

# Department of Environment and Conservation



**Annual Report 2008-2009**

2009

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Cover photos (clockwise from top left): Fermeuse Wind Farm (P. Carter); Pitcher Plant, Pine Marten (Salmonier Nature Park, M. Blackwood); Pinus River, Labrador (C. Ramsay)

Header pictures: Little Grand Lake Provisional Ecological Reserve and Glover Island Public Reserve, Mistaken Point Ecological Reserve Parks and Natural Areas Division, Erika Pittman.

## Table of Contents

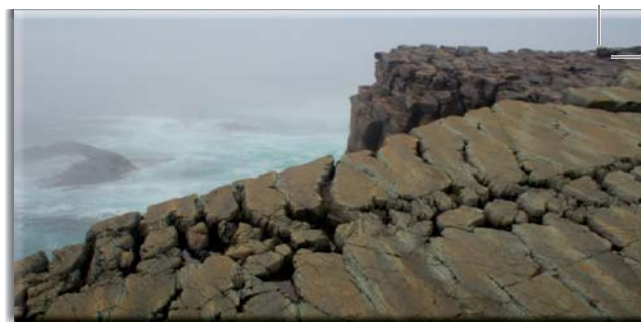
Message from the Minister .....	5
Departmental Overview .....	7
Shared Commitments .....	10
Highlights and Accomplishments .....	12
Outcomes of Strategic Issues .....	22
Staff Accomplishments .....	32
Opportunities and Challenges .....	33
Financial Statement .....	34
<b>Appendices</b>	
I. Lines of Business .....	36
II. Activities Related to the Newfoundland and Labrador Green Fund .....	41



**Department of Environment and Conservation  
Annual Report 2008-2009**

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## Department of Environment and Conservation Annual Report 2008-2009



### Message from the Minister

In accordance with government's commitment to accountability, I present the 2008-09 annual report for the Department of Environment and Conservation. This report addresses the department's activities and outcomes from April 1, 2008 to March 31, 2009, which is the first reporting period for the department's 2008-2011 strategic plan. As Minister, I am accountable for the preparation of this report and for the results contained herein.

It has been a productive time for the department and I would like to take the opportunity to highlight some of the achievements of the past year. Our 2005 Climate Change Action Plan is in the process of being updated and will include greenhouse gas emission targets for the province. The Rural Drinking Water Safety Initiative was announced in May of 2008. Two studies were implemented as part of this initiative, one on Potable Water Dispensing Units, the other on Operation and Maintenance of drinking water systems in the province. The Policy for Drinking Water Quality Monitoring and Reporting for Public Water Supplies was issued in January 2009. The Operator Education, Training and Certification (OETC) section hosted the 8th Annual Clean and Safe Drinking Water Workshop. Education and training opportunities offered through the OETC program were well attended; 460 water and wastewater system operators participated in education seminars and 310 participated in on-site training sessions. In addition, 151 water and wastewater system operators successfully achieved certification. The Caribou Science and Management Strategy has been initiated and scientific predator reduction studies are continuing in three study areas; namely Middle Ridge, LaPoile and Northern Peninsula. The Newfoundland and Labrador Green Fund (\$25 million) accepted proposals for greenhouse gas reduction projects during the 2008-09 fiscal year and this was in addition to the numerous climate change oriented projects that received funding through our department.



The department's 2008-2011 Strategic Plan has renewed our commitment to achieving the goals and objectives put forward in this plan and we will continue to work diligently in fulfilling the proposed outcomes for these goals and objectives.

*Charlene Johnson*

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Hon. Charlene Johnson  
MINISTER

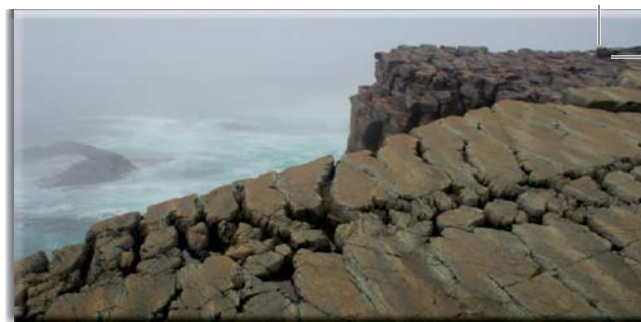


**Department of Environment and Conservation  
Annual Report 2008-2009**

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## Department of Environment and Conservation Annual Report 2008-2009



### Departmental Overview

The Department of Environment and Conservation is responsible for the protection and enhancement of the environment, management of the province's wildlife, inland fish, water, parks, and Crown land resources. The Department is also leading Government's response to climate change and the Sustainable Development initiatives.

### Vision

The vision of the Department of Environment and Conservation is a clean, sustainable environment and healthy, resilient ecosystems in perpetuity for the social, physical, cultural, biological and economic well-being of the province.

### Mission

By March 31, 2011, The Department of Environment and Conservation will have reduced the adverse impacts of human activities on the environment to safeguard and improve the health of our ecosystems.

### Mandate

The mandate of the Department of Environment and Conservation is derived from the Department of Environment and Conservation Notice, 2008 under the Executive Council Act on matters related to:

- the protection, enhancement and conservation of the quality of the natural environment, including water, air and soil quality;
- environmental assessment;
- the conservation, development, control, improvement and proper utilization of the water resources of the province;
- provincial lands;
- the management, preservation, control, protection and development of provincial parks, as defined in the Provincial Parks Act; provincial interests in all national parks established in the province by the Government of Canada; and wilderness and ecological reserves as defined in the Wilderness and Ecological Reserves Act;
- the management and control of measures for the protection, preservation and propagation of wildlife, including inland fish;
- the assessment, development and establishment of sustainability indicators for the sustainable development of natural resources of the province; and
- the management, protection and preservation of endangered species as defined in the Endangered Species Act.

1. Note that the mandate is taken from the 2008 Executive Council Act which has changed from the 2008-11 Strategic Plan.



## Department of Environment and Conservation Annual Report 2008-2009

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### Values

The core values explain the character of the organization we promote.

#### *Accountability*

Each employee accepts responsibility for his/her own actions and contributions and follows through on requests and commitments.

#### *Efficiency*

Each employee uses resources in an effective and timely manner.

#### *Leadership*

Each employee will carry out responsibilities and make decisions to advance the conservation of the environment and natural heritage.

#### *Professionalism*

Each employee will be responsible for maintaining professional competencies required for his/her position and will demonstrate excellence and high quality performance.

### Lines of Business

The Department of Environment and Conservation is engaged in the following lines of business:

- land Resources;
- Provincial Parks, ecological and wilderness reserves, natural areas, and Canadian Heritage Rivers;
- protection of wildlife and inland fish;
- coordination of environmental assessments;
- prevention of air, soil and water pollution;
- water quality, availability and management of water resources;
- climate change; and
- sustainable development and strategic science.

For details on the Lines of Business of the department please see Appendix I.



## Department of Environment and Conservation Annual Report 2008-2009



### Staff

The Department of Environment and Conservation's main offices are located at the Confederation Building and the Howley Building in St. John's, as well as in Deer Lake and Corner Brook. The department has regional offices in other locations in St. John's, Grand Falls-Windsor, Clarenville, Corner Brook, Gander, and Happy Valley-Goose Bay. The department is responsible for the Salmonier Nature Park along with fourteen camping parks, six natural and scenic attraction parks, eleven park reserves and the T'Railway Provincial Park. In addition, there are twenty wilderness and ecological reserves, three wildlife reserves and special management areas, and one public reserve.

The Department has a staff complement of 400 employees (including contractual, seasonal and temporary employees). During peak season, we have 197 employees on the Avalon Peninsula and 203 employees in all other regions including Labrador.

### Departmental Structure

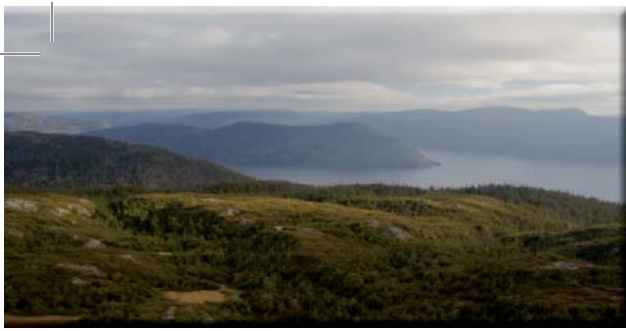
The Department of Environment and Conservation consists of three branches: Environment, Lands and Natural Heritage. The branches are further subdivided into divisions and sections. The department also contains a Policy and Planning Division, a Sustainable Development and Strategic Science Division and a Communications Unit. The Institute of Biodiversity, Ecosystem Science and Sustainability (IBES), housed at Memorial University (Sir Wilfred Grenfell College) is an integral component of the Sustainable Development and Strategic Science Division.



