canadian-based exploration and development company, acquired the rights to a large consolidated block of land in the offshore adjacent to the Northern Peninsula. The acquisition was made from NWest Energy Ltd. early in 2012. Shoal Point posted a drilling deposit with the C-NLOPB and is evaluating various drilling locations to drill an onshore to offshore exploration well. Shoal Point Energy is also the operator for another offshore block located adjacent to the Port-au-Port Peninsula. The company began drilling operations on the onshore to offshore 3K-39Z well in February, 2012. This well was in follow-up to several other wells drilled from the same location targeting the shallow unconventional oil resources in the Green Point Formation.
 - Corridor Resources, a Canadian-based junior exploration and development company, holds the rights to an offshore block of land in the Gulf of St. Lawrence. Corridor has been actively seeking a partner to drill an exploration well on a target within the block more commonly referred to as the “Old Harry” prospect. The company has applied to the C-NLOPB for a drilling permit and hopes to be in a position to commence a drilling program in 2014.

In recent years, the department has provided support for continued exploration in Western Newfoundland. When the Provincial Government released the provincial Energy Plan, *Focusing our Energy*, it announced a \$5.0 million investment for onshore geoscience initiatives under the Petroleum Exploration Enhancement Program (PEEP). Projects eligible for financial support under PEEP include the acquisition, processing and interpretation of existing and new geoscience data, and the development of new technologies that improve exploration efficiency or that reduce exploration risks. During the year, the department participated in the *International Symposium on Oil and Gas Resources in Western Newfoundland*, presenting information related to work already conducted under PEEP to assist explorers in better understanding basin evolution. A total of \$3.0 million has been committed from the PEEP investment fund to date with other projects currently under consideration for funding.



Mines and Energy Branches

4. Third Annual Women in Mining Forum

For the third year in a row, the department played a lead role in organizing a “Women in Mining Forum” as part of Provincial Mining Week prior to the annual Mineral Resources Review conference and trade show held in St. John’s. The purpose of the forum is to provide girls an opportunity to learn about the variety of career and entrepreneurial opportunities in the mining industry. As such, the target audience for the event is female junior high and high school students and their educators.

The forum consists of a panel discussion by women working in the province’s mining, minerals and exploration industry. Panelists are chosen to represent a variety of educational backgrounds, careers, companies and regions of the province and to represent different facets of the mineral industry (e.g., exploration, mining and/or processing, environmental and/or remediation, etc.). The panelists share their stories, insights and experiences and then take questions from audience members. The forum is followed by a networking luncheon which enables audience members to hold one-on-one conversations with panelists and other attendees.



A selection of forum attendees and sponsors

Photo: Department of Natural Resources



Mines and Energy Branches

The forum has been well-received by the target audience and industry and has grown considerably since it first started in 2009. The first forum had approximately 50 attendees with the 2011 forum hosting over 200. Of these, 158 were students representing schools in the Avalon/Eastern region of the province, as well as several parts of Labrador, including the north coast. Schools from the Eastern school district participating in the forum can avail of transportation subsidies due to sponsorship by Provincial Mining Week partners. Attendance by students from Labrador in 2011 was a first for the forum and was possible thanks to funding through *Techsploration* a program run by the Women in Resource Development Corporation.

Feedback from attendees has been positive and plans have already begun for the next Women in Mining forum which will be held during Provincial Mining Week 2012, which runs from October 28 – November 3. The annual Mineral Resources Review 2012 is scheduled to take place November 1 – 3.



Mines and Energy Branches

Outcome of Objectives

This section of the Annual Performance Report details the department's accomplishments related to its 2011-12 objectives.

Issue 1: Market Attraction and Exploration

As shown by the industry overviews provided above, the economy of the province benefits greatly from energy and mining developments. The revenues to the province from these sectors help enable the Provincial Government to invest in social and economic programs such as education, health care, and infrastructure. Continued progress in the resource sector is key to ongoing social and economic development in the province. To keep resource revenues flowing well into the future, new developments will need to come on stream. For that to happen, new, economically viable resources must be found through exploration.

The petroleum and mineral industries are global in scale. Companies operating in these industries assess potential exploration locations around the world based on a number of factors. The most important of these is resource potential, that is, the likelihood - based on scientific evidence - of finding a commercially viable petroleum reserve or mineral deposit. Exploration companies use existing geoscience data to determine the resource prospectivity of potential sites. One of the department's primary goals, therefore, is to increase the amount of geoscience data collected in the province and make it available to prospectors and exploration companies. At the same time, the department also emphasizes the global promotion of Newfoundland and Labrador as an attractive region for exploration. During 2011-12, the department continued its efforts in these areas through the development of strategies to increase exploration, to enhance its own capacity to conduct geoscience activity and to promote the province's resource potential.

The department's 2011-12 achievements in these areas, outlined below, are in direct support of the Provincial Government's strategic direction toward *increased exploration and development of mining and energy resources*. In defining this strategic direction, government identified three primary areas where results should be focused: *acquisition and promotion of geoscience data, increased exploration and development activity, and enhanced marketing and promotion of our natural resources*. The department's actions during the year included support for all three focus areas.



Mines and Energy Branches

Goal

By March 31, 2014 the Department of Natural Resources will have advanced the province's ability to compete in the mines and energy sectors.

Objective

By March 31, 2012 the Department of Natural Resources will have enhanced policy frameworks for resource exploration and promotion, and increased geoscience data acquisition.

Measure: Enhanced policy frameworks for resource exploration and promotion, and increased geoscience data acquisition

Progress 2011-12

1. Developed strategies to increase oil and gas exploration including mechanisms to:

- **Increase geoscience data acquisition and availability;**
- **Participate in the implementation of planned PEEP and OGDG projects.**

One of the most important elements in continued petroleum exploration is the availability of geoscience data on prospective oil and gas fields. During the year, the department developed and implemented strategies focused on continued data acquisition, availability and curatorship; and on raising awareness among exploration companies about prospectivity in particular regions.

In the implementation of these strategies the department:

- Continued to advance the quality and accessibility of its onshore geoscience data by digitizing older paper copies and requiring new data to be submitted in digital format by exploration companies. Digital data can be more effectively used to inform resource management decisions, such as which land parcels to make available for licensing. Digital data is also more effective and useful in terms of public release once appropriate confidentiality periods have expired.
- Completed a Letter of Agreement with the Geological Survey of Canada and provided funding to manage an offshore Western Newfoundland Potential Fields Survey. The data from this survey will be made available as an *Open File* through the department's Geological Survey Division.



Mines and Energy Branches

- Through the Offshore Geoscience Data Program (OGDP), participated in a multi-client seismic survey acquisition program in the Labrador offshore region to acquire modern seismic data that will be available for interested exploration companies.
- Participated in the 6th *International Symposium on Oil and Gas Resources in Western Newfoundland* presenting information related to work conducted under the Petroleum Exploration Enhancement Program (PEEP) to assist explorers in Western Newfoundland better understand basin evolution.

2. Enhanced capacity within the department for increased geoscience activity

As in the petroleum sector, the availability of modern maps, data and studies of the geology of the province is an important precursor to exploration by prospectors and mining companies. The department's Geological Survey Division actively contributes to the province's geoscience knowledge base by employing geologists to perform field mapping and related analyses and then publishing these findings for the exploration community. In 2011-12, \$1.2 million was added to the annual Geological Survey Division budget with the intention that this would become a permanent part of the division's base funding each year. These long-term committed funds significantly increased the division's ability to conduct geoscience mapping across the province, as well as its capacity in data delivery. The division was able to hire three new geologists during the year whose efforts were focused on iron ore geoscience, mineral data analysis and mineral promotion. In addition, the division acquired two new analytical machines that will allow more rapid analysis of rock/mineral samples and provide cost savings over the long-term. During the year, another geoscientist joined the division to study coastal erosion. This position was financed by the Office of Climate Change, Energy Efficiency and Emissions Trading.



Staff geologist in the field

Photo: Department of Natural Resources



Mines and Energy Branches

3. Increased activity to attract new entrants to the mineral and energy resource sectors.

The department is dedicated to promoting Newfoundland and Labrador, on the national and international stage, as a prime location for mineral and petroleum exploration. The primary purpose of such efforts is to make exploration and development companies aware of the province's potential and to expand the number of these companies who come to the province to explore.

Energy Sector

During the year, the department continued the implementation of its Petroleum Resource Marketing Plan. This is a comprehensive strategy designed to raise awareness of the resource potential of the province's many sedimentary basins and is geared toward national and international audiences, as well as existing players in the province's oil industry. Targeted resource promotional materials were produced and distributed featuring increased content as the department began marketing new information on several PEEP and OGDG projects. In particular, new information on the Offshore Satellite Seeps Project and the offshore Labrador multi-client seismic survey was included.

Promotional efforts included participation in various events organized and attended by the international exploration and development community. These included events sponsored by the Canadian and American Associations of Petroleum Geologists and Geophysicists and a presence in the expanded International Pavilion at the North American Prospects Expo. This expansion was designed to enhance awareness of international resource development opportunities and, to maximize the opportunity, the department co-sponsored a Canadian luncheon held on the first day of the Expo.

The department was a key organizer and participant in the 3rd International Upstream Forum, held in St. John's on September 27-28. The forum is held to allow respective government departments and agencies to meet and discuss offshore oil and gas policy. Such discussions allow governments to understand and assess competitive regimes. Twenty-two people attended the 2011 forum with 10 international participants from the United States, Norway, the United Kingdom, Greenland, Nigeria and Ghana. The forum was deemed successful and the results of discussions held will be used in the design of new, progressive regulations that can enhance investment attraction efforts for the province's petroleum sector.



Mines and Energy Branches

Mineral Sector

The department continued the implementation of its Minerals Promotional Plan which guides the development and delivery of the majority of the department's marketing and promotional efforts related to mineral resources and the mineral industry. In doing so, the department participated in a number of national and international conferences and trade shows and organized several mining trade/investment missions. During the year, the department:

- Participated in the China Iron and Steel Association (CISA) mining investment mission to the Labrador Trough; coordinated Chinese and provincial industry participation in a field trip to Labrador City and Wabush; coordinated and participated in the CISA/Newfoundland and Labrador/Quebec iron ore investment forum;
- Participated in the Chinese National Development and Reform Commission mining mission to Canada, and coordinated provincial industry participation in related Toronto and Vancouver investment forums;
- Helped to organize and coordinate provincial participation in the annual Canada Investment Forums in Beijing and Hong Kong; provided support for participating junior exploration companies from Newfoundland and Labrador; and delivered promotional materials and events specific to provincial mining opportunities;
- Participated in the 2011 China Mining Conference and Exhibition including the delivery of presentations at the "Iron Ore" and "Canada" sessions;
- Held direct discussions on provincial mining opportunities with CISA and government ministries in Beijing; and presented provincial mining industry overview to the Asian Mining Club in Hong Kong;
- Developed and delivered promotional and marketing materials for the province's annual Mineral Resources Review Conference and Trade Show which is attended by local, national and international companies;
- Participated in the 2012 Prospectors and Developers Association of Canada Convention, Trade Show and Investors Exchange including: presence via a Newfoundland and Labrador promotions booth; participation in the Atlantic Canada Pavilion; and hosting of a dedicated Newfoundland and Labrador reception; and,
- Developed and delivered various promotional materials and published articles in national and international publications.



Mines and Energy Branches

4. Completed development of the Minerals Strategy

The Minerals Strategy was drafted in full during the year. At year end, the draft was undergoing review within the department; further review and consultation with other departments will also be required prior to the strategy being finalized. Finalization of the strategy did not occur due to other challenges in the department which needed to be addressed in relation to increasing industry activity. The department was, however, able to begin moving forward on a number of initiatives identified through strategy work. These initiatives included a review of mineral rights legislation and the analysis of staffing and other options to improve operational efficiency and effectiveness. Completion of the strategy will remain a priority for the department in 2012-13.

Objective Summary

The progress achieved during the year on the Minerals Strategy, as well as oil and gas exploration attraction strategies, helped strengthen the department's policy frameworks in the areas of resource exploration and promotion. The strategy work completed identified priorities for the department in terms of policy and legislative measures that could be taken to encourage exploration and/or promote the province's resources more effectively. Work on some of these measures began during the year and in 2012-13 the department will initiate more of the priority recommendations from these strategies.