Salmonier Nature Park



Water Resources Division



## Department of Environment and Conservation Annual Report 2008-2009

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### Shared Commitments

To achieve government's key commitments the Department of Environment and Conservation works closely, and in conjunction with other government departments. The Strategic Plan for 2008-2011 sets out the strategic direction for the department over the next 3 years and includes Climate Change, Sustainable Development, Safe Drinking Water and Waste Management as shared commitments.

### Climate Change

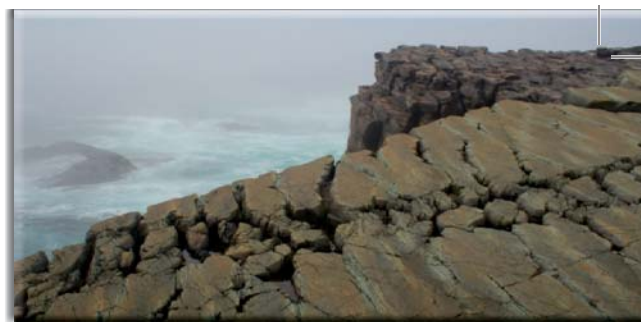
The Newfoundland and Labrador Green Fund (NL Green Fund) earmarked \$25 million to support projects that reduce greenhouse gas emissions and consisted of funding from the EcoAction Trust Fund as well as the provincial government. Since its launch in March 2008, the \$25 million NL Green Fund has been fully subscribed with numerous innovative greenhouse gas reduction projects. The funding will continue to be dispersed until March 31, 2010 which marks the end of the two year program. For a summary of the NL Green Fund and funding criteria, refer to Appendix II.

The department continued to provide financial support to its partners for climate change education and outreach. The department partnered with the Western School District in designating all school property in the district 'Idle-Free Zones'; Coastal Connections Ltd., in developing a program for high school students to gain hands-on experience in ocean monitoring as it relates to Climate Change; and, provided funding for various projects that engaged the youth of our province. The department also supported energy efficiency seminars with the NL Building Owners and Managers Association (BOMA) and district heating study with the Centre for Environmental Excellence in Corner Brook. In addition, the department provided funding for various Climate Change Adaptation workshops and studies; including an impact assessment of Stephenville crossing by Dr. Norm Catto as well as the 5th Annual Canadian Risks and Hazards Symposium.

### Safe Drinking Water

The Department works closely with the Department of Municipal Affairs, the Department of Government Services and the Department of Health and Community Services on drinking water issues. Numerous studies are ongoing and preparations are being made to include more communities in a project to install potable water dispensing units.

## Department of Environment and Conservation Annual Report 2008-2009



### Waste Management Strategy

The department participates on steering and technical committees, in partnership with the Department of Municipal Affairs, the Department of Government Services and the MMSB, for the implementation of the provincial waste management strategy. The Department works with each of the provinces Regional Waste Management Authorities on waste management issues and one key component of this is attending regional waste management committee meetings.

Progress on the provincial Waste Management Strategy continues with 40 waste disposal sites closed to date. Open burning of garbage in the Avalon region ceased in 2008-09 and will cease in the Central Region by 2010.

Waste management standards were developed for:

- municipal solid waste compost facilities;
- material recovery facilities;
- closure of non-containment landfills;
- municipal solid waste management and public education; and
- household hazardous waste depots.



Methane Gas Flare - Robin Hood Bay Landfill site. Photo: City of St. John's.

A key focus of the waste management strategy in 2008-09 and continuing into 2009-10 is the closure of the remaining 23 incinerators.

### Caribou Science and Management Strategy

Caribou Calf Mortality study continued on the Middle Ridge, La Poile and Northern Peninsula herds as well as predator ecology studies initiated in the three study areas. In relation to this ongoing research, numerous peer-reviewed manuscripts on the Newfoundland caribou are in final preparation for publication in the 2008-09 publication cycle. The Department works closely with Memorial University of Newfoundland/Sir Wilfred Grenfell College as well as the Institute for Biodiversity and Environmental Science (IBES) on research, for example, a M.Sc. student is studying the economic and social ramifications of the caribou resource to increase the understanding within hunting and outfitter client groups. Initiatives have also been implemented to determine the impact of human land-use patterns and activities on caribou and their predators. One such initiative is the historical landscape change project which will be carried out by a graduate student at Memorial University.





## Department of Environment and Conservation Annual Report 2008-2009

### Highlights and Accomplishments

#### Natural Heritage Branch

##### Wildlife Division

The current Wildlife Information Management System related to the Big Game Licence Draw underwent a review regarding concerns over hunter priority pool classifications and other computer programmed “rules”. These concerns were reviewed in concert with the Office of the Chief Information Officer and recommendations are being considered for implementation in the 2010 draw. A review was initiated into current mechanical properties associated with the use of plastic, locking salmon tags and findings will be considered when purchasing tags for the 2010 angling season. The departments computerized big game license draw for resident moose and caribou licenses involved over 70,000 residents.

Species at Risk Stewardship Program helped to secure approximately \$565,000 through the Government of Canada’s Habitat Stewardship Program for Species at Risk (HSP) and Aboriginal Funds for Species at Risk (AFSAR). These funds were used in 16 partner-lead projects to advance stewardship and recovery efforts for species at risk in Newfoundland and Labrador. The total value of these programs and projects in Newfoundland and Labrador during 2008-2009 exceeded 1.7 million dollars.

The Wetland Stewardship Program secured \$84,500 in external funding for programs carried out by Wildlife Division staff under the North American Waterfowl Management Plan (NAWMP) via the Eastern Habitat Joint

Venture (EHJV). The total value of partner driven EHJV activities in Newfoundland and Labrador during 2008-2009 exceeded \$525,000. A new five year Newfoundland and Labrador EHJV Implementation Plan (2007-2011) was formally endorsed by the EHJV Board of Directors.

In June of 2008, Minister Charlene Johnson attended the signing of a new Municipal Wetland Stewardship Agreement with the Town of Hawke’s Bay, signed the first ever coastal stewardship agreement with the Town of St Anthony and attended the spring meeting of the Stewardship Association of Municipalities hosted by the towns of Spaniards Bay and Bay Roberts.



Photo: Salmonier Nature Park.

A new seminar and workshop series for hunters and trappers designed to increase participation and knowledge in hunting and trapping predators was initiated in 2008 as part of the Department’s five year Caribou Strategy. Approximately 650 people

## Department of Environment and Conservation Annual Report 2008-2009



participated in 9 workshops, which aimed to teach participants about the impact and role of predators on Newfoundland Woodland Caribou and the general biology of coyotes and black bears. In addition, workshops focused on improving hunter / trapper understanding and awareness of responsible and humane harvesting techniques for predator species. Other initiatives involved the completion of the latest edition of the Trapper Education Student Manual printed in partnership with the four Atlantic Provinces and respective trapper education associations.

Five new posters, 2 brochures and 7 banners were produced on caribou, black bears, coyotes and lynx; a Powerpoint presentation on coyotes was developed for use in schools; and enhancements to Wildlife Division's website was undertaken.

This year the Firearm Safety-Hunter Education and Trapper Education programs also saw an enhanced newsletter that combines information for conservation education instructors involved in delivery of courses that teach safe and responsible hunting and trapping.

In 2008, a total of 47 animals entered the animal care program at Salmonier Nature Park, 21 of which were birds of prey, and 9 of these were banded and released back to the wild. The Park's display eagles were used as a training tool to teach biologists how to correctly attach satellite transmitters, in addition, an eagle from the park was fitted with a satellite transmitter and released.

Salmonier Nature Park had in excess of 32,000 visitors including over 15,000 school children.

Three caribou calves were transferred from the Cape Shore for display and a media reel was produced of their capture and transfer. Construction continued on the joint spruce grouse/snowshoe hare enclosure, which is scheduled to be open to the public during the summer of 2009.

The Become an Outdoors Woman (BOW) workshop was held in the spring and a Beyond BOW was held in the fall. The Park organized the International BOW Coordinators Conference in Burnt Cove in July where representatives from all over the United States and Canada attended. Over 100 educators were trained in the Wild Education Program and as a result, an outreach program that focuses on endangered species, bears and "Natural Legacies" was delivered to schools on the Northern Peninsula and in the Stephenville area.

Annual management plans were completed for big game, small game, and furbearers outlining, among other things, recommended harvest levels for game species in the province. Multiple field monitoring surveys were organized and implemented across the province to survey moose, caribou, snowshoe hare, ptarmigan, grouse and arctic hare. Most significant among these was the completion of the caribou census of all Northern Peninsula herds. A Trappers Update has been developed and the Moose Vehicle Collision education program was continued in partnership with the Department of Transportation and Works.

The total insular moose population estimate for 2008 is approximately 120,000 animals and the total estimate for caribou is approximately 32,000 animals. These estimates were



## Department of Environment and Conservation Annual Report 2008-2009

developed from the analysis of data from moose and caribou surveys, aerial surveys, hunter trend analysis and mathematical modeling.

Approximately 6,000 successful hunter crests were mailed to individuals who participated in the 2007 fall caribou and moose harvest. The total number of caribou jawbones processed was 406, a 6.8% increase over the previous year and the total number of moose jawbones processed was 3,643, an increase of 2.0 %.

Six fishing lodges in Labrador participated in the “Outfitters Logbook Program” whereby changes to the sport fisheries of the Eagle River can be detected and mitigated.

### Parks and Natural Areas Division

Mistaken Point Ecological Reserve was officially expanded in March 2009 to permanently protect internationally significant fossils adjacent to the original boundary.

An agreement was signed between the Nature Conservancy of Canada and the Department to further conservation planning in Labrador and completion of the provincial protected areas system. Each partner will contribute \$100,000 a year for each of three years.

Breeding bird surveys were conducted in most provincial parks and ecological reserves in western Newfoundland, greatly adding to our knowledge of avian biodiversity within those protected areas.

In 2008 use of the Provincial Parks Campsite

Five recovery teams and working groups met this year and two new recovery teams were created in response to species being listed under the Endangered Species Act. The Wildlife Division is currently involved in 20 recovery teams and working groups, working to develop recovery documents and ensure the long term sustainability of species at risk.

In 2008, species assessments were begun as part of the 2010 General Status of Wild Species where mammals, amphibians, ground beetles, butterflies, and black flies were all assessed. By the end of 2010, it is expected that the status of over 3000 wild species in Newfoundland and Labrador will be determined.

Reservation Service increased by 10% to a total of 8400 reservations.

In 2008 approximately 2300 students participated in Parks as Nature’s Classroom, a curriculum based outdoor education program delivered in provincial parks and ecological reserves.



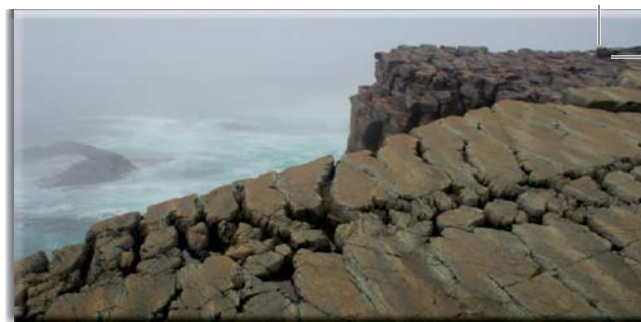
Main River. Photo: E.Pittman

The first Canadian Heritage Rivers Day celebration in the province took place on June 8th at Main River Canadian Heritage River. Events included white-water rafting, sea kayaking and campfire programs.

Work continues on the development and implementation of a Natural Areas System Plan for the protection of the province’s biodiversity and natural heritage. On going projects include the Human Footprint Project,



## Department of Environment and Conservation Annual Report 2008-2009



a communication tool to convey a picture of human influence across the island portion of the province. The series of maps identify areas of high ecological integrity and low human influence that assist in conservation planning purposes.

### Provincial Parks Renewal Strategy

- The planning and tendering for the installation of electrical services on designated campsites at Dildo Run, Notre Dame and La Manche Provincial Parks was completed. Work to be completed in 2009-10.

- Hiking trail upgrades and new trail developments were completed in 8 provincial parks (J.T Cheeseman, Barachois Pond, Blow Me Down, Pistolet Bay, Pinware River, Lockston Path, Butter Pot and La Manche Provincial Parks). New playground equipment was installed in 4 provincial parks (Pistolet Bay, Dildo Run, Frenchman's Cove and Sir Richard Squires Memorial Provincial Parks).

- Additional campsites were constructed in La Manche Provincial Park (13) and Sandbanks Provincial Park (5). Campsites were upgraded or enlarged at La Manche (45) and Sandbanks Provincial Parks (5).

- Landscaping was completed around the comfort station at Pinware River Provincial Park. Resurfacing of parking lots and culvert replacements occurred at Lockston Path, Sandbanks, Deadman's Bay and Codroy Valley Provincial Parks. Paving was completed around the checkpoint at La Manche Provincial Park. The fire exit road was upgraded at Barachois Pond Provincial Park.

- New highway signs, conforming to the new brand standard, for provincial parks and reserves were purchased in 2008. The signs will be installed in 2009.

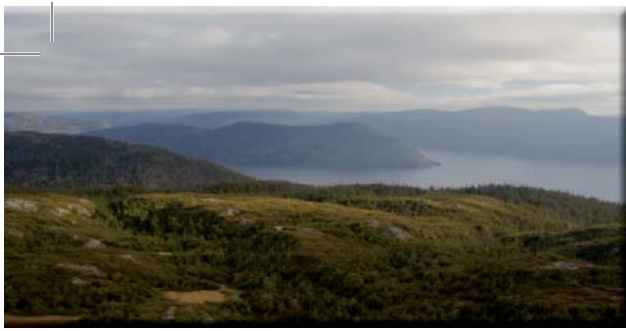
- The T'Railway Provincial Park underwent emergency repairs from Clarenville east to Goobies due to extensive flood damage.

## Environment Branch

### Water Resources Management Division

The Surface Water Section released the annual Drinking Water Safety Report for April 1, 2007 to March 31, 2008. During fiscal year 2008-09, two water supply areas had their protection status revoked. Five active watershed management committees were operational. 103 permits were issued regulating activities in Protected Public Water Supply Areas in order to ensure the integrity of drinking-water sources.

The Policy for Drinking Water Quality Monitoring and Reporting for Public Water Supplies was issued in January 2009. The policy establishes the Department's drinking water quality monitoring and reporting requirements for all public water supplies. A radionuclide monitoring program was established for all groundwater public water supplies. This is a three-year program that will establish background information on radionuclides in public drinking groundwater supplies.



## Department of Environment and Conservation Annual Report 2008-2009

During fiscal year 2008-09, the Operator Education, Training and Certification (OETC) Section held the 8th Annual Clean and Safe Drinking Water Workshop. This event was attended by 324 participants, and included a tradeshow exhibition. Education and training opportunities offered through the OETC program were well attended; 460 water and wastewater system operators participated in education seminars and 310 participated in on-site training sessions. During the 2008-09 fiscal year, 151 water and wastewater system operators successfully achieved certification.

Managers of the Hydrologic Modelling Section and the Water Quality Monitoring Agreement Section were selected to participate in a European Space Agency (ESA) project that will see it use water management technology from Newfoundland and Labrador as part of its TIGER project in Egypt to use space technology for water resource management. In this project, remote sensing – the use of cameras mounted on space-based satellites to observe the earth – will be partnered with Real Time Water Quality (RTWQ) monitoring technology from Newfoundland and Labrador. This real time monitoring involves the installation of an instrument into a water body which then reports water quality information on a near-real-time basis. The combination of remote sensing and RTWQ will permit water resources specialists to map the water quality of large lakes at frequent intervals. This will allow for the better management of lakes and help with the detection of adverse events such as algal blooms.

The manager of the Hydrologic Modelling Section will represent the province on a project in which the European Space Agency

(ESA) has partnered with the Department of Environment and Conservation, C-CORE, and the Department of Fisheries and Oceans to use satellite-based Earth Observation (EO) to detect aquatic point pollution sources in the Bay of Islands, Bay d'Espoir and Wabush Lake. The 18-month project focuses on developing and implementing efficient processes to detect aquatic pollution using newly available high-resolution satellites.