The department was also successful in increasing its capacity for conducting geoscience work and advanced efforts in the area of resource promotion. Supporting increased geoscience data collection and dissemination and conducting targeted promotions to exploration companies around the world will always be of strategic importance to the department. As such, the department will continue to advance its efforts in these areas during 2012-13 and beyond.



Mines and Energy Branches

Objective, Measure and Indicators for 2012-13

Objective:

By March 31, 2013 the Department of Natural Resources will have initiated implementation of priority recommendations from strategy development.

Measure: Initiated implementation of priority recommendations from strategy development.

Indicators

- Progressed initiatives toward the enhancement of the mineral resource capacity of the province
- Advanced geoscience data collection and dissemination in relation to the province's onshore and offshore petroleum resources, including:
 - Support for the completion of an offshore Western Newfoundland potential fields survey with data available in the public domain
 - Completion and publication of studies conducted under PEEP
- Advanced geoscience data collection and dissemination in relation to the province's mineral resources, through continued geoscience field work, data analysis and publication
- Progressed efforts related to the targeted promotion of the province's petroleum and mineral resources, at the local, national and international levels



Mines and Energy Branches

Issue 2: Sustainable Resource Development

Sustainable development within the province's petroleum and mineral sectors can be viewed as consisting of three primary components: maintaining exploration/development activities, responsible management of developments and remediation of environmental impacts associated with past developments.

Maintaining Exploration/Development Activities

As discussed under Issue 1, current resource developments and discoveries will eventually need to be replaced through successful exploration in order to sustain the province's mineral and petroleum industries for the long term. While encouraging new exploration is, perhaps, the most important element in sustaining the province's petroleum and mining sectors, ensuring the province has competitive policy and regulatory frameworks is also important. To this end, in 2011-12, the department made significant advances toward the development of a Minerals Strategy for the province. Strategy work included an assessment of current policy, regulations and legislation associated with the mining sector in the interest of identifying where changes might help move the industry forward.

The department's achievements in this area are consistent with the Provincial Government's strategic direction to *ensure maximum benefits to the province through the strategic development of our resources*. Long-term sustainability of the province's mineral and petroleum industries is the cornerstone of benefits maximization.

Responsible Management of Developments

The department manages development projects through the administration of legislation and regulations designed to guide and govern mineral and petroleum development. In its role as regulator, the department monitors project activity and performance to ensure compliance with legislative and regulatory requirements, as well as contractual requirements specific to individual projects. The department endeavors to work with industry to assist in interpreting and incorporating these requirements into operations early in the lifecycle of a project. The legislative, regulatory and contractual framework covers a range of issues including production methods to maximize resource yield; safety and environmental practices; royalty calculation and remittance mechanisms; and benefits practices in areas such as project employment, expenditures and gender/diversity commitments.



Mines and Energy Branches

During the year, the department continued to monitor and manage mineral and petroleum exploration and development activity. Efforts included:

- Progression of negotiations on benefits agreements for new resource development projects including Labrador Iron Mines James Mine Project and Tata/New Millennium Capital Corporation's Direct Shipping Ore Project, both in western Labrador.
- Monitoring of benefits associated with existing agreements for ongoing projects and significant progress on the development of a new gender equity and diversity policy.
- Monitoring the royalties paid to the province by its oil industry partners and advancing work on a new Petroleum Royalties Administration and Monitoring System (PRAMS). The PRAMS will make royalty calculation and audit work more efficient and position the department for the increased work load associated with the addition of the Hebron project as well as other future oil developments.
- Ongoing monitoring of exploration and development work by the department's engineers, exploration and quarry field inspectors, and other professionals to ensure activities were conducted within the province's legislative and regulatory framework.
- Assisting operators in navigating through regulatory requirements.
- Completion of Phase 1 and commencement of Phase 2 of the Energy Innovation Roadmap initiative. The Roadmap will identify the most attractive opportunities for using innovation to diversify the province's energy industry. In many cases, the opportunities identified through the Energy Innovation Roadmap will translate into meaningful focus areas for energy-related research and development (R&D) in the province.
- Through work on the Minerals Strategy, a collection of valuable information on R&D and its role in sustaining the mineral development industry in the province.

Well-regulated industries that are managed responsibly ensure non-renewable resources are developed to their maximum potential and that the province and its citizens benefit as much as possible from the resulting economic spinoffs. These and other efforts during the year are consistent with the Provincial Government's overall strategic direction to *ensure maximum benefits to the province through the strategic development of our resources*. In particular, some of these efforts have been in direct support of three of the focus areas identified under this strategic direction: *supporting increased local industrial and employment benefits, increased participation of women and underrepresented groups in natural resource projects and influencing/ informing strategic research and development investments*. The strategic direction toward a *stable and competitive energy supply for domestic use and export to market* was also



Mines and Energy Branches

supported during the year through the department's work on the Energy Innovation Roadmap. Specifically, the focus area of *alternative energy research and development* is reflected in a number of the opportunity areas identified for further study.

Remediation of Environmental Impacts

Current legislation requires the province's mineral and petroleum exploration and development companies to leave resource development sites in good environmental condition once exploration and/or development activities have ceased. This has not always been the case and, in the past, some mining sites were abandoned by operators and left in unacceptable condition. The department is committed to performing rehabilitation work at such former mine sites, and has already completed work at a number of sites including Buchans, Rambler, Whalesback and Baie Verte. During the year, the department continued to fund and manage rehabilitation efforts at abandoned mine sites in the province.



Buchans tailings area before and after rehabilitation work

Photo: Department of Natural Resources



Mines and Energy Branches

Goal

By March 31, 2014 the Department of Natural Resources will have implemented enhanced sustainable development practices in the mines and energy sectors.

Objective

By March 31, 2012 the Department of Natural Resources will have enhanced sustainability policy structures within mines and energy.

Measure: Enhanced sustainability policy structures

Progress 2011-12

1. Developed a more comprehensive benefits framework policy for mineral and energy projects

With an increasing level of activity, particularly in the mining sector, the department is negotiating more benefits agreements with project operators than ever before. The department has committed to developing a more comprehensive benefits framework policy to inform industry and other stakeholder groups about the department's expectations and standards in terms of economic and social benefits stemming from major project developments. Having a standard policy framework in place would assist all parties in commencing the benefits negotiation process on the same page.

During 2011-12, progress was made toward development of the benefits framework policy. Needs assessment work was completed within the department's Mines Branch on key benefits components in relation to recent mining benefits agreements. The policy was not completed, largely due to requirements for the department to address other benefits-related priorities. The department will continue its focus on the development of this policy framework in 2012-13.



Mines and Energy Branches

2. Developed departmental gender equity policy

During the year, the gender equity policy was drafted. However, to better align with the requirements of the mines and energy industry sectors⁶, a decision was made at the departmental level to expand the policy to include a diversity component. Progress was made on drafting the diversity elements with focuses on persons with disabilities, Aboriginal persons and visible minorities. Policy development work will continue in 2012-13.

3. Developed priority components of Energy Innovation Road Maps

The department held over 20 meetings with stakeholders between April and July 2011 to provide a briefing on the status of Phase 1 of the Energy Innovation Roadmap project and to outline next steps for Phase 2. Phase 1 results (five reports), which were publicly released in July 2011, contained recommendations for roadmapping to be conducted along nine priority themes in four energy areas. The themes and energy areas identified were as follows:

1. Oil and Gas
 - 1.1. Harsh environment;
 - 1.2. Arctic conditions;
 - 1.3. Subsea protection;
 - 1.4. Enhanced recovery;
 - 1.5. Far offshore logistics; and
 - 1.6. Onshore seismic;
2. Onshore Wind;
3. Energy Transmission; and
4. Remote Energy Systems.

The department's 'priority components' for the year in terms of advancement of the roadmap project consisted of the development and issue of project-related requests for proposals (RFPs). The purpose of the RFPs was to retain consultants to provide assistance in roadmap development. The department held discussions with Nalcor, the Research & Development Corporation, the Canadian Association of Petroleum

⁶ In recent years, operators of major resource projects have been negotiating Benefits Agreements with the province before projects have been approved for development. A Benefits Agreement outlines specific commitments in the areas of provincial employment and project expenditures, including programming related to gender equity and diversity. Benefits requirements and programming are designed to develop the province's labour capacity and its supply and service capabilities.



Mines and Energy Branches

Producers, Petroleum Research Newfoundland and Labrador and C-CORE to identify which of the priority areas listed above should be targeted for initial roadmapping. Based on those discussions, on December 14, 2011, the department issued two RFPs for three priority areas: Oil and Gas – Harsh Environment, Onshore Wind, and Energy Transmission. Onshore Wind and Energy Transmission were combined into one RFP as anti/de-icing technology innovations will be required in order to advance large scale onshore wind development, as well as to further advance the transmission of energy in the province, particularly in Labrador. It is anticipated that the department will award contracts to the successful bidders and work on these two roadmaps will commence in early 2012-13. RFPs for the development of roadmaps for other priority areas (e.g. Remote Energy Systems) are expected to be issued in 2012-13 as well.

4. Identified and drafted policy, capacity, legislation and regulation changes required by the Minerals Strategy

As discussed under Goal 1, Indicator 4, a draft of the Minerals Strategy was completed during the year. During public consultations a number of potential changes were identified with regards to policies, regulations, legislation and departmental programs/capacities. The department was able to begin work on a number of related initiatives and work will continue in 2012-13 on the component areas identified.

5. Continued to address orphan/abandoned mines

In 2011-12 the department completed a detailed safety review of dams at the former Gullbridge, Whalesback and Rambler mine sites. This review included design and preparation of tender packages for necessary repairs to these dams. Any repairs are expected to be completed in 2012-13.

During the year the department took initial steps towards completing a review of each orphaned or abandoned mine in the province, identifying any issues at each and prioritizing actions based on risk.



Mines and Energy Branches

Objective Summary

The mines and energy sectors in the province are experiencing rapid growth. To help ensure industry sustainability over the long term, the department constantly reviews its policy structures in light of emerging trends and industry needs. Significant work was accomplished in this area in 2011-12; initiatives not finalized during the year, along with others, will carry on into 2012-13.

Objective, Measure and Indicators for 2012-13

Objective:

By March 31, 2013 the Department of Natural Resources will have implemented new policy directives in support of mineral and energy sector sustainability.

Measure: Implemented new policy directives in support of mineral and energy sector sustainability

Indicators

- Expansion of benefits monitoring and negotiation processes for mines and energy projects
- Supported the completion of roadmaps for the priority areas identified under the Energy Innovation Roadmap initiative
- Conducted consultations and completed final draft of departmental gender equity and diversity policy



Mines and Energy Branches

Issue 3: Renewable Energy

Nations, organizations and individuals around the world are striving to reduce their green house gas emissions and, to do so, are seeking new sources of renewable, green energy. This increasing demand for renewable energy, coupled with the province's own energy needs contributed to the decision to develop the hydro assets of the lower Churchill River (Lower Churchill). The development of the Lower Churchill has been identified as the most stable, least-cost alternative in terms of energy supply for the future needs of the province. During the year, the department worked closely with Nalcor on measures to advance the project.

The Lower Churchill Project represents the largest undeveloped hydro-electric project in North America and is a top priority for government. Nalcor Energy, as government's crown corporation responsible for energy, is playing the lead role in the Lower Churchill Project, which will have two major phases. In Phase I, generation facilities will be constructed at Muskrat Falls, a Labrador-island transmission link will be constructed, as well as a Maritime link to transmit excess power for sale in eastern Canada and the United States. In Phase II, a second generation facility will be constructed at Gull Island with power being available for industrial development in Labrador and export to market in North America.

The Lower Churchill Project, if sanctioned, will bring many benefits to the province. When Phase I of the project is complete, the province will no longer be reliant on the Holyrood generating station which is fired by fossil fuels. This will enable the province to significantly reduce green-house gas emissions and will also help stabilize the price of energy, which is currently influenced significantly by the upward trend of oil prices. Lower Churchill power will provide increased electrical capacity to industrial clients in Labrador enhancing opportunities for expansion in existing, as well as, new operations. The construction of Lower Churchill generating facilities will bring significant employment and economic benefits.