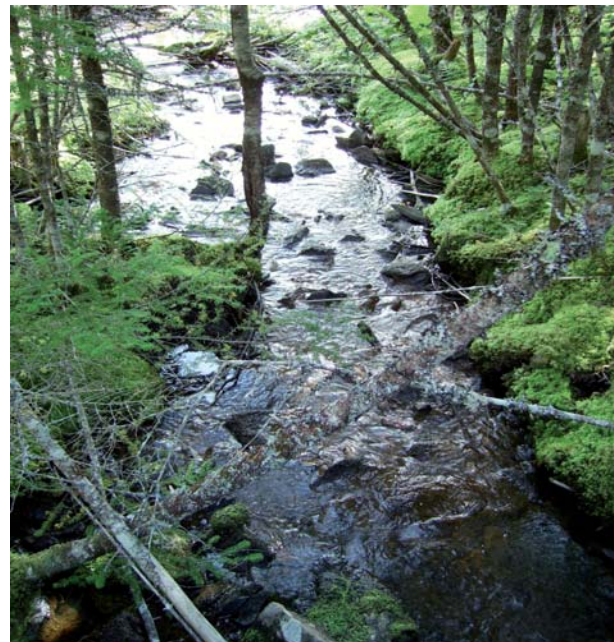
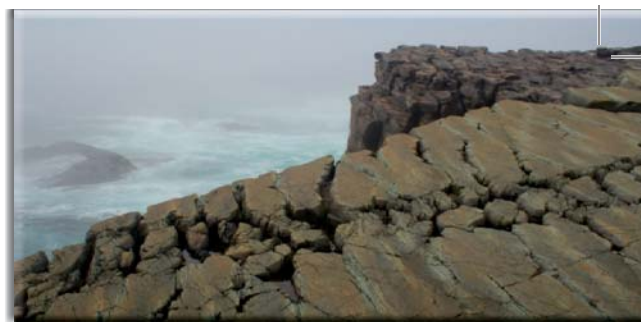


Photo: Salmonier Nature Park

Through the Community Water & Wastewater, Hydrometric Agreement, Rural Drinking Water Safety Initiative 163 permits were issued for the construction of various water supply and sewer system components, in addition to 77 permits issued for the operation of drinking water and wastewater systems. The report “Best Management Practices for the Control of Disinfection by-Products in Drinking Water Systems in Newfoundland and Labrador” was completed.

## Department of Environment and Conservation Annual Report 2008-2009



The Rural Drinking Water Safety Initiative was announced by the Minister for Environment and Conservation in May of 2008. Two studies were initiated as part of this initiative, one on Potable Water Dispensing Units, the other on Operation and Maintenance of drinking water systems in the province.

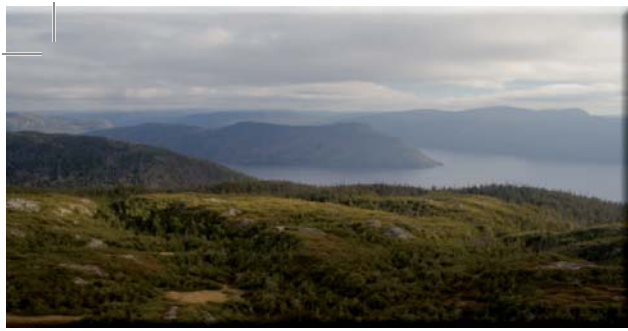
The province currently has 93 hydrometric water level or flow stations, 73 on the island and 20 in Labrador. Consideration was given to signing on to the Canada-wide Strategy for the Management of Municipal Wastewater Effluent but the strategy was not adopted due to concerns over disproportionate costs to the province. The Strategy assigns 30% of the 13 billion dollar national total to Newfoundland and Labrador.

The Water Rights Section evaluated 92 water use allocation proposals and issued 81 water use licences. Proposals and licences were for a variety of water use sectors including agricultural, aquaculture, mineral exploration, water bottling, water power generation and other commercial and industrial uses. The section continuously updated its Registry of Water Rights which now contains more than 1,900 records. The section continued to cooperate with the Nunatsiavut Government on water management and water rights related to the Labrador Inuit land claims agreement. Also, the section is involved in negotiations of water management and water rights related to the Labrador Innu land claims agreement. In addition, the section was involved in the Aquaculture Infrastructure Working Group.

The section collected water power rentals in the amount of \$440,330. The section head was invited to submit a proposal to expand the first pilot study on agricultural water conservation and efficiency measures that was conducted in 2007-08. Subsequently, the section was successful in obtaining one hundred percent of the funding to expand this program based on the success and overwhelming response to the first pilot program. This program and its expansion were successful in helping participating farms in their on-farm water management for the first time in their operational history. The program will also set the stage for the continuous monitoring and reporting on agricultural water uses to ensure the efficient utilization and sustainability of the province's water resources.

Dr. Abdel-Razek spoke at national events including the Ag-Water Forum III in Saskatoon. He also presented a paper on agricultural water conservation and efficiency measures in the 13th World Water Congress in Montpellier, France. In addition, he presented on water rights frameworks in Newfoundland and Labrador and other Canadian jurisdictions to the Russian delegation during their visit to the province in February 2009.





## Department of Environment and Conservation Annual Report 2008-2009

### Pollution Prevention Division

Work continued with industry to improve air emissions and effluent discharges. Highlights include:

- The sulphur in fuel limitation at the Holyrood Thermal Generating station was reduced from 1% to 0.7% further reducing sulphur dioxide and particulate emissions.
- The review of the Environmental Assessment of the nickel processing facility in Long Harbour was completed and preparation of approvals for construction began.
- Work continued with Abitibi Bowater on both the decommissioning of the Stephenville mill as well as remediation at the old ASARCO mine and mill in Buchans.
- A consultant was engaged to carry out preliminary assessment work of contamination at the former military radar site in Hopedale and community site at North West Point, Labrador.

Enforcement efforts resulted in 4 convictions on charges that proceeded to court.

#### **Waste Management:**

- Approximately 12 new Certificates of Approval were issued for waste management operations dealing with composting, hazardous/special waste, dangerous goods transportation and storage, and petroleum/heavy metal contaminated soil treatment facilities.
- Approximately 6020 tonnes of hazardous/special waste was tracked while being transported for treatment/destruction outside the province.

- Worked closely with Agrifoods on waste management projects such as pilot composting projects on mink farms, contingency planning for poultry producers and on meeting federal compliance issues for Specified Risk Material from cattle.

- Worked with the Department of Fisheries and Aquaculture on waste management issues related to net cleaning and feed bags.

- Continued to participate in ongoing Transport Canada South Coast oil spill risk assessment, the Shipping Federation Atlantic Forum and the Atlantic Region Marine Oily Waste Management working group.

#### **Petroleum Storage and Management:**

- Distributed an additional 3201 registration tags to licensed inspectors to use in the identification of registered systems. This constituted a drop of 4% compared to the previous year when 3331 tags were distributed.

- Continued to update and verify the Storage and Handling of Gasoline and Associated Products Regulations, 2003 database. Completed and verified entries are now up to 9540. A dedicated staff person continues to verify data on tanks going back to the 1970s.

- Continued activity in national code/standard development with staff participating at multiple meetings at both Underwriters' Laboratories of Canada (ULC) and Canadian Standards Association (CSA). This work is very important as the results are standards and codes which are an integral part of the regulations pertaining to hydrocarbon storage and

## Department of Environment and Conservation Annual Report 2008-2009



management. The section is represented on one CSA and four ULC committees (one as chair).

### Science and Monitoring:

- Continued to work closely with the Industrial Compliance Section to evaluate and audit industrial monitoring to ensure compliance with various environmental regulations.

- Maintained ambient air monitoring at St. John's, Mt. Pearl, Grand Falls - Windsor, Corner Brook and Ferolle Point to support the National Air Pollution Surveillance (NAPS) monitoring network and the national smog prediction program.

### Environmental Assessment Division

The Environmental Assessment (EA) Division ensures that development projects proceed in an environmentally acceptable manner. In 2008-09 a number of large scale resource development projects (mining and hydro) were received from Labrador. These projects included extensive consulting with Aboriginal groups and governments on environmental issues pertaining to their land claims.

Each year this Division is consulted by other agencies and proponents on whether the EA Regulations apply to a particular project. The staff of the Division reviews the proposal and a determination is given in writing for each referral. The number of referral requests and responses for 2008-09 was 179 determinations.

Projects that must be reviewed for their potential environmental effects undergo a review by over 26 government agencies and are available for comment by the public. The results and comments are intensively analyzed by EA staff and recommendations made to the Executive and Minister, all within a 45 day deadline from the registration day.

In 2008-09 the number of these registrations (environmental assessment reviews) was 45.



Fermeuse Wind Farm. Photo P.Carter.