While the Lower Churchill project is the main focus among renewable energy initiatives, the department also continues to explore opportunities in other renewable energy areas. The province possesses significant reserves of renewable fuels including resources such as wood pellets and bio-diesel. During the year, the department began assessment work towards the development of a provincial policy regarding renewable fuel (biofuel) development.

In line with Energy Plan commitments, the department is committed to enhancing the potential for increased renewable energy use in Labrador. An increased renewable



Mines and Energy Branches

energy supply, in the form of Lower Churchill power, will translate into increased renewable energy use by industry in Labrador as it continues to grow. During 2011-12, the department worked with Hydro and industrial stakeholders in Labrador to action the Energy Plan commitment which seeks to ensure that electricity rates for existing and new industrial customers are in the best interests of the province. At the same time, the department provided funding support to Hydro to conduct alternative energy studies in coastal Labrador. The intent of this work is to identify renewable energy options for electricity users in the region to reduce reliance on isolated diesel generation systems.

The department's efforts during the year have been in support of the Provincial Government's strategic direction of *responsible resource development*, with direct relevance to the focus area *development of clean renewable energy through the Lower Churchill Project*. The strategic direction of a *stable and competitive energy supply for domestic use and export to market* has also been supported. Four of the focus areas related to this strategic direction are reflected in the department's work, namely: *alternative energy research and development; advancement of renewable energy projects and related infrastructure; development of industrial electricity rates that support resource development; and export of surplus energy.*



Mines and Energy Branches

Goal

By March 31, 2014 the Department of Natural Resources will have enhanced legislation and/or policy necessary to advance renewable energy in the province.

Objective

By March 31, 2012 the Department of Natural Resources will have developed legislation and/or policy necessary to advance renewable energy priorities of the province.

Measure: Developed legislation and/or policy

Progress 2011-12

1. Drafted legislation and/or policy for the electricity sector, with particular focus on requirements for connection to the North American power grid

In 2011-12, the department completed preliminary policy work with specific focus on policy decisions that may be required in order to export power on the North American electricity grid. Work was completed in cooperation with Nalcor, along with Atlantic Energy Gateway⁷ participants, regarding the need and structure for an electricity system operator, the requirement for an open access tariff and other Federal Energy Regulatory Commission (FERC)⁸ requirements. The output of this work was directed through the Atlantic Energy Gateway Initiative.

2. Developed biofuels policy

In September 2010, the Government of Canada published amended *Renewable Fuels Regulations*. The regulations require fuel producers and importers of diesel

⁷ The Atlantic Energy Gateway Initiative involves work by the four Atlantic Canada energy departments, their provincial utilities and ACOA and Natural Resources Canada. The work includes planning for generation, transmission, and system operation, as well as electricity markets, supply chain development, research and development and regulatory improvements.

⁸ FERC is an independent agency that regulates the interstate transmission of natural gas, oil, and electricity in the United States.



Mines and Energy Branches

fuel and heating distillate oil to have an average annual renewable fuel content equal to at least two per cent of the volume of diesel fuel and heating distillate oil that they produce and import. The amendment set a coming-into-force date for this requirement of July 1, 2011.

In preparation for this requirement, the department established and began leading a biofuels working group to develop a biofuels policy for the province. The working group included Provincial Government officials from the Department of Natural Resources (Energy, Forestry, Agrifoods), the Department of Fisheries and Aquaculture, and the Department of Environment and Conservation and Phase 1 of a two-phase process was completed during the year. Phase 1 involved an assessment of the biofuel supply sources, known as feedstocks, available in the province (e.g., wood, fish oil, etc.) and the technologies required to transform these supplies into biofuel.

Under Phase 2, the working group planned to identify the most promising technologies and biofuel production methods for the province's particular feedstocks. In June 2011, however, Canada's Environment Minister announced that a permanent exemption would be provided for renewable content in diesel fuel and heating distillate oil sold in Newfoundland and Labrador to address the logistical challenges of blending biodiesel in this region. The exemption reduced the immediacy associated with the implementation of a provincial biofuels policy which allowed the reallocation of staff to other, higher priority, areas.

3. Developed Labrador industrial rate electricity policy

The department conducted consultations with a number of the region's existing and prospective industrial electricity customers. While these consultations took longer than anticipated, the department has completed analysis on rate policy options and is completing detailed analysis with a goal to preparing final policy documents for government consideration.

4. Completed planned 2011-12 components necessary to advance Lower Churchill project milestones

During the year, the department completed planned components required to advance the Lower Churchill Project. The components included the submission of a reference question to the Public Utilities Board (PUB) regarding the least-cost option



Mines and Energy Branches

for electricity supply to the island. This was a key part of government's review process to ensure that the Muskrat Falls project is the least-cost option compared to the alternative (i.e., the isolated Island option which depends largely on oil-fired generation at Holyrood).

Department staff provided support throughout the year on efforts to negotiate formal commercial agreements with Emera as well as the development of the MOA signed among the Governments of Newfoundland and Labrador, Canada and Nova Scotia on a loan guarantee for the project. In addition, department staff collaborated with the Department of Environment and Conservation on work associated with the Environmental Assessment process for the Lower Churchill Hydroelectric Generation Project.



Muskrat Falls

Photo: Nalcor Energy

5. Investigated development of small scale hydro and wind power for remote Labrador coastal communities

The department provided 2011-12 funding to Newfoundland and Labrador Hydro to conduct two multi-year alternative energy studies on the Labrador coast. One is a two-year Small Hydro Pre-feasibility Study and the other is a three-year Coastal Labrador Wind Assessment. Both studies began during the year as planned and, together, represent Phase 2 of a larger initiative to study opportunities for renewable power in the region.



Mines and Energy Branches

Small Hydro Pre-feasibility Study

During 2011-12, Hydro selected a contractor to complete the study and completed planning for site visits of five coastal Labrador communities. Site visits are scheduled to take place in 2012-13.

Coastal Labrador Wind Assessment

Preparatory work for this assessment was completed in 2011-12 and required monitoring towers will be erected in spring 2012. Data collection from these towers will begin during summer 2012 and will continue through to 2014. These towers will assist in the evaluation of requirements, constructability, and other desirable qualities of a wind energy development site, and the collection and validation of the wind data from each site. In addition to the towers, at each potential wind site Hydro will complete helicopter patrols; review ground conditions and access at each site; and collect local information to prepare for metrological tower installation.

Objective Summary

The Lower Churchill Project is the most significant of the renewable energy priorities of the province. During the year the department was able to make progress on policy work and other milestones required for project advancement. Development was not fully completed on all policy work undertaken during the year but the achievements made were significant and will continue into 2012-13.



Mines and Energy Branches

Objective, Measure and Indicators for 2012-13

Objective:

By March 31, 2013 the Department of Natural Resources will have advanced priorities related to hydro and electricity development in the province.

Measure: Advanced priorities related to hydro and electricity development in the province

Indicators

- Continued support of alternative energy studies on the Labrador coast
- Completed planned 2012-13 components necessary to advance Lower Churchill project milestones including:
 - Advancement of legislation and regulation that may be required in support of the project
 - Participation in negotiations regarding the Federal Government's loan guarantee
 - Work with Nalcor towards advancement of the Emera and NLH agreements
 - Support for activities related to the legislative debate on Muskrat Falls, scheduled for Fall 2012
 - Engagement with Nalcor on project sanction decision



Mines and Energy Branches

Issue 4: Outreach for Growth

Effective communication with stakeholders is an integral part of successful industry growth and development. Public knowledge and perceptions of the mining and energy sectors are important factors as the province works to increase development. Better public/community understanding of these and other matters will lead to more informed decisions on participation in resource development projects. With several major projects on the horizon, greater public knowledge about future developments will also help increase interest in careers in the mineral and energy industries. Communicating information about future developments and employment/business opportunities will support increased local community participation in resource development and better enable communities to prepare for economic opportunities associated with resource development.

By placing emphasis on communicating with stakeholders, the department itself will also become better informed about needs, concerns, opportunities and priorities in the area of natural resource development. A broad understanding of community interests, as well as industry-specific issues, will enhance the department's ability to carry out its planning, regulatory and administrative responsibilities.

The department is committed to focusing efforts on greater outreach to the general public, communities, and specific stakeholder groups to share information about current and future developments and their anticipated impacts on the province's economy, environment and people. Toward this end, in 2011-12, the department identified outreach opportunities and supported current activities in this regard. A departmental outreach strategy will be developed in 2012-13.

The department's efforts in this area are in support of the Provincial Government's strategic direction toward *responsible resource development* with particular relevance to the focus area *activities to support Social License⁹ through adequate stakeholder consultation*.

⁹ Social License can be defined as a level of acceptance granted by the community, including Aboriginal groups. It is rooted in the beliefs, perceptions and opinions held by the local population and other stakeholders about a project.



Mines and Energy Branches

Goal

By March 31, 2014 the Department of Natural Resources will have advanced outreach practices to support industry growth.

Objective

By March 31, 2012 the Department of Natural Resources will have assessed opportunities for enhanced outreach and coordination

Measure: Assessed opportunities

Progress 2011-12

1. Completed analysis on opportunities for increased government, stakeholder, and community outreach and/or coordination

During the year the department conducted a research/analysis exercise to gather information from staff members who work in promotional and/or public-facing program areas. In the course of this work, the department analyzed the types of outreach and communications activities it already performs and identified where the best opportunities exist to increase those and/or related efforts. Information gathered through other means also helped inform this initiative including public consultations on the Minerals Strategy, the department's ongoing participation in Aboriginal consultations on relevant resource projects, as well as participation in project communications activities associated with the Lower Churchill Project. During 2012-13, the department will examine opportunities more fully to determine the focus of future outreach and coordination activities.



Mines and Energy Branches

Objective, Measure and Indicators for 2012-13

Objective:

By March 31, 2013 the Department of Natural Resources will have developed a comprehensive departmental outreach strategy.

Measure: Developed a comprehensive departmental outreach strategy

Indicators

- Developed Outreach Strategy.



Workshop session held as part of Minerals Strategy consultations

Photo: Department of Natural Resources



Mines and Energy Branches

Strategic Directions

There has been significant progress during the past year toward the achievement of the department's strategic directions as communicated in its 2011-14 Strategic Plan. While specific accomplishments are outlined in detail in the previous sections of this report, this section summarizes the alignment of these accomplishments with each of the strategic directions. For ease of reference, this section makes specific note of achievements reported under the four issue areas.

Strategic Direction: Resource Exploration and Development

Continued and, preferably, increased resource exploration and development is critical in order to sustain economic benefits to the province associated with the mines and energy sectors. As such, the department selected *Market Attraction and Exploration* as Issue 1. The objective and indicators under this issue area are all focused on encouraging increased mineral and petroleum exploration in the province. Achievements in 2011-12 toward this end included efforts to support the acquisition and availability of new geoscience data, promote the province nationally and internationally as an ideal place to explore and develop and to devise new strategies to encourage exploration by industry and optimize departmental policies and programs to support exploration activities.

Strategic Direction: Responsible Resource Development

As a strategic direction, responsible resource development refers to the development of clean, renewable energy through the Lower Churchill Project and the pursuit of activities that support Social License through adequate stakeholder consultation. The department selected *Renewable Energy* as Issue 3. The objective and indicators under this issue area are focused on advancing renewable energy in the province, with significant focus on elements required for the Lower Churchill Project. During the year the department continued work to advance the Lower Churchill project with focus on the identification and implementation of regulatory changes in support of the project. In terms of Social License, the department identified *Outreach for Growth* as Issue 4. This issue focused, in part, on sharing information with the public and stakeholder groups about the mines and energy sectors as a whole, as well as specific projects/ initiatives of special interest to communities. As planned, in 2011-12 the department completed analysis work to identify opportunities for outreach activities. The department also continued to support ongoing outreach and public/community consultation activities.



Mines and Energy Branches

Strategic Direction: Strategic Resource Development

This direction is focused on the maximization of benefits to the province through the strategic development of mineral and energy resources. Issue 2, *Sustainable Resource Development*, is heavily focused on benefits maximization with the 2011-12 objective and indicators dedicated to efforts such as enhancing benefits and gender equity policies. Issue 2 also includes support for the completion and initial implementation of the Energy Innovation Roadmap initiative which will identify the most promising areas for innovation in the province's energy sector. Work completed on the Minerals Strategy, also a focus area under Issue 2, provided insight into research and development opportunities and benefits maximization as they apply to the minerals sector.

Strategic Direction: Stable and Competitive Energy Supply

This strategic direction is focused primarily on alternative energies, electricity rates and the export of surplus energy. The department's strategic plan addresses these focus areas under Issue 3, *Renewable Energy*, which identifies initiatives related to the Lower Churchill Project as discussed above. Specific achievements during the year included policy work on the development of biofuels as alternative sources of energy, as well as the investigation of alternative energy solutions for remote Labrador coastal communities, now reliant on diesel power generation. Also included amongst the year's achievements were consultations and policy development related to an industrial electricity rate policy for Labrador and policy work required to advance the Lower Churchill project.



Mines and Energy Branches

Additional Highlights and Accomplishments

1. Geoscience Report Supports Exploration in Northern Labrador

In August 2011, the department's Geological Survey division published a new report identifying key geological areas of interest for potential mineral exploration in Northern Labrador. The report examines an area located 50 kilometers west of Ukak Bay and 120 kilometers west-northwest of Nain. It covers an area of approximately 3,000 square kilometers in three National Topographic System map areas. The report analyzes geochemical data obtained in previous government surveys and identifies the potential for significant rare-earth and rare-metal mineralization in the area. Since its release the report has attracted considerable interest with over 500 new mineral claims staked in the area.

2. Continued Interest in Offshore Exploration

The C-NLOPB (the Board), through a Call for Bids process, determines on an annual basis the offshore areas available for exploration activity. The Board issues a call for bids for approved offshore "parcels", and issues exploration licenses to the companies which submit the highest bids in terms of exploration expenditure commitments over a five-year period.

The 2011 Call for Bids consisted of eight parcels of land in the Western Offshore, the Flemish Pass/North Central Ridge region, and the Labrador Offshore with exploration rights for a total of 1,599,295 hectares of land available for bidding. The 2011 bids yielded the second highest single-year bid total since 1988 with work commitments totaling almost \$350 million. These results demonstrate the petroleum industry's continued interest in the exploration opportunities available in the province's offshore.

3. Save It Forward Helps Students Go Green

In July 2011, government released the results of the inaugural year of the Save It Forward program. Through the program, more than 8,400 students in over 30 schools learned about using and conserving energy during the school year. The program is delivered in partnership by the Department of Natural Resources and the Department of Education and delivers on a commitment in the 2007 Energy Plan to invest in the



Mines and Energy Branches

development of innovative educational programs that engage young people in energy conservation and climate change.

Students participating in Save It Forward were asked to come up with ideas which support the conservation and efficient use of energy and submit proposals with the potential for funding to put the ideas into action. The proposals were evaluated and more than \$76,000 was allocated to the successful applicants. A variety of projects were funded including litter-free lunches, the purchase of solar panels, and the installation of window insulation. Evident in all proposals received was that the province's young people understand the importance of protecting the environment and want to explore ways of reducing their carbon footprint, beginning in their classrooms and schools.

Shared Commitments

The Department of Natural Resources has legislative oversight for the following public bodies related to the mines and energy sectors: Nalcor Energy and its subsidiaries including Hydro, Nalcor Energy – Oil and Gas, Churchill Falls (Labrador) Corporation, Twin Falls Power Corporation, Lower Churchill Development Corporation, Gull Island Power Corporation and Bull Arm Fabrication Site; and the Mineral Rights Adjudication Board.

The department also shares management of offshore petroleum resources with the Federal Government and participates in management efforts through the C-NLOPB.

The department works closely with each of these public bodies toward fulfillment of the strategic directions of the Minister of Natural Resources.



Mines and Energy Branches

Opportunities and Challenges

Opportunities

Strong Mining Industry

The mining industry in Newfoundland and Labrador is more prosperous than ever before and is an increasing contributor to the province's economic growth. Iron ore has been a strong commodity for several years but favorable prices for gold, base metals and specialty products such as antimony and fluorspar have also led to strong exploration and development activity for these minerals across the province. The nature of the mining industry results in employment and project spending in rural areas where economic stimulus is needed most. With commodity price forecasts being strong going into 2012-13, the mining industry presents an exciting opportunity for the department to help facilitate continued employment and other economic benefits throughout the province.

Petroleum Potential

Over 3.1 billion barrels of oil and 11 trillion cubic feet of natural gas have been discovered in the province to date and it is estimated that an additional 6 billion barrels of oil and 60 trillion cubic feet of natural gas remain either undiscovered or undeveloped. The royalties flowing to the province from current offshore developments have been a major factor in the province's economic growth over the last several years. With the magnitude and prospectivity of the province's undiscovered reserves, there is no doubt that there are other commercially viable discoveries to be made. Identifying ways to attract continued exploration in the province represents one of the greatest opportunities for the department moving forward.

Challenges

Keeping Pace with Industry

The Department of Natural Resources monitors and interfaces with companies and stakeholders in resource industries that are global in scale. In order to provide the expected returns to investors and shareholders, resource development companies are



Mines and Energy Branches

typically on the leading edge of technology in terms of exploration and development techniques, data/financial analysis, etc. They are also able use their returns to retain skilled professionals with attractive compensation and benefits packages. It is important for the department to keep pace with industry, to the greatest extent possible, in order to be proficient in carrying out its regulatory function, and to continue gathering and promoting information on resource potential to ensure exploration work continues in the province. The department continuously looks for creative ways to attract and retain talented professionals and to advance technological capacities within the fiscal limitations of a public sector organization.

The department is also challenged to keep pace with other jurisdictions around the world vying for exploration and development activities and investments. Oil and minerals will yield the same price on world markets regardless of where they are produced, and resource companies are careful to find the most beneficial jurisdictions in which to conduct business. The department will continue to compete with other resource-rich jurisdictions by promoting Newfoundland and Labrador as an attractive destination with strong resource potential and a business-friendly environment.

Maintaining Momentum

One of the department's primary focus areas is to keep the province's resource industries moving ahead, to keep new discoveries coming, and to maximize the benefits that arise from the resulting development projects/operations. While the department makes every effort to promote the province's resource potential and support continued exploration and development, many factors that influence continued industry activity are out of the department's control. World commodity prices are, perhaps, the biggest of these factors. Prices dictate the commodities for which companies want to explore and produce, based on anticipated profitability (particularly in the mining industry). At present, prices for many of the province's resources are relatively high and, thus, the sectors are doing well. At some point in the future, however, this trend may change. The challenge for the department in this regard is to keep abreast of industry conditions and make timely adjustments to the strategies and tactics it uses to help keep the mineral and petroleum sectors moving in a positive direction.



Forestry and Agrifoods Agency



Photo Credits, previous page:

Top and bottom: Department of Natural Resources



Forestry and Agrifoods Agency

Introduction

The Forestry and Agrifoods Agency's (the agency) primary focus during this fiscal year was to provide programs and services to support our forestry, agriculture and agrifoods industries' economic development and sustainable resource management.

To fulfill the mandate of the agency, \$67.2 million was spent in the 2011-12 fiscal year. These expenditures focused on programs and services to support opportunities that provided economic and employment benefits to many regions throughout Newfoundland and Labrador.

The agency's commitment to research and development initiatives that support industry innovation, development, and sustainability are significant for 2011-12. The Agriculture Research Initiative (ARI) and the Centre for Forest Science and Innovation (CFSI) have funded 38 projects through 2011-12. The ARI is a federal (60) / provincial (40) cost shared program. The CFSI entered into partnerships that resulted in significantly increased available funding.

The agency's investment into the industry, and resource sustainability, go well beyond research and development. The agency through program initiatives such as the Growing Forward Program and the Legal Land Survey Assistance Program has provided significant support to the agriculture and agrifoods industry. The continued investment in forest access roads and infrastructure for forest resource utilization is a valuable investment for current and future industries. Continued advancement of an Environmental Management System for crown lands under sustainable forest management illustrates the value the agency places on the environment and sustainable resource management.

The agency has demonstrated through various initiatives and investment the commitment to innovate, diversify, and manage sustainably the province's forestry and agriculture resources.



Forestry and Agrifoods Agency

Overview of the Agency

The Forestry and Agrifoods Agency was established under the *Executive Council Act*. It is a category one public body under the *Transparency and Accountability Act*.

The legislation administered by the agency is provided in Appendix I.

Vision

The vision of the Department of Natural Resources is a province that realizes the full benefit from the sustainable development of its natural resources.

Mission Statement

By March 31, 2017, the Forestry and Agrifoods Agency will have supported programs and services to strengthen and sustain forestry, agriculture and agrifoods industry development in an innovative and economically beneficial manner.

Mandate

The mandate of the Forestry and Agrifoods Agency includes the supervision, control and direction of all matters relating to:

- forest resources and utilization (control and direction of cutting, classifying, measuring, manufacturing and inspection of trees and timber products), constructing and maintaining forest access roads, forest protection from fire and insects, silviculture, inventory, conservation, management, preparation of management plans, analysis, mapping and developing of forest resources;
- enforcement and compliance responsibility in the areas of forestry and assisting in enforcement in the areas of motorized snow vehicle and all-terrain vehicle usage;
- agriculture, including, without limitation of the word "agriculture," agrifoods, agronomy, horticulture, animal husbandry, aviculture, the development of forage production and the growing of hay and the products of agriculture, including, without limitation of the word "products," animals, meats, fur, eggs, poultry, wool, dairy products, berries, grains, seeds, fruit, including wild fruit, fruit products,



Forestry and Agrifoods Agency

- vegetables and vegetable products;
- animal health;
- food technology and marketing; and
- agricultural land and the sustainable utilization, protection, conservation, management, surveying, mapping and development of agricultural land.

For a complete list of all legislative responsibilities that inform the agency's mandate, please refer to Appendix FA-I and/or the House of Assembly website: <http://www.assembly.nl.ca/Legislation/sr/NaturalResources.htm>.

The agency's responsibilities for supporting natural resource development in the forestry, agriculture and agrifoods sectors are provided through two branches. The Policy and Planning Division provides policy support and coordination for both branches within the agency.

Forestry Services Branch

The Forestry Services Branch is responsible for managing and regulating the forest resources of the province. Programs and services are provided through the following divisions within the branch: Forest Ecosystem Management, Forest Engineering and Industry Services, Legislation and Compliance and the Centre for Forest Science and Innovation. District offices operate within three regions – Eastern, Western and Labrador.

Agrifoods Development Branch

The Agrifoods Development Branch is responsible for promoting the continued development, expansion and diversification of competitive and sustainable primary and value-added agriculture and agrifoods businesses. Programs and services are provided through the following divisions within the branch: Agriculture Business Development, Animal Health, Land Resource Stewardship and Production and Market Development.



Forestry and Agrifoods Agency

Employees

As of March 31, 2012, the Forestry and Agrifoods Agency had 393 staff on payroll. Employees with the agency work in offices located in St. John's, Corner Brook and in district offices and units located throughout the province.

The table below provides the breakdown of staff in each branch.

Branch	Female	Male	Total
Forestry Services	81	203	284
Agrifoods Development	55	54	109
Total¹	136	257	393

¹ This figure does not include: the entire staff complement of seasonal employees employed in the Forestry Services Branch (majority male), employees in communications and ministerial support shared with the Mines and Energy Branches and employees with corporate services shared with other departments.

Table 2 – Employee Breakdown (agency)

Physical Location

The Forestry and Agrifoods Agency's headquarters is located at the Fortis Building in Corner Brook. The mailing address is as follows:

Fortis Building
P.O. Box 2006
Corner Brook, NL A2H 6J8

In addition to headquarters, the Agency has offices located throughout many regions of the province. A detailed listing can be located on the Department of Natural Resources web site, www.gov.nl.ca/nr under the contact listings for the Forestry Services Branch and the Agrifoods Development Branch.

Website

The Department of Natural Resources web site address is www.gov.nl.ca/nr. A link to the department's web site is also provided in the main web site for the Government of Newfoundland and Labrador at www.gov.nl.ca.