Environmental Preview Reports (or EPR's) are required by the Minister after an environmental assessment review if the registration document has insufficient information to allow agencies to give adequate advice to the Minister, or if the public comments have pointed out an area of concern upon which the Minister wishes the proponent to elaborate. There were three EPR's ordered by the Minister in 2008-09 for the Bloom Lake Railway Project in western Labrador, Parsons Pond Oil Exploration

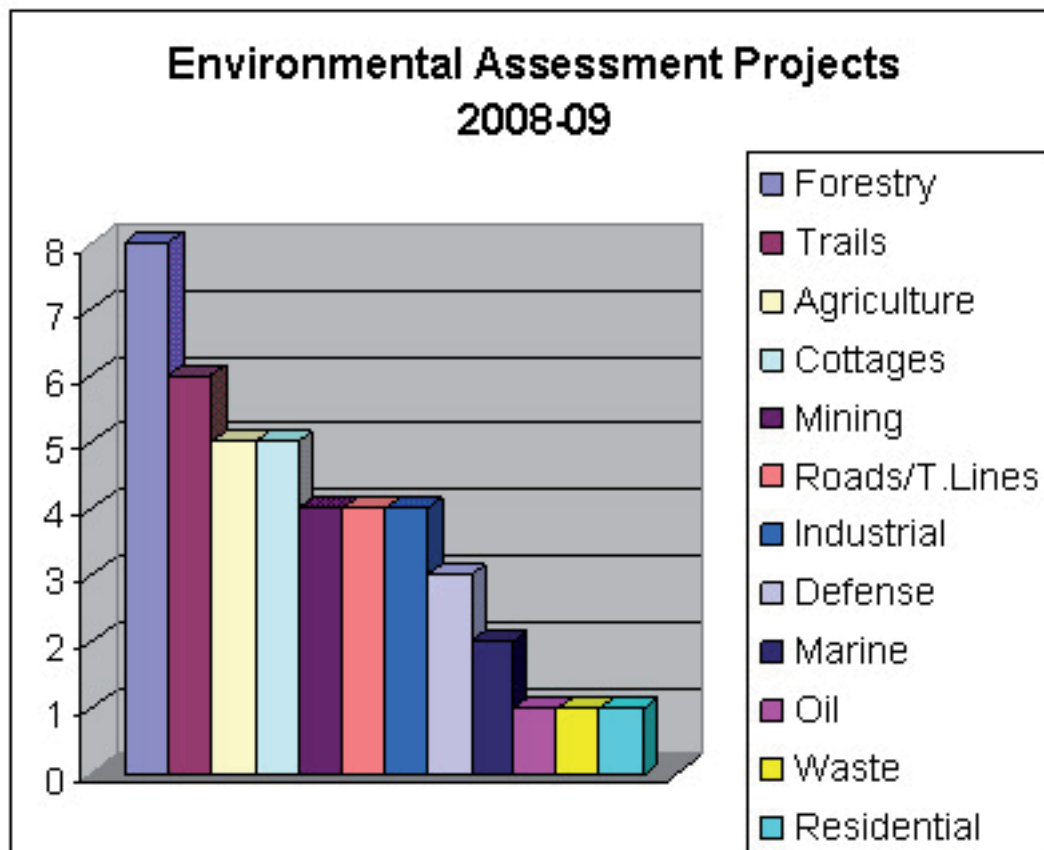


## Department of Environment and Conservation Annual Report 2008-2009

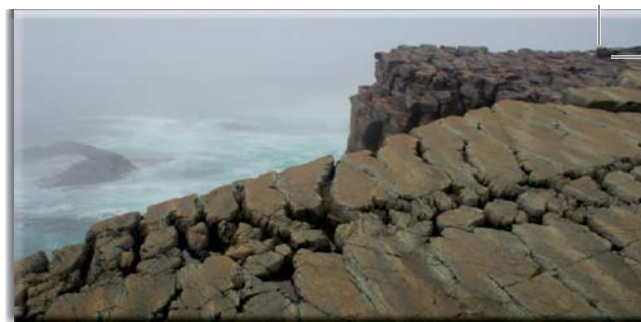
Access Road, and the Old Perlican Chitin Plant. Also, EPR guidelines were developed for a fourth project submitted the previous year for the Portland Creek Agricultural Land Development.

Environmental Impact Statements (or EIS's) are required of the Minister mainly if original research is required to predict potential environmental effects from a proposed undertaking. There were four undertakings

registered in 2008-09 for which the Minister ordered EIS's to be prepared. They were the Schefferville Area Iron Ore Mine, Elross Lake Area Iron Ore Mine, Goose Bay Supersonic Flight Training, and the Labrador – Island Electrical Transmission Link. Also, in 2008-09 a Joint Review Panel was established to review the EIS for the Lower Churchill River Hydroelectric Generation Project.







## Lands Branch

### Crown Lands Administration Division

The Crown Lands Administration Division of the Lands Branch received funding in the 2008 budget to increase inspection efforts throughout the province in order to reduce public wait time for inquiries and acquisition of Crown land. This increased inspection effort will result in enhanced enforcement of the Lands Act, a deterrent to illegal occupation and provide a greater revenue return to Government.

In 2008/09 fiscal year a total of 271 unauthorized structures were issued removal notices. These structures, consisting of cabins, trailers, buses and gates in unauthorized sites, has lead to concerns of pollution and safety hazards.

In March 2009, the Division implemented new Standards for the surveying of Crown land by licenced surveyors with the Association of

Newfoundland Land Surveyors (ANLS). The purpose of the new Standards was to make them current with today's survey technology (ie. GPS surveys), eliminate overlap with ANLS survey guidelines, provide clearer direction to surveyors in the performance of Crown land surveys and to reduce delays in the issuance of title documents to clients.

In addition to the new Survey Standards, the Division has revised its policies related to Crown land surveys. The revised policies are aimed at reducing application wait times and the survey error rate, which is having an impact on the Division's operations. These changes will affect members of the ANLS in that it will be incumbent on surveyors to ensure that the work they submit is to the satisfaction of the Branch at all times.

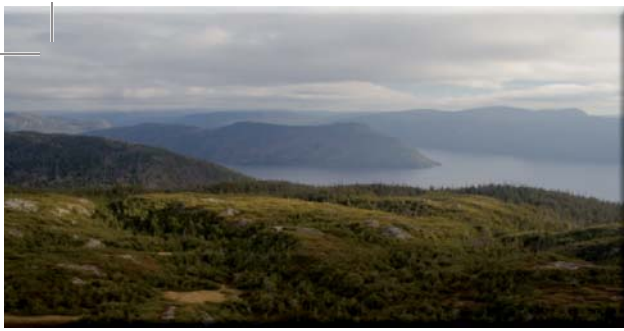
### Land Management Division

The Lands Branch is the coordinating agency for the provincial referral process for Crown land that is to be allocated. Applications for Crown land are referred to various government departments and agencies that have an interest in the land and the comments are factored into the decisions as to whether the land is allocated and the particular conditions that apply to its development.

There were 35 Crown land related projects registered with the Interdepartmental Land Use Committee. The Land Management Division developed 33 cottage lots with a total value of \$173,000.

In 2008-09, the division issued over 992 parcels of Crown land with a total area of 2450 hectares valued at \$9,735,500. In the final year of a three year commitment aimed at reducing accounts receivable for Crown Lands, the total of \$5.4 million dollars originally owed has been reduced by \$3.4 million to \$2 million.

The Land Use Atlas is now accessible by intranet to the Lands Branch Regional Offices and in compact disc format to other users. Efforts are underway to make the Land Use Atlas available on-line to all government departments. Land use designations are added to the Land Use Atlas on an on-going basis.



## Department of Environment and Conservation Annual Report 2008-2009

### Outcomes of Strategic Issues

#### Climate Change Mitigation and Adaptation

The province released its Climate Change Action Plan in 2005 which outlined 40 action items regarding the reduction of greenhouse gas emissions and adaptation to climate change. Since its release, progress on most action items in the Action Plan has been made.

Government has committed, in the 2007 Energy Plan, to producing an update to the 2005 Action Plan and to set targets for GHG reductions. The newly established Office for Climate Change, Energy Efficiency and Emissions Trading is taking over responsibility for the Climate Change Action Plan Update, however the, implementation of any programs and services will continue to fall under the department's responsibilities. In addition to the coverage in the new Climate Change Action Plan, adaptation to climate change will be addressed in a separate Climate Change Adaptation Plan for Newfoundland and Labrador.

The role of the department is to encourage stakeholders to reduce emissions and take action to mitigate and adapt to climate change. The department does this by funding emissions reduction projects, funding awareness and education campaigns and encouraging the adoption of government-wide policies that reduce emissions. Providing funding for these types of projects and initiatives and working with other Government Department's helps Government to achieve the strategic directions related to improving energy efficiency in Government operations and in the transportation sector as outlined in the Department's 2008-2011 Strategic Plan.

***Goal: By March 31, 2011, the Department of Environment and Conservation will have facilitated the reduction of greenhouse gas emissions and increased adaptive capacity to respond to climate change.***

***2008-09 Objective: By March 31, 2009, the Department of Environment and Conservation will have updated the provincial climate change action plan to include greenhouse gas emissions reduction targets.***

#### Measure 1: Release of an updated action plan.

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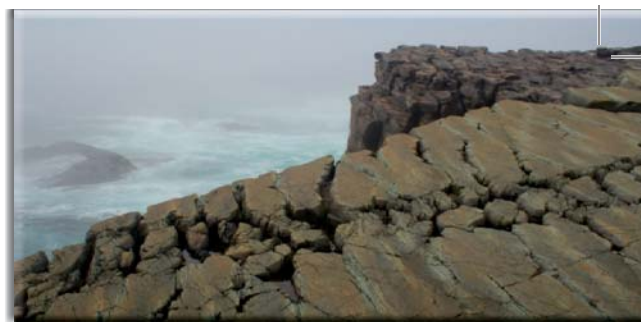
##### Indicators

- Greenhouse gas forecast developed.

##### Actual Results

Complete. Will inform updated action plan.

## Department of Environment and Conservation Annual Report 2008-2009



- Plan released with GHG emissions reduction targets.
- Preliminary work on Action Plan undertaken and passed to the newly established Office of Climate Change, Energy Efficiency and Emissions Trading to take forward.

### Discussion of Results

In relation to creating climate change awareness and facilitating the reduction of greenhouse gas emissions, our department has awarded local businesses and organizations over \$377,000 in funding for climate change related projects. This excludes \$25 million dollars from the NL Green Fund that was used to fund numerous other projects directly relating to reducing GHG emissions. Work on the Climate Change Action Plan Update now rests with the newly established Office of Climate Change, Energy Efficiency and Emissions Trading. The Adaptation Plan, the 2009-2010 objective, will focus on the adaptation aspect of climate change.

*2009 – 2010 Objective: By March 31, 2010, the Department of Environment and Conservation will have released a provincial climate change adaptation strategy.*

Measure: Release of a Newfoundland and Labrador Adaptation Plan.

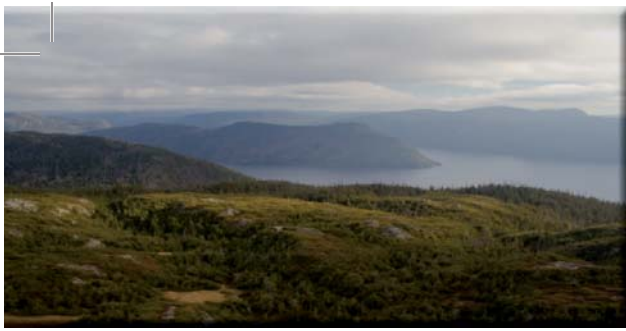
### Indicators

- Adaptation issues identified for Labrador, if deemed appropriate.
- Adaptation Plan released.

### Sustainable Development Initiative

The proposed Sustainable Development Act outlines the sustainable development principles that will ensure resource development decisions take into account the full range of environmental, social and economic values and provides stakeholders a voice in how these resources are managed. Sustainable development principles will come into play in every aspect of development and is termed as “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” In the 2008-2011 Strategic Plan, the department has set a goal for the three year period as determining what measurements are indicative of a sustainable path to development. This will be done through research into appropriate measures and the input of stakeholders, including the Sustainable Development Round Table. This work will help Government to achieve its strategic direction related to the responsible and sustainable development of our natural resources.

*Goal: By March 31, 2011, the Department of Environment and Conservation will have assessed the province’s status in relation to sustainable development to set the foundation for future progress on key areas.*



## Department of Environment and Conservation Annual Report 2008-2009

*2008 – 2009 Objective: By March 31, 2009, the Department of Environment and Conservation will have established and operationalized the Sustainable Development Round Table.*

### Measure 1: Round Table Established

#### Indicators

- Press release on the establishment of the Round Table
- Members appointed

#### Actual Results

No press release. Membership is under review.

Membership is under review.

### Measure 2: Round Table is operational

#### Indicators

- Round Table Secretariat staff hired
- Number of meetings held
- Draft statement of indicators prepared
- Work plan prepared for public consultation on indicators

#### Actual Results

Hired April 08.

Membership for the Round Table is under review.

An appropriate indicator framework has been selected for Newfoundland and Labrador and specific indicators, tailored to the province's circumstance, has been drafted. Extensive literature on indicators and indicator frameworks has been compiled and an overview of sustainable development indicators and indicator frameworks is also complete. The draft Indicator Framework will be ready late 2009.

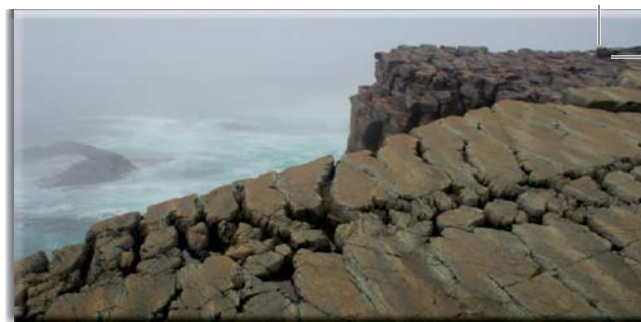
Work plan not complete. Will be ready late 2009 when the indicator framework has been established.

### Discussion of Results

Since the *Sustainable Development Act* received royal assent in the House of Assembly on June 14, 2007, the department has been working to put in place the necessary human and financial resources to carry out the initiative. Membership for the Round Table on Sustainable Development is in the process of being established. The 2008-09 objective to establish and operationalize the



## Department of Environment and Conservation Annual Report 2008-2009



Sustainable Development Round Table was not met due to delays in finalizing the membership for the Round Table. The Sustainable Development Round Table Secretariat was staffed, which will take the lead on the coordination and facilitation of all Round Table activities when the membership is confirmed.

Research and policy development activities include the development of a communications plan, creation of Sustainable Development Regulations and development of an internet portal. In addition to ongoing scientific research, the department has committed to develop a Strategic Environmental Management Plan, a Sustainability Indicators Strategy, a Sustainable Procurement Policy and conflict resolution mechanisms. A draft outline of the Strategic Environmental Management Plan (SEMP) is nearing completion and can only be finalized when the Indicator Framework and the Sustainability Report are completed; it is the third and final step of this process.

***2009 -2010 Objective: By March 31, 2010, the Department of Environment and Conservation will have prepared a Strategic Environmental Management Plan.***

Measure: Strategic Environmental Management Plan (SEMP) produced.

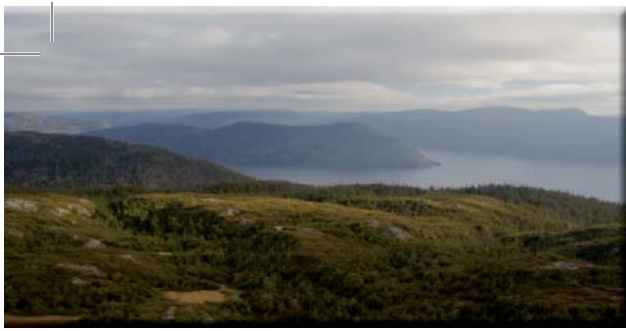
### Indicators:

- Interdepartmental Committee on Sustainable Development established.
- Draft outline circulated to committee.
- SEMP drafted.

## Caribou Science and Management Strategy

In February 2008, government announced over \$15 million in funding for a five-year science and management strategy for the island's woodland caribou populations. The current caribou population is estimated to be about 37,000 down from 90,000 caribou in 1996; representing a decrease in population of approximately 60%. It is believed that predation due to black bear, coyote and lynx are among the major factors associated with the decline. The work of the department will focus on testing methods to stabilize the decline in the caribou population and support the recovery and long-term sustainable management planning. Activities will include scientifically controlled predator reduction, improving knowledge of social and economic values of caribou and predators as well as caribou health and habitat. This work will help Government to achieve its strategic direction related to enhancing management of wildlife resources.

***Goal: By March 31, 2011, the Department of Environment and Conservation will have initiated the implementation of science and wildlife management activities designed to assist in long-term sustainability of the caribou resource.***



## Department of Environment and Conservation Annual Report 2008-2009

**2008-2009 Objective:** *By March 31, 2009, the Department of Environment and Conservation will have finalized science-based predator reduction strategies for two study areas dependant on successful establishment and interpretation of the baseline data.*

Measure: Predator reduction strategies finalized based on establishment and interpretation of baseline data.

### Indicators

- Education efforts are initiated to improve public participation in predator harvest developed.