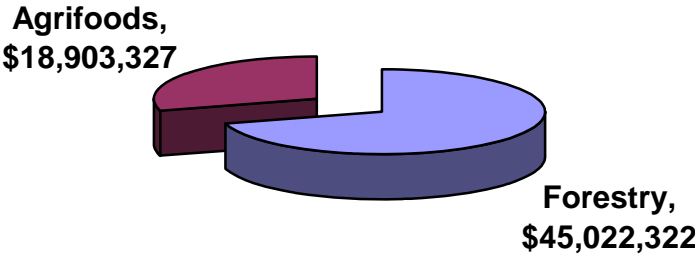


Forestry and Agrifoods Agency

Budget

Expenditures for the Forestry and Agrifoods Agency in fiscal year 2011-12 totaled \$63,925,649 million this figure does not include \$6,043,475 related to executive and support services which are shared with the Mines and Energy Branches. The following chart provides a breakdown of expenditures by branch. See Appendix II for additional details.

2011-12 Expenditures by Branch





Forestry and Agrifoods Agency

Lines of Business

Enforcement and Compliance of Legislated Requirements

The agency's responsibility for enforcement as a tool in forestry management is delivered through the Regional Services structure. In this capacity over 100 Conservation Officers are located at various regional/district offices across the province. In addition to enforcing forestry regulations under the *Forestry Act/Regulations*, Conservation Officers are authorized to enforce provisions of the *Plant Protection Act*, *Motorized Snow Vehicles and All-Terrain Vehicles Act/Regulations* and certain sections of the *Wilderness and Ecological Reserves Act/Regulations*. The agency actively collaborates with other government departments and agencies on enforcement activities. The agency is responsible for monitoring timber harvesting operations as well as patrolling forest areas for compliance with the regulations under the various acts.

The Legislation and Compliance Division is located at headquarters in Fortis Towers in Corner Brook. In addition to providing support for enforcement and compliance related activities in regions and districts, this division manages: special investigations; policy development, implementation, analysis, and review; coordination of training and certification for enforcement related duties including use of force; and enforcement equipment inventory and distribution.

Licensing and Permitting

The agency's regional and district offices issue licenses and permits for: commercial or domestic timber cutting, commercial or domestic sawmilling, burning permits, operating permits during the fire season, timber export, the purchase of timber, protection of livestock from wild animals, bear protection, replacement of a big game license, permits to remove nuisance animals, game export permits, temporary outdoor identification cards, possession for taxidermy, permit to transport firearms, and fur bearer export permits.

Regional Services

The policy and programs associated with sustainable forest management, health and services are implemented through a regional/district structure. Regional Services is responsible for the delivery of the silviculture, resource roads, forest fire suppression,



Forestry and Agrifoods Agency

and enforcement/compliance programs. In addition, Regional Services is responsible for 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.

Sustainable Forest Management

The agency works to ensure a balance between environmental, economic and social values, while having forest ecosystems that provide viable populations of native species, a sustainable forest economy and associated employment. Through the agency's headquarters in Corner Brook, and offices in St. John's, the agency is responsible for policy, legislation, programs and forest management planning that enable the citizens of the province to benefit from the services that the ecosystems provide while ensuring their sustainability and health.

The agency's forest programs include silviculture, resource roads construction, forest inventory, forest fire suppression, forest insect control, forest management planning, enforcement/compliance, wood measurement and timber royalty, and industry development.

Furthermore, the Centre of Forest Science and Innovation is responsible for the development of forest-related research programs and science capacity in the province consistent with themes of the Provincial Sustainable Forest Management Strategy and other guiding documents.

Research themes under the ecological direction of the Provincial Forest Research Strategy include forest disturbance, climate change, ecosystem dynamics, biodiversity and water. Economic themes are grouped under innovation, industry and markets while social themes include forest based communities, aboriginal participation and forest values.

Animal Health

The agency's animal health services consist of: farm animal veterinary services; supportive laboratory analyses for diagnostic and regulatory programs through the ISO 17025 accredited Animal Health Laboratory; control of food quality at the production or primary processing level under the *Food and Drug Act* (raw milk) and *Meat Inspection Act* (slaughterhouses); monitoring and control of specific animal diseases of either



Forestry and Agrifoods Agency

economic interest to the livestock industry or of public health interest to the provincial community under the proposed new *Animal Health and Protection Act*; the oversight, monitoring and support of investigations of cruelty to animals complaints (new *Animal Health and Protection Act*); assistance to wildlife/conservation officials; promotion and control of Heritage Animals (Newfoundland Ponies) under the new *Animal Health and Protection Act*.

Business Development Services

The agency delivers a wide range of programs and services to support business development including: AgrilInsurance, Livestock Insurance; the Provincial Agrifoods Assistance Program, Growing Forward, and the Agriculture and Agrifoods Development Fund; grants and subsidies for the Newfoundland and Labrador Federation of Agriculture, 4-H Program, and the Provincial Training Program; and Professional Advisory Services through eight agricultural representatives and three farm management specialists.

Land Management

The agency offers a number of programs and services in the area of land resource stewardship including the: Environment and Land Use Program, involving the Real Property Tax Exemption Program; Land Consolidation Program; Environmental Farm Planning Program; Agricultural Limestone Program; and Agricultural Access Roads and Electrical Services. Also included are soils and mapping activities, delivered through the Soil Survey Program; geographic information system development; field mapping and database development; and the Soil Fertility and Laboratory Service Program.

Production and Market Development

The agency offers a wide range of programs and services aimed at maximizing production and market development at the primary and secondary levels. These programs and services include: professional and technical support, pest control training, research and development, market development, market intelligence, on-farm food safety, off-farm food safety, and marketing and promotion.



Forestry and Agrifoods Agency

2011-12 Year in Profile

The Forestry and Agrifoods Agency has worked over the past year with the forestry and agriculture sectors providing programs and services to focus on sustainable, economic development of our renewable natural resources. The following sections profile some of the accomplishments of the agency during 2011-12.

1. The Agriculture Research Initiative Investment Builds Research Capacity in the Province

The Agriculture Research Initiative is a three year federal/provincial cost-shared program which is funded under the Canada-Newfoundland and Labrador AgriFlexibility Agreement for total funding of \$7.5 million or \$2.5 million annually on a 60:40 federal-provincial basis. Funding is provided to build both public and private sector applied research capacity in Newfoundland and Labrador in support of the competitiveness of the agriculture sector. This year, the program funded 20 projects with a total investment of nearly \$2 million. These projects included: Alternative Feeds Research, Alternative Crops Research, Seed Potato Research, Northern Berry Study, Integrated Pest Management, Manure management on mink farms, and cheese manufacturing. This program is essential to the growth and diversification of all sectors in the agriculture industry.

2. Over \$1.1 Million Invested through the Cranberry Industry Development Program

This is the fourth year of the five-year Cranberry Industry Development Program (CIDP). The CIDP was established to facilitate the development of the cranberry industry with financial assistance of \$15,000.00 per acre for up to 100 acres per year for eligible applicants.

In 2011-12 the Program expended over \$1.1 million for cranberry site development and plant propagation. Cranberry site development activities include on-farm roads that provide access to



Cranberry Harvest



Forestry and Agrifoods Agency

cranberry sites, cranberry bed development, dykes, water reservoirs and irrigation systems, ditches and drainage tiles, and the acquisition of approved cranberry plant material.

3. 165 Projects Completed by Farmers through the Growing Forward Program

The Canada-Newfoundland and Labrador Growing Forward program is a 5 year joint Federal – Provincial 60/40% funded initiative to promote three strategic outcomes: a competitive and innovative sector, a sector that contributes to society's priorities, and a sector that is proactive in managing risks.

In 2011-12, the Growing Forward Program, made significant contributions to the industry by providing over \$6.66 million in funding for farmers to complete 165 projects. The Growing Forward Program has enhanced environmental stewardship on farms through investments in environmental farm planning, manure handling and storage systems, integrated pest management, and improved cropping systems. Investments have also been made to increase the innovative capacity of the agriculture sector. Support was provided to investigate and implement alternate energy projects for the greenhouse sector, adopt efficient crop harvesting systems, and implement feed efficiency measures on farms. Additionally Growing Forward continued to provide investments to mitigate agricultural risks including investments for wildlife control fencing and irrigation systems.

4. The Agriculture and Agrifoods Development Fund Invested \$3.25 Million

The Agriculture and Agrifoods Development Fund (AADF) was established to encourage the development, diversification and expansion of large scale agricultural projects in primary and secondary processing sectors. It is intended to stimulate and attract investments in the industry. AADF invested \$3.25 million in the agriculture and agrifoods industry in 2011-12.

Dairy Farmers of Newfoundland and Labrador received \$2.47 million in 2011-12 to continue a large scale land development initiative to increase forage production for the sector and reduce the reliance on imported feeds. This investment enhanced the competitive capability and profitability of Newfoundland and Labrador dairy farms. The funding enabled rough clearing of 946 acres and enhancement of 1,086 acres on 23



Forestry and Agrifoods Agency

dairy farms across the province this year. This land development will produce forage valued at \$1.0 million annually and will be used to feed dairy cows to supply milk throughout the province.

Additionally, \$773,000 in funding was provided for two other projects to establish a new dairy farm and for the construction of a manure anaerobic digester system for a livestock operation. The investment into the anaerobic digester system has several benefits including creating a renewable energy source for the farm and the byproducts can be utilized for fertilizer and livestock bedding.

5. Investment in Forest Related Research

The Centre for Forest Science and Innovation (CFSI) is responsible for the development of forest related research programs and science capacity in the province consistent with themes of the Provincial Sustainable Forest Management Strategy and other guiding documents.

In 2011-12, CFSI strengthened the province's forest research capacity and fostered innovation by funding 18 projects. This year's investment of \$504,000 by CFSI contributed to partnered projects totaling over \$3,900,000. Projects were initiated in the areas of climate change, endangered species, bio-energy, and wood fibre.

6. Maintaining Healthy Forest Ecosystems through Silviculture

Maintaining healthy forest ecosystems is a high priority within the agency and each year the agency implements a province-wide silviculture program and facilitates the delivery of a parallel program by Corner Brook Pulp and Paper Limited (CBPPL) through a cost-sharing arrangement with the agency. The provincial silviculture program is comprised of two classes of activities; reforestation, and forest improvement. Reforestation activities are designed to establish new forests, typically on sites that were previously forested but also on sites that have been non-forested for a long period of time. In 2011-12, approximately \$10.8 million was spent in support of the silviculture program. Over 9,400 hectares were silviculturally treated in Newfoundland and Labrador this year. To support this activity, provincial tree nurseries shipped approximately 11 million seedlings.



Forestry and Agrifoods Agency

7. Development of Environmental Management System (EMS) for Crown Limits

Efforts to develop an Environmental Management System (EMS) for crown managed lands continued in 2011-12. The objective is to position the Forestry Services Branch (FSB) so that it can register the EMS under the ISO 14001 Standard in 2012-13. The EMS will:

- Demonstrate environmental responsibility;
- Aid Forest Environmental Management Planning Process (will improve upon current process);
- Complement current and new strategic plans;
- Follow the lead of National and International Forestry Organizations;
- Help gain public confidence in forest management programs; and,
- Set the foundation for registration under a Sustainable Forest Management (SFM) Certification System.

In 2011-12, seven significant environment aspects (SEA's) were identified, an environmental policy developed and a draft of the EMS manual completed.

8. The Agency Invested \$5.9 Million in the Construction of Forest Resource Roads

In 2011-2012, the Forestry Services Branch committed a total of \$5.9 million to the construction of forest resource roads on Crown Limits in Newfoundland and Labrador. During the construction season a total of 90 projects were completed consisting of:

- 84km new construction;
- 44km of reconstruction;
- 25 new bridges proposed (11 wooden & 14 Steel Panel);
- 10 bridge repairs;
- 52km of surfacing;
- 1,110km of grading (10 were the result of emergency repairs); and,
- 159km (both sides) of alder removal/ditching.





Forestry and Agrifoods Agency

Outcome of Objectives

This section of the Annual Performance Report details the significant work undertaken and completed by the agency on its goals during the 2011-12 planning period and progress toward achieving the goals of the agency's 2011-2014 Strategic Plan.

Issue 1: Forestry, Agriculture and Agrifoods Resource Sustainability

Sustainability is critical for forest and agrifoods renewal resources in order to ensure longevity of these sectors for future generations. Over the past year, the Forestry and Agrifoods Agency has developed and implemented initiatives to support the sustainability of our renewal resources.

Changes in our agriculture laboratories have improved our efficiency and evaluation abilities to better assist our farmers. Through the development and implementation of the Legal Survey Assistance Program and the investigation of potential new entrants' initiatives, the agency has supported new agriculture industry entrants. As well, implementation of the Growing Forward Sustainability Program has enhanced food safety and environmental stewardship within the industry.

The Forestry and Agrifoods Agency has focused on many areas to continue sustainability of our forest resources. Forest protection and monitoring initiatives for has been completed this year in the province. Initiatives in this area are critical in ensuring the protection of our resource from major forest pests. Work has begun on the development of an Environmental Management System for certification of Crown Forestry Operations. As well, the agency has maintained and expanded our forestry access roads and bridge infrastructure throughout the province. This infrastructure is critical to ensure accessibility to the resource so it can be managed in a sustainable manner.



Forestry and Agrifoods Agency

Goal

By March 31, 2014, the Forestry and Agrifoods Agency will have implemented measures to advance forestry, agriculture and agrifoods industry sustainability in the province.

Objective

By March 31, 2012, the Forestry and Agrifoods Agency will have commenced development and/or implementation of priority initiatives to strengthen the forestry, agriculture and agrifoods industries to create sustainable opportunities for Newfoundland and Labrador.

Measure: Commenced development and/or implementation of initiatives to support sustainable development of the forestry, agriculture and agrifoods industry.

Progress 2011-12

1. Commenced development of an Environmental Management System for certification of Crown forestry operations

The Forestry Services Branch has worked towards the development of an Environmental Management System (EMS) for forest operations on Crown Limits. The system follows the outline of the ISO 14001 standard and is approximately 60% complete. In 2011-12, seven significant environment aspects (SEA's) were identified, an environmental policy developed and a draft of the EMS manual completed. Becoming certified to the ISO 14001 standard is an important step towards pursuing internationally accepted land base certification such as Forest Stewardship Council (FSC) or Sustainable Forestry Initiative (FSI). Being ISO certified will demonstrate to all stakeholders that the Environmental Management System in place by the Forestry Services Branch is independently audited. It demonstrates the commitment of the FSB to protecting the environment in which they operate.



Forestry and Agrifoods Agency

2. Developed new forestry policy structure in support of legislative framework

The development of a new forestry policy structure in support of legislative framework has not yet been completed. Prior to the development of new forestry policy structure, consultation between the Forestry and Agrifoods Agency and the Department of Environment and Conservation was required to address overlapping issues in the legislative framework. These consultations have now been completed. The Agency continues to work to advance this initiative.

3. Developed approaches to develop agribusiness new entrants initiatives

The Agrifoods Development Branch developed approaches to move forward with initiatives related to new entrants. A Steering Committee was formed comprised of Agrifoods Development Branch staff, a member/director of the Newfoundland Federation of Agriculture, and a member/director of the Young Farmers Forum. A consultant was hired, and with the guidance of the Steering Committee, a report was produced. This report outlines approaches to develop new entrants initiatives in areas such as mentoring, scholarships, and school career days. These initiatives are intended to attract new entrants to the agriculture and agrifoods sector.

4. Developed a Legal Survey Assistance Program

A Legal Land Survey Assistance Program was developed. This program provided financial assistance to eligible new entrants to the agriculture industry towards the cost of a legal land survey for the acquisition of an agriculture crown land lease. Surveys completed by a registered member of the Association of Newfoundland and Labrador Land Surveyors between April 1, 2011 and March 31, 2012 were eligible for funding. Ten applications were approved for a total reimbursement of \$27, 037.

5. Maintained and expanded capital infrastructure (forest access roads and bridges)

In 2011-12, the Provincial Capital Roads Program was successful in tendering a total of 90 projects at a value of \$5.9M. Highlights of the program included 84 km of new construction, 44 km of re-construction and the installation of 25 new bridges. The program also funded the repairs of 10 older bridges and the grading of 1,110 km of resource road throughout Newfoundland and Labrador.



Forestry and Agrifoods Agency

6. Implemented forest protection initiatives for managed forest stands

The Forestry Services Branch implemented forest protection and monitoring initiatives for major forest pests in Newfoundland and Labrador in 2011-12. In July, an aerial control program using the biological insecticide (Btk) was successfully conducted to protect 3,733 ha of forest in central areas of the province from the hemlock looper. Various monitoring surveys were also conducted and indicate that hemlock looper populations have declined in both Labrador and the island while eastern spruce budworm populations remain active in Labrador. Balsam fir sawfly populations also remain active in localized areas on the island. Aerial monitoring of damage also detected two new areas with red pine mortality caused by Scleroderris (EU) canker, a serious disease of hard pines. In 2011-12, initiatives also included conducting forest health monitoring in the province's high-value silvicultural (plantations, thinnings) areas. Small-scale trials were also conducted to improve sampling procedures for surveys used to monitor insect development, assess treatment results, and forecast expected populations.

7. Implemented Growing Forward sustainability programs

The Agrifoods Development Branch implemented the Growing Forward Agriculture sustainability program. This program provided support to enhance food safety and environmental stewardship within the agriculture and agrifoods industry. In 2011-12, this program invested \$1,410,295 in 24 projects to implement environmental beneficial management practices; in addition to contributing \$310,027.90 in 6 projects addressing food safety initiatives.

8. Implemented improved quality and standards of Agrifoods Development Branch laboratories

The Animal Health Laboratory purchased new equipment to help increase the efficiency of milk quality testing. The Soil Plant and Feed Laboratory improved quality and standards by purchasing more sensitive equipment and updating extraction methodology. These improvements have increased efficiency and enabled the laboratory to better evaluate soil fertility and provide reliable fertilizer recommendations to farmers.



Forestry and Agrifoods Agency

Objective, Measure and Indicators for 2012-13

Objective:

By March 31, 2013, the Forestry and Agrifoods Agency will have continued implementation of initiatives to support sustainable development of the forestry, agriculture and agrifoods industries.

Measure: Continued implementation of initiatives to support sustainable development of the forestry, agriculture and agrifoods industries.

Indicators:

- Advanced ongoing efforts to complete an Environmental Management System for certification of Crown forestry operations
- Completion of consultations and the development of a Provincial Sustainable Forestry Management Strategy
- Drafted the Sustainable Forest Management Planning Regulations.
- Development of a defined Agriculture Production Landbase with an increase in compliance on existing leases
- Worked with AAFC to review the current suite of Federal Provincial Territorial Business Risk Management programming and administration
- Developed and administered training of enforcement personnel for Animal Health Legislation
- Continued administration of Growing Forward Sustainability Programs and ensured that these programs are included in the Growing Forward 2 framework



Forestry and Agrifoods Agency

Issue 2: Forestry, Agriculture and Agrifoods Innovation, Development and Promotion

The Forestry and Agrifoods Agency is supportive of initiatives that will promote opportunities for development of the sector. The agency has been supportive of development of new forest-based initiative in Labrador and Central Newfoundland. The agency is working diligently in assessing opportunities in these areas. Forestry research, which is an important component of advancement of the forestry sector, was very successful in collaborating with other partners to invest in a variety of forest research areas this year.

The agency has supported innovation and development through many of its programs and services for the agriculture and agrifoods industry. Through actions such as the expansion of the Agriculture and Agrifoods Research Development Fund to help build applied research capacity in the province, working with Agriculture and Agri-Food Canada on the development of a Growing Forward 2 Program, and collaborating with industry to develop agriculture awareness initiatives, the agency realizes the value of partnering to provide more opportunities for growth within the industry.

Goal

By March 31, 2014, the Forestry and Agrifoods Agency will have supported the expansion and promotion of the forestry, agriculture and agrifoods industries through innovative initiatives.

Objective

By March 31, 2012 the Forestry and Agrifoods Agency will commence implementation of initiatives to support expansion and promotion of the forestry, agriculture and agrifoods industries.

Measure: Commenced implementation of initiatives to support industry expansion and promotion



Forestry and Agrifoods Agency

2011-12 Progress

1. Supported collaborative forestry research and development centered on three priority research directions (Ecological, Economic and Social)

This year's investment of \$504,000 by the Centre for Forest Science and Innovation (CFSI), along with partners from areas such as universities, colleges, governments, non-government organizations and industry contributed to over \$3,900,000 in research projects. Projects included the following:

Ecological Research

- Climate Change Transect Assessment
- NL Marten Project
- Caribou/Forest Harvesting
- Coastal River Otters
- First Nations Training
- Bio-Fuels
- Managing Hemlock Looper
- Mushroom Census
- Labrador Vegetation/Soil Survey
- Arboreal Lichen Diversity in NL
- Forest Carbon Management

Social Research

- Sustainable Forest Management
- Forestry Governance Structures

Economic

- Adapting Bio Pathways
- New Wood Product Association
- Wood Fibre – Enhanced Forest Inventory

2. Developed a comprehensive marketing strategy for manufactured wood products

A comprehensive marketing strategy for manufactured wood products has not been developed at this point. The outcomes of the on-going expressions of interest for Labrador and Central Newfoundland could have significant impacts on the forest industry in the province. As such, until the expressions of interest are finalized and



Forestry and Agrifoods Agency

further analysis has been completed on the forest industry, the Agency has decided to defer any further development of a comprehensive marketing strategy for manufactured wood products.

3. Supported development of new forest-based initiatives in Central Newfoundland

The Forestry Services Branch (FSB) has worked in 2011-12 with other relevant provincial departments to support the development of new forest-based initiatives in Central Newfoundland. The FSB advanced the review and negotiation of a business proposal that resulted from an expression of interest for 280,000 cubic meters of commercial wood in Central Newfoundland. Discussions with the proponent have been ongoing during this period for this potential initiative.

4. Supported development of new forest-based initiatives in Labrador

During 2011-12, a concept proposal was received from a proponent to develop a forest based initiative in the region. The Forestry and Agrifoods Agency has reviewed this proposal and has requested from the proponent a detailed business plan for further evaluation. By accepting and reviewing proposals and encouraging detailed business plans the FSB is supporting development of new forest-based initiatives in Labrador.

5. Worked with Agriculture and Agri-Food Canada to begin developing Growing Forward 2, the next phase of federal-provincial agriculture industry programming, for delivery in 2013

The Agrifoods Development Branch worked with Agriculture and Agri-Food Canada to begin development of Growing Forward 2 (GF2). Federal Provincial Territorial governments are currently negotiating a five-year multilateral agreement. September, 2012 is the anticipated date that parties will seek authority to sign the GF2 Multilateral Framework Agreement. It is expected that bilateral negotiations and program design will begin following the signing of the Multilateral Framework Agreement.



Forestry and Agrifoods Agency

6. Expanded the Agriculture and Agrifoods Research Program to support innovation and research and development within the agriculture and agrifoods sectors

This year, the Agriculture and Agrifoods Research Development Fund (AARD) was expanded to include funding from Agriculture and Agri-Food Canada under the Agriflexibility Agreement to create the Agriculture Research Initiative. This initiative is a three year federal/provincial 60:40 cost-shared program with a total funding of \$7.5 million or \$2.5 million annually. Funding is provided to build both public and private sector applied research capacity in Newfoundland and Labrador in support of the competitiveness of the agriculture sector. This year, the program funded 20 projects with a total investment of nearly \$2 million. These projects included: Alternative Feeds Research, Alternative Crops Research, Seed Potato Research, Northern Berry Study, Integrated Pest Management, Manure management on mink farms, and cheese manufacturing. This program is essential to support innovation and research and development of all sectors in the agriculture industry.