**Baseline information on caribou-predator dynamics was established in the following manner:**

Baseline estimates established of predators (lynx, black bear, coyotes) abundance in Middle Ridge, LaPoile, and Northern Peninsula.

Island-wide black bear abundance index initiated

Number of individuals of each predator species (lynx, black bear, coyotes) radio collared in the three study areas.

Number of individuals of adult female caribou radio collared.

Continuation of the monitoring of the female caribou collared on South Coast and Northern Peninsula.



Caribou at Salmonier Nature Park.  
Photo: Salmonier Nature Park

### Actual Results

Nine “How to Hunt Coyote” workshops delivered. “How to Hunt Bear” workshops

Samples have been collected and are currently being analyzed. Delays in analysis are due to problems in finding a genetics laboratory to conduct the analysis. Report on analysis expected January 2010.

Project Underway.

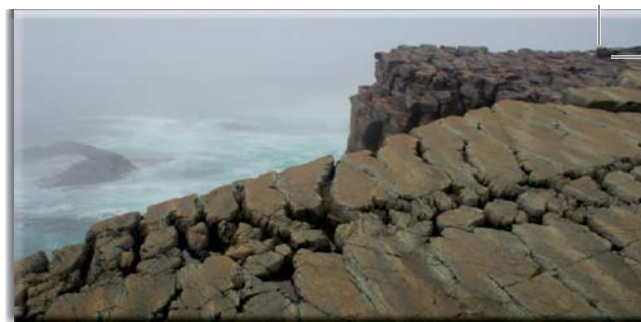
In 2008-09, 31 Black bear and 36 Coyotes were collared. No Lynx were collared because they were not in significant numbers to be captured.

Radio Collars were received March 31, 2009 and 12 adult female caribou were radio collared in the Middle Ridge study area by May 2009.

Monitoring continuing



## Department of Environment and Conservation Annual Report 2008-2009



Graduate student projects are coordinated with IBES on predator ecology, abundance estimation techniques, space-use and habitat selection, and predator interactions.

Achieved. Coordination of 6 students working on associated projects.

Range-use maps are completed for all herds on the Northern Peninsula

Range-use maps were completed for all herds on the South coast because they were collared in the 2008-09 year. Range-use maps for the Northern Peninsula herds are now complete.

### Discussion of Results

Caribou Calf Mortality study continued on the Middle Ridge, La Poile and Northern Peninsula herds. Calves were collared in June (newborns) and November at all three sites, and their survival was regularly monitored. Predator ecology studies were initiated in all three study areas and as part of this effort, 31 black bear and 36 coyote were fitted with GPS radio collars. The 2008-09 objective of finalizing a predator reduction strategy was not achieved. More time was needed to conduct further scientific study and to collect sufficient predator data in order to properly research the most effective predator reduction strategies. Scientific protocols were developed in collaboration with the Caribou Strategy Academic Team; comprising regional and international experts. The writing of reports and the preparation of manuscripts and publications continued as part of the Caribou Data Synthesis. Numerous peer-reviewed manuscripts on Newfoundland caribou are in the final stages of preparation for publication in the 2008-09 publication cycle. In addition, numerous internal presentations were conducted on the Caribou Strategy.

***2009 – 2010 Objective: By March 31, 2010, the Department of Environment and Conservation will have implemented predator reduction strategies in two study areas and commenced evaluation studies to ascertain their effects.***

Measure 1: Implementation of predator reduction strategies in two study areas.

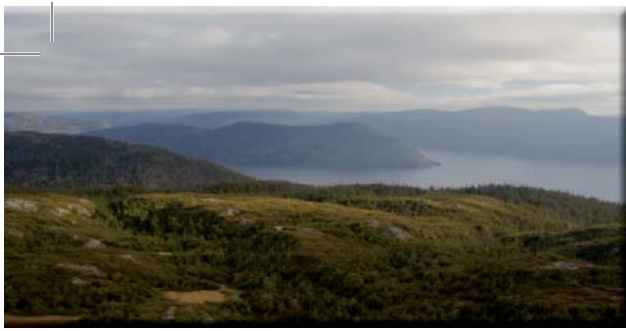
#### Indicators:

- Finalize predator reduction strategies in 2 study areas.
- Logistical and implementation plan completed

Measure 2: Evaluation studies undertaken to study the effects of the predator reduction strategies.

#### Indicators:

- Appropriate scientific monitoring and studies continued in study areas.
- Number of individuals of each predator species in experimental sites.



## Department of Environment and Conservation Annual Report 2008-2009

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### Safe Drinking Water

Following the Walkerton and North Battleford drinking water tragedies of 2000 and 2001, government approved the Multi-Barrier Strategic Action Plan (MBSAP) for drinking water safety in the province. Since the release of this Plan in May 2001, substantial progress has been made. The province has received international recognition for establishing one of the best drinking water monitoring and reporting programs. Despite the progress, concerns remain in small communities in rural areas of the province around high numbers of boil water advisories, high levels of trihalomethanes (THMs) and issues such as arsenic, colour and turbidity. Analysis by the department shows that potable water dispensing units (PWDU) are the most appropriate technology to deal with these issues in small communities and will work to achieve our strategic outcome of improved protection and delivery of drinking water; as outlined in our Strategic Plan 2008-11. In communities where a PWDU is installed, residents come to the units to fill their containers as needed. The communities continue to operate their regular water system for other uses such as laundry and toilet flushing.

*Goal: By March 31, 2011, the Department of Environment and Conservation will have improved drinking water available in rural communities.*

*2008-09 Objective: By March 31, 2009, the Department of Environment and Conservation will have improved drinking water in 20 communities with populations less than 500.*

Measure: Improved drinking water available in 20 communities

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#### Indicators

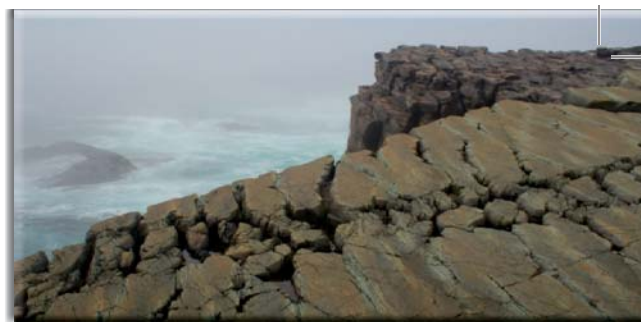
- number of units installed

#### Actual Results

1 PWDU installed for the town of Gaultois. A Terms of Reference was released and 42 responses were received on PWDU installations for communities. Delays in the installation of units were due to delays in receiving proposals associated with the terms of reference.

- Other corrective measures taken

Study for corrosion control initiated and almost complete. Technical working group established, terms of reference developed and PWDU guidelines completed.



Study on Operation and Maintenance of  
Drinking Water Infrastructure in  
Newfoundland and Labrador - ongoing.

Study on Performance Evaluation of  
Existing PWDU's and Recommendations  
for Design and Operational Guidelines -  
ongoing.

### Discussion of Results

The 2008-09 objective of improving drinking water with potable water dispensing units in 20 communities was not realized in the 2008-09 fiscal year due to time-frame issues. The terms of reference for the design of PWDUs for use in small communities has been released and proposals have been accepted. Further to this, the consultant has been contracted to do this work in 44 communities with plans to engage more communities in the program later this year.

*2009-2010 Objective: By March 31, 2010, the Department of Environment and Conservation will have improved drinking water available in 60 additional communities in populations less than 500.*

Measure: Improved drinking water available.

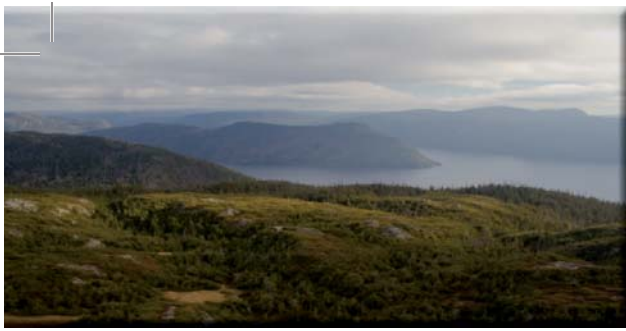
#### Indicators

- Number of units installed
- Other corrective measures taken

### Natural Areas System Plan

The purpose of the Natural Areas System Plan is to establish a comprehensive system of publicly supported parks and protected areas for our citizens that protect the province's biodiversity and natural heritage. These parks and protected areas will help support a vibrant culture and economy, as well as enhance public understanding, appreciation and enjoyment of our natural environment. The Natural Areas System Plan is in line with government's commitment to sustainable development as well as the province's commitments to the Natural Forest Strategy and Canadian Biodiversity Strategy. Our department's Strategic Direction for the 2008-11 planning cycle is to protect a system of natural areas representing each of the province's eco-regions.