7. Commenced development of educational agribusiness modules and market readiness toolkits

The Agrifoods Development Branch commenced development of education agribusiness modules and market readiness toolkits. Initial market research was done within industry to determine market priorities, which included social media, relationship marketing, direct marketing, branding and agritourism. Training of marketing staff on topics was done to adequately and effectively present the information to industry and provide ongoing support. A marketing 101 presentation was given to industry to provide information on each one of the priority areas to allow producers to become aware and to decide on which markets fit within their business. Initial workshops created included a relationship marketing workshop bringing together chefs, restaurant owners and farmers to network and learn about bring the two industries together for the benefit of both industries and how producers can become market ready for an educated industry. Research on market readiness toolkits was completed in other jurisdictions. Development of such toolkits has commenced and will be completed by 2012-13.



Forestry and Agrifoods Agency

8. Collaborated with industry to develop and implement agriculture awareness initiatives

Growing Forward provided \$363,277 to the Newfoundland and Labrador Federation of Agriculture to promote agriculture awareness initiatives for the province. These initiatives included participation in agriculture fairs and trade shows with interactive displays to promote agriculture and food production to the public.

As well, the Agency collaborated with industry to organize and implement Open Farm Day in the province in 2011. The Agency employees worked with the host farms to assist in set up for the day's activities and assisted in answering consumers' questions. Over 1,500 people visited the thirteen host farms during this event. The Agency also worked to create industry awareness through the participation in 14 trade shows and events during this fiscal year.

Objectives, Measure and Indicators for 2012-13

Objective

By March 31, 2013 the Forestry and Agrifoods Agency will have continued the implementation of initiatives to support forestry, agriculture and agrifoods industry expansion and promotion.

Measure: Continued implementation of initiatives to support forestry, agriculture and agrifoods industry expansion and promotion.

Indicators

- Supported National Forest Week initiatives that promote the forest resource and associated industries
- Conducted research projects, in partnership with other stakeholders, to support forest industry expansion
- Worked with Federal Provincial Territorial governments to finalize Growing Forward 2 framework
- Consulted with industry and stakeholders on Growing Forward 2
- Enhanced opportunities to raise awareness on agriculture and food security issues



Forestry and Agrifoods Agency

Strategic Directions

The outcomes achieved by the Forestry and Agrifoods Agency with respect to their objectives for the year are consistent with the minister's strategic directions for the strategic planning period. Many of the successes referenced below are covered in more detail in the Outcomes of Objectives section but are included here to illustrate their strategic importance.

Title: Forestry, Agriculture and Agrifoods Resource Sustainability

The future of our renewable resources is dependent upon our proper management of the resources today. The Forestry and Agrifoods Agency has focused on areas to achieve sustainability over the long term. Working in the areas such as assisting and attracting new entrants into the industry, the Agrifoods Development Branch has investigated approaches to move forward with initiatives related to having more entrants into the agriculture industry. As well, the Legal Survey Assistance Program was developed to assist with the expenses of legal land surveys for the acquisition of agriculture crown land leases for new entrants. The Forestry Services Branch continues to work in areas such as the maintenance and expansion of forestry access roads and bridges, and implementation of forest protection and monitoring initiatives for major pests. The agency works diligently to preserve our renewable forestry and agriculture resources.

Title: Forestry, Agriculture and Agrifoods Innovation, Promotion and Development

The forestry and agriculture industries contribute significantly to Newfoundland and Labrador's economy. As an agency, we strive to support innovation and further development of our sector to advance them beyond the current levels. The Centre for Forest Science and Innovation has worked collaboratively with other partners to research many areas from an ecological, economic and social perspective. The agency also sees value in trying to support development for new forest-based initiatives in Labrador and Central Newfoundland where there are forest resources available for potential development. The agency has collaborated with industry to promote agriculture awareness initiatives, and has commenced development of agribusiness modules and market readiness tools. These initiatives will help the industry in key directions for promotion of the industry to the public. Through many of its programs, such as Growing Forward, the Agriculture Research Initiative and the Agriculture and Agrifoods Development Fund, the agency continues to support enhanced development and innovation within the agriculture and agrifoods industry.



Forestry and Agrifoods Agency

Additional Highlights and Accomplishments

The additional programs outlined in this section contributed to the strategic directions of the Strategic Plan 2012-14. They were important in assisting sector development and/or diversification or improved sustainable resource development.

1. The Provincial Agrifoods Assistance Program Invested Over \$2 Million

The Provincial Agrifoods Assistance Program provides financial support to promote the growth and commercialization of the agriculture sector. In 2011-12, over \$2.08 million was invested in 152 projects across the province.

On-farm funding was provided for land development activities, including land clearing, enhancement, drainage, and on-farm access roads. Investment was also made in land development equipment such as rock rakes, harrows and limestone spreaders to increase the productivity of our agricultural land base. The Program also provided for on-farm diversification, secondary processing, technology adoption and environmental stewardship. Investments were also made into the expansion, upgrade, and construction of fruit and vegetable facilities, including the purchase of washing, grading, and packaging equipment.

2. Animal Health Laboratory Improvements

The Animal Health Division has its main laboratory in the Provincial Agriculture Building (St. John's). The laboratory provides ISO 17025 certified testing for the dairy and poultry industry as well supporting other diagnostic and food safety requirements. In this past year, diagnostic testing has expanded into rabies testing of wildlife and the testing of wild bird samples for avian influenza. Equipment was also purchased to help increase the efficiency of milk quality testing.

3. Lumber Market Trial in Ireland

The Forestry Services Branch conducted a lumber market trial in Ireland. The sample, which contained close to 20,000 board feet, was prepared by several Newfoundland and Labrador sawmills to the specifications required by the intended end users in Ireland.



Forestry and Agrifoods Agency

There was positive feedback by the two companies who took part in the trail. The Forestry Services Branch will continue to explore opportunities related to lumber markets such as determining pricing from the potential purchasers, examining and reviewing grade requirements, and determining and identifying the appropriate machine stress rated grading equipment for our sawmills.

4. Wildland Fire Staff and Water Bombers Deployed to Other Provinces

Although the 2011 fire season was one of the lowest on record for the number of fires within the province, it was a very busy season for deployments of fire staff and aircraft to other provincial agencies. The province was able to accommodate requests for assistance under the Mutual Aid Resource Sharing (MARS) Agreement. The MARS agreement provides Canadian Interagency Forest Fire Center (CIFFC) member agencies with a standard set of procedures to use when resource sharing is required. The province is a participating member of the Canadian Interagency Forest Fire Centre, which coordinates the sharing of fire management resources. Provincial forest firefighters and aircraft from the Forestry Services Branch played an active role in supporting other jurisdictions that required assistance

5. Provincial Sustainable Forestry Management Strategy Development

The preparation of a Provincial Sustainable Forest Management Strategy is intended to ensure the development of the province's valuable forest resources is undertaken with Newfoundlanders and Labradorians as the primary beneficiaries. The strategy is required under the *Forestry Act* and is renewed every 10 years.

Consultation sessions were held in several communities during the spring of 2012 to give industry, interested groups and organizations, and the public the opportunity to discuss the sustainable management of Newfoundland and Labrador's forest resource. Completion of the consultations is anticipated by the early fall of 2012.



Forestry and Agrifoods Agency

Shared Commitments

The Department of Natural Resources has legislative oversight for the following public bodies related to the forestry, agriculture and agrifoods sectors: Timber Scalpers Board, Forest Land Tax Appeals Board, Chicken Farmers of Newfoundland and Labrador, Wooddale Land Development Advisory Authority, St. John's Urban Region Agricultural Appeal Board, St. John's Land Development Advisory Authority, Agricultural Land Consolidation Review Committee, Farm Industry Review Board, Newfoundland and Labrador Livestock Owners Compensation Board, Newfoundland and Labrador Crop Insurance Agency, and Newfoundland and Labrador Farm Products Corporation. The Forestry and Agrifoods Agency works closely with these public bodies toward fulfillment of the strategic directions of the Minister of Natural Resources.

The Forestry and Agrifoods Agency also works with the federal government through programs such as Growing Forward and the Canada-Newfoundland AgriFlexibility Agreement.

The Canada-Newfoundland and Labrador Growing Forward program is a 5 year joint Federal – Provincial 60/40% funded initiative to promote three strategic outcomes: a competitive and innovative sector, a sector that contributes to society's priorities, and a sector that is proactive in managing risks. In 2011-12, Growing Forward programming made significant contributions to the industry by providing \$6.66 million in funding this past year.

As Growing Forward will end March 31, 2013, federal provincial territorial governments began to negotiate a five-year multilateral agreement for Growing Forward II. September 2012 is the anticipated date that parties will seek authority to sign the Growing Forward II Multilateral Framework Agreement. It is expected that bilateral negotiations and program design will begin following the signing of the Multilateral Framework Agreement.

In 2011-12 the Agricultural Research Initiative was created. This three year cost shared program commits \$2.5 million annually on a 60 – 40 federal/provincial cost shared basis with Agriculture and Agri-Food Canada under the Agriflexibility Agreement. This initiative will support the agriculture and agrifood industry's needs to grow using innovative techniques through the research and development work under this program.



Forestry and Agrifoods Agency

Opportunities and Challenges

As the Forestry and Agrifoods Agency moves forward it will continue to work with the forestry, agriculture and agrifoods sectors to embrace opportunities and seek solutions to the challenges ahead.

The Agriculture and Agrifoods Industry

The agriculture and agrifoods industry has an abundance of opportunity for expansion and diversification. Our industry only produces a small percentage of the agriculture and agrifood products that we consume in this province. As an agency we support initiatives to help our industry to reach its full potential. Challenges for our agriculture industry includes attracting new entrants and finding ways to be able to increase our production in an economically and sustainable manner.

The Forestry Industry

The robust forest resource of the province of Newfoundland and Labrador will continue to supply the existing forest industry with a reliable sustainable fibre flow and has the capacity to provide a sustainable fibre source to new entrants in the manufacturing sector. The management of the forest resource continues to advance best management practices. The challenged faced by new and existing industry manufacturers is competition for product placement in a global market place where competition is strong. This challenge also provides for an opportunity to diversity, which will, in the long run create a sustainable industry that can utilize the sustainable forest resource of the province.



Sawmill Operation



Appendix I: Legislation

Mines and Energy

1. ***Petroleum and Natural Gas Act.*** Defines how the rights to explore for and develop oil and gas properties on land may be obtained and maintained; how areas may be assigned for exploration; the scope with which government may regulate activity and the various royalties that may be due.
2. ***Canada-Newfoundland and Labrador Atlantic Accord Implementation Newfoundland and Labrador Act.*** Sets out the mechanism for joint federal-provincial management of the Newfoundland offshore area through the Canada-Newfoundland Offshore Petroleum board; defines the methods of obtaining exploration and production rights; the requirements for safety, resource conservation and environmental protection and the activities that may be regulated. The *Act* is mirrored in federal statutes.
3. ***Hydro Corporation Act.*** Continues the existence of, and sets out the mandate, powers and management structure of the Newfoundland and Labrador Hydro-Electric Corporation as a Crown agency.
4. ***Electrical Power Control Act.*** Sets policy with regard to electric power rates and establishes provisions for the determination of such power rates by the Public Utilities Board.
5. ***Lower Churchill Development Act.*** Authorizes the Minister of Mines and Energy [Natural Resources] to enter into an option agreement with the corporation guaranteeing the Lower Churchill Development Corporation (LCDC) executive water rights, rights to flood land and a sole option to purchase the Gull Island hydro assets.
6. ***Newfoundland and Labrador Power Commission (Water Power) Act.*** Extinguishes certain water power rights held at the time by BRINCO and provides for their assignment to Newfoundland and Labrador Hydro (Power Commission) to facilitate financing of the Bay d'Espoir hydro-electric project.
7. ***Miscellaneous Financial Provisions Act, 1975.*** Removes any restrictions elsewhere in provincial legislation on government assigning to Newfoundland and Labrador Hydro Electric Corporation a right, title or interest in royalties and rentals in



Mines and Energy

clauses 1 and 8 of Part II of the lease between government and CF(L) Co.

8. **Mineral Act.** Defines the rights of explorers and developers of mineral properties; the methodology to be used in obtaining such rights and the areas where government may regulate activity.

The Mineral Regulations provide specific details on the methods by which mineral rights may be acquired and the fee payments and reporting schedules required to keep these rights in good standing.

9. **Mineral Holdings Impost Tax Act.** Designed, by imposition of a tax, to encourage holders of mineral properties that do not come under the terms of the *Mineral Act* to either explore their lands or to surrender them so that they become subject to the *Mineral Act*.

The *Mineral Holdings Impost Regulations* set out the level of tax (impost) to be paid and the requirements for offsetting the tax through exploration expenditures.

10. **Quarry Materials Act, 1998.** Defines the rights of explorers and developers of quarry materials; the methods by which such rights may be required, royalties payable; and areas where government may regulate activity.

The *Quarry Materials Regulations* set out the details for obtaining such rights and keeping them in good standing.

11. **Undeveloped Minerals Areas Act.** Enables government to arrange for the exploration of private mineral properties (generally ones which are not covered by the *Mineral Act*) that in its opinion have not been adequately explored. Properties affected by the *Act* have been identified by various orders.

12. **Mining Act.** Regulates the development, operation and closure of mines in the province; outlines requirements for development, operational and rehabilitation and closure plans as well as milling licenses and financial assurance. This Act does not deal with Occupational Health and Safety matters.

13. **Energy Corporation Act.** Establishes the existence of, and sets out the mandate, powers and management structure of the Energy Corporation of Newfoundland and Labrador as a Crown agency



Department of Natural Resources

Forestry and Agrifoods

1. ***Abitibi-Consolidated Rights and Assets Act.*** An act to return to the crown certain rights relating to timber and water use vested in Abitibi-Consolidated and to expropriate assets and lands associated with the generation of electricity enabled by those water use rights.
2. ***Foresters Act.*** An act establishing the Association of Registered Professional Foresters of Newfoundland and Labrador. The act outlines the objectives, structure, operation and membership of the Association.
3. ***Forestry Protection Act.*** An act to provide for the establishment and maintenance of a forest protection association in the province.
4. ***Forestry Act.*** An act respecting the management, harvesting, and protection of the forests of the province.
5. ***Motorized Snow Vehicles and All-Terrain Vehicles Act.*** An act respecting all-terrain vehicles.
6. ***Agrologists Act.*** An act establishing the Newfoundland and Labrador Institute of Agrologists. The act outlines the objectives, structure, operation and membership of the Institute.
7. ***Animal Health and Protection Act***¹⁰. An act respecting the health and protection of animals.
8. ***Animal Protection Act.*** The purpose of this act is to provide for a method to help animals that are in distress and to prevent cruelty or other mistreatment of animals.
9. ***Crop Insurance Act.*** An act respecting the Newfoundland and Labrador Crop Insurance Agency. The Crop Insurance Plan is covered under this act. The plan offers insurance on insurable agricultural crops under the regulations. The act designates the Newfoundland and Labrador Crop Insurance Fund and also the Crop Insurance Agency.

¹⁰ Once associated regulations come into force, the *Animal Health and Protection Act* will consolidate the following acts: *Animal Protection Act*, *Livestock Act*, *Livestock Health Act*, *Dog Act*, *Heritage Animals Act*, *Poultry and Poultry Products Act*.



Department of Natural Resources

10. **Dog Act.** An act respecting the keeping of dogs.
11. **Farm Practices Protection Act.** An act respecting the protection of farm practices in the province.
12. **Farm Products Corporation Act.** An act respecting the administration of Farm Products Corporation.
13. **Heritage Animals Act.** An act to provide the means for recognition and protection of heritage animals within the province. Included under this act are the Designation of Inspectors Order and the Newfoundland Pony Designation Order.
14. **Livestock Act.** An act regarding the control and protection of livestock. The Livestock Regulations outline the details relating to the control and protection of livestock.
15. **Livestock Health Act.** An act respecting the prevention of diseases in livestock. Under this act are the Livestock Health Regulations which provide the details on the prevention of diseases in livestock.
16. **Livestock Insurance Act.** An act to provide for livestock insurance and respecting the Livestock Owners Compensation Board. The Livestock Insurance Plan is covered under this act. The plan offers insurance on beef, sheep, cattle and goats from predatory attacks by dogs or coyotes. The act designates the Livestock Owners Compensation Fund and the Livestock Owners Compensation Board.
17. **Meat Inspection Act.** An act to provide for animal and meat inspection in slaughterhouses. This act includes Meat Inspection Regulations which provide the details on standards and licensing for animal and meat inspection in slaughterhouses.
18. **Natural Products Marketing Act.** An act to allow for the creation of commodity boards, and a supervisory board to protect the interests of the general public, and an act to amend the *Natural Products Marketing Act* and the *Farm Practices Protection Act* to create the Farm Industry Review Board.
19. **Plant Protection Act.** An act respecting the protection of plants and the prevention of the spread of pests and diseases destructive to vegetation.



Department of Natural Resources

20. ***Poultry and Poultry Products Act.*** An act respecting poultry and poultry products such as chicken and eggs.
21. ***Vegetable Grading Act.*** An act respecting the grading of certain products of agriculture in the province.
22. ***Veterinary Medical Act.*** An act to revise the law about veterinary medicine.



Department of Natural Resources

Appendix II: Statement of Revenues and Expenditures

Expenditure and revenue figures included in this document are based on public information provided in the Report on the Program Expenditures and Revenues of the Consolidated Revenue Fund for Fiscal Year Ended 31 March 2012.

STATEMENT OF EXPENDITURE AND RELATED REVENUE SUMMARY FOR THE YEAR ENDED 31 MARCH 2012 (Unaudited)

		Actual (\$)	Estimates	
			Amended (\$)	Original (\$)
Executive and Support Services				
1.1.01	Minister's Office	458,008	472,000	447,000
1.2.01	Executive Support	3,270,176	3,288,900	2,488,700
1.2.02	Administrative Support	922,402	938,700	1,098,700
	Less: Revenue	(20,143)	(10,000)	(10,000)
1.2.03	Administrative Support (Capital)	1,645,491	2,845,100	2,810,100
	Less: Revenue	(232,459)	(1,086,100)	(1,086,100)
	Total	6,043,475	6,448,600	5,748,400
Forest Management and Protection				
Forest Management				
2.1.01	Administration and Program Planning	10,611,633	10,759,300	10,244,000
	Less: Revenue (Provincial)	67	0	0
2.1.02	Operations and Implementation	11,159,291	11,207,800	10,090,400
	Less: Revenue	(503)	0	0
2.1.03	Silviculture Development	10,304,437	11,068,700	11,899,600
	Less: Revenue	(22,500)	(1,000)	(1,000)
2.1.04	Resource Roads Construction	5,691,010	5,905,200	5,905,200
2.1.05	Forest Industry Diversification	2,118,000	4,318,000	4,318,000



Department of Natural Resources

		Actual (\$)	Estimates	
			Amended (\$)	Original (\$)
Forest Protection				
2.2.01	Insect Control	1,601,738	3,028,400	3,673,400
2.2.02	Fire Suppression and Communications	3,559,149	4,114,600	4,341,600
Total		45,022,322	50,401,000	50,471,200
Agrifoods Development				
Land Resource Stewardship				
3.1.01	Land Resource Stewardship - Administration	1,986,937	2,009,900	2,160,900
	Less: Revenue	(11,696)	(33,000)	(33,000)
3.1.02	Limestone Sales	496,701	496,800	441,800
	Less: Revenue	(192,052)	(140,000)	(140,000)
3.1.03	Land Development	1,828,862	2,700,000	2,700,000
Production and Market Development				
3.2.01	Production and Market Development - Administration	2,825,056	3,680,600	3,746,600
	Less: Revenue	(24,561)	(454,700)	(454,700)
3.2.02	Marketing Board	106,990	177,000	177,000
Agricultural Business Development				
3.3.01	Agricultural Business Development - Administration	1,764,284	1,779,600	2,151,100
3.3.02	Agriinsurance and Livestock Insurance	265,762	419,800	419,800
	Less: Revenue (Federal)	(123,588)	(202,800)	(202,800)
3.3.03	Agricultural Initiatives	2,081,545	2,250,000	2,250,000



Department of Natural Resources

		Actual (\$)	Estimates	
			Amended (\$)	Original (\$)
3.3.04	Agriculture and Agrifoods Development Fund	3,249,850	3,276,000	3,276,000
3.3.05	Growing Forward Framework	6,994,029	7,340,100	7,340,100
	Less: Revenue (Federal)	(5,223,058)	(4,216,600)	(4,216,600)
	Less: Revenue	(2,381)	(10,000)	(10,000)
Animal Health				
3.4.01	Administration and Support Services	3,173,690	3,247,100	3,119,100
	Less: Revenue	(531,298)	(530,000)	(530,000)
3.5.01	Research and Development	1,523,665	2,527,800	2,527,800
	Less: Revenue (Federal)	(1,285,410)	(1,500,000)	(1,500,000)
Total		18,903,327	22,817,600	23,223,100
Mineral Resource Management				
4.1.01	Geological Survey	5,686,840	5,826,800	6,130,000
	Less: Revenue	0	(4,000)	(4,000)
4.1.02	Mineral Lands	1,628,630	1,658,400	1,464,900
	Less: Revenue	0	(5,000)	(5,000)
4.1.03	Mineral Development	5,389,429	5,915,800	5,569,300
	Less: Revenue	(10,825)	0	0
Total		12,694,074	13,392,000	13,155,200



Department of Natural Resources

		Actual (\$)	Estimates	
			Amended (\$)	Original (\$)
Energy Resources and Industrial Benefits Management				
5.1.01	Energy Policy	46,512,890	46,793,800	4,706,600
5.1.02	Petroleum Development	1,402,750	1,469,500	1,522,500
5.1.03	Canada/Newfoundland and Labrador Offshore Petroleum Board	7,956,000	7,956,000	7,756,000
	Less: Revenue	(8,882,909)	(5,817,000)	(5,817,000)
5.1.04	Royalties and Benefits	2,829,616	3,237,600	3,833,100
	Less: Revenue	(60,400)	(70,000)	(70,000)
5.1.05	Energy Initiatives	11,134,828	11,217,900	13,417,900
5.1.06	Energy Initiatives - Capital	0	308,100,000	348,000,000
Total		60,892,775	372,887,800	373,349,100
Total Department		143,555,973	465,947,000	465,947,000



Department of Natural Resources

Appendix III: Inactive Entities Reporting to the Minister

The following category three public bodies that report to the Minister of Natural Resources were inactive for the period April 1, 2012 to March 31, 2013. In the event that one of these public bodies becomes active, it will prepare, and table in the House of Assembly, an Annual Performance Report.

Forest Land Tax Appeals Board

The Forest Land Tax Appeals Board was created pursuant to the *Forestry Act (1990)*. The mandate of the board is to hear appeals from landholders who disagree with the way in which Part III of the *Forestry Act (1990)* is applied. Appeals may concern: the contents of a Certificate of Managed Land issued to the appellant; entries made with respect to the appellant in the Assessment Roll; the amount of tax payable by the appellant; or whether or not the appellant is even liable for taxation under Part III of the act.

Timber Scalers Board

The Timber Scalers Board was created pursuant to the *Forestry Act (1990)*. Under section 124 of the act, the duties of the board are to: examine the ability and knowledge of persons who apply to be certified to scale timber; hear appeals to scaling disputes; and recommend to the minister new scaling methods before they are used.

Newfoundland and Labrador Farm Products Corporation

The Newfoundland and Labrador Farm Products Corporation was created pursuant to the *Farm Products Corporation Act*. The corporation has a mandate to establish abattoirs, cold storage plants, warehouses, packing and processing plants and other buildings and establishments of every kind necessary and suitable for the handling, preparation, processing and storage of farm products of every kind both animal and vegetable for the purpose of facilitating the development of farm products in the province. Associated activities may include: making advances of livestock to farmers and livestock keepers, either for cash or on credit; employing instructors to instruct farmers and livestock keepers; purchasing, storing, processing, packing and selling arm products of every kind; and handling, storing and selling or advancing on credit animal feeding stuffs or every kind.

The Lieutenant-Governor in Council may appoint not fewer than five or more than nine members to the Newfoundland and Labrador Farm Products Corporation. One person is to be chairperson. The members of the corporation, with the exception of the chairperson, shall be appointed for one year and are eligible for reappointment.