*Goal: By March 31, 2011, the Department of Environment and Conservation will have released a Natural Areas System Plan and an Implementation Strategy.*



## Department of Environment and Conservation Annual Report 2008-2009

*2008-09 Objective: By March 31, 2009, the Department of Environment and Conservation will have identified study areas in each of Labrador's natural regions and prepared a draft Natural Areas System Plan.*

### Measure 1: Study areas identified for each of Labrador's natural regions.

#### Indicator

#### Actual results

- |                                                                                                                      |                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Study area boundaries identified for internal government review.</li> </ul> | <p>Study areas have not been identified. The step wise approach to determining appropriate study areas for the province has experienced delays. The identification process is taking longer than anticipated, however, the committee is working to develop the best plan.</p> |
|----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Measure 2: Draft Natural Areas System Plan prepared

#### Indicators

#### Actual results

- |                                                                                                                                                                                         |                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Draft Natural Areas System Plan document prepared for internal review.</li> <li>• Discussion document prepared for internal review.</li> </ul> | <p>No. Awaiting finalization of the Natural Areas System Plan.<br/>Not complete.</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|

### Discussion of Results

The public discussion document was not completed in 2008-09 as we are awaiting finalization of the Natural Areas System Plan. The process of identifying potential study areas for the Natural Areas System Plan has been more complex than originally envisioned. During the past three years, the department has completed biophysical assessments of the 25 natural regions on the island. This information was used to identify study areas and, where possible, alternate areas that capture the biological features representative of each natural region. The completion of these biophysical assessments is significant and an integral part of the review process.

An Interdepartmental Committee approves the study areas once all departments are satisfied that their concerns have been addressed. The process of finalizing area boundaries is taking longer than first anticipated. The committee is working through the process to ensure that the necessary balance is reached for all residents of the province and at the same time, ensuring that the environment is protected.



Department of Environment and Conservation  
Annual Report 2008-2009



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*2009-2010 Objective: By March 31, 2010, the Department of Environment and Conservation will have completed consultations on the draft Natural Areas System Plan and prepared a proceedings document.*

**Measure 1: Draft Natural Areas System Plan document prepared for internal review.**

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**Indicator**

- Draft Natural Areas System Plan document prepared for internal review.

**Measure 2: Conduct consultations on the Natural Areas System Plan draft.**

**Indicators**

- Public discussion document prepared.
  - Consultations complete.
  - Proceedings document prepared for internal review.
- 



Sandbanks Provincial Park, Burgeo. Photo: Erika Pittman



## Department of Environment and Conservation Annual Report 2008-2009

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### Staff Accomplishments

Dr Amir Ali Khan, Haseen Khan, Martin Goebel and Paul Neary were selected to participate in a European Space Agency (ESA) project that will use water management technology from Newfoundland and Labrador as part of its TIGER project in Egypt to use space technology for water resource management.

Dr Amir Ali Khan will represent the province on a project in which the European Space Agency (ESA) has partnered with the Department of Environment and Conservation, C-CORE, and the Department of Fisheries and Oceans to use satellite-based Earth Observation (EO) to detect aquatic point pollution sources in the Bay of Islands, Bay d'Espoir and Wabush Lake.

In recognition of his expertise in agricultural water management, Dr. Abdel-Zaher Kamal Abdel-Razek of the Water Resources Management Division was selected as a Canadian water resources expert to peer review the report entitled "Arghandab Irrigation Rehabilitation Project", CIDA Afghanistan Task Force, Technical Appraisal Mission Report. This major project is part of the Canadian reconstruction efforts towards reviving traditional agricultural activities in Afghanistan.

Dr. Abdel-Razek was also invited to chair three technical sessions in the 13th World Water Congress that was held in September 2008 in Montpellier, France. This congress is a major event in which water resources experts from around the world gathered to discuss and share experience on global water resources issues.

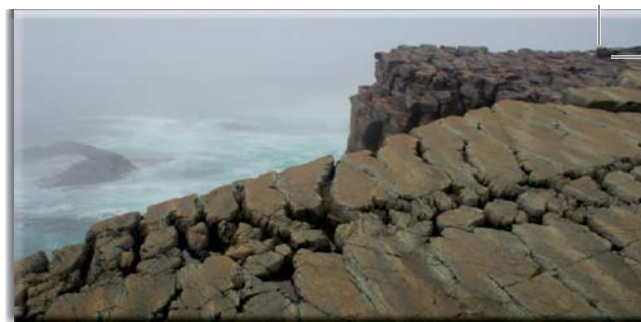
Mr. Reg Garland, Director of the Land Management Division, presented on Land Use Management in Newfoundland and Labrador during the Canadian Lands Directors Association Conference in Whitehorse, Yukon.

Mr. Randy Hawkins, Administrative Officer with the Surveys and Mapping Division, made two presentations to the Geographical Names Board of Canada's annual meeting in Iqaluit, Nunavut; entitled "Bartlett Basin Update" and "Preservation of the Innu Culture".

Robert Otto, Director of The Institute for Biodiversity, Ecosystem Science and Sustainability (IBES) recently chaired and organized the 12TH North American Caribou Workshop, an international conference to share technical knowledge and discuss emerging issues on Caribou. The conference was held in Happy-Valley Goose Bay, NL from November 4th to 6th, 2008 at the Hamilton Hotel and Convention Centre.

Mr. Otto coauthored an article published on April 7th, 2008 in the Canadian Journal of Zoology titled "Body-condition dynamics in a northern ungulate gaining fat in winter". This article can be found on the NRC Research Press Web site at [cjz.nrc.ca](http://cjz.nrc.ca).



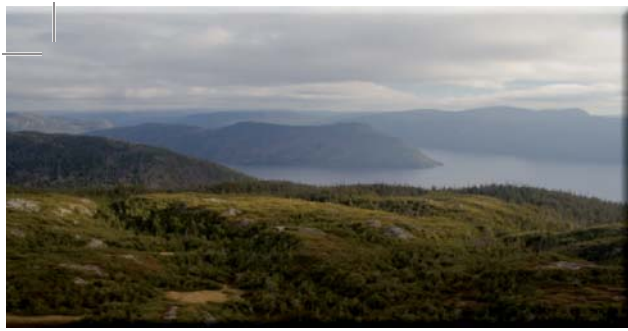


## Opportunities and Challenges

As the Strategic Outcomes section of this report indicates, the department has been successful in meeting many of its commitments. The action items put forward in the Climate Change Action Plan of 2005 have been addressed and the Newfoundland and Labrador Green Fund has been well received. The support mechanisms have been put into place for the Sustainable Development Round Table and significant work on the draft Sustainable Development Indicator Framework has been completed with a view to release in the Fall 2009.

The Natural Areas Systems Plan is progressing with discussions to establish study areas. The Caribou Science and Management Strategy is underway and will continue for the next four years.

In terms of opportunities, the Waste Management Strategy has been initiated and holds great potential for environmental protection in the province over the coming years. Assisting Newfoundland and Labrador communities in adapting to climate change will be an important issue over the long-term and we have committed to releasing an Adaptation Strategy in 2010. The Crown Lands division has put measures in place to eliminate environmental hazards and protect water resources by removing ad-hoc camping structures on shoreline reservations and other sites across the province.



## Department of Environment and Conservation Annual Report 2008-2009

### Financial Statement

Unaudited Statement of Expenditure and Related Revenue for the year ending 31 March 2009 from the *Report on the Program Expenditures and Revenues of the Consolidated Revenue Fund*. Government departments are not required to include audited statements in this report.

Executive and Support Services	Actual
Minister's Office	\$254,827
Executive Support	\$904,932
Administrative Support	\$351,332
Policy Development and Planning	(\$1,368,469)
Sustainable Development and Strategic Science	\$2,936,110
Administrative Support (capital)	\$1,305,601
<b>Total Executive Support and Services</b>	<b>\$4,384,333</b>
Environmental Management and Control	
Pollution Prevention	\$2,608,246
Water Resources Management	\$2,977,920
Water Quality Agreement	\$385,055
Environmental Assessment	\$902,218
Voisey's Bay Environmental Management Board	\$84,378
<b>Total Environmental Management and Control</b>	<b>\$6,957,817</b>
Lands	
Crown Lands	\$3,290,382
Land Management and Development	(\$3,966,831)
Surveying and Mapping	\$816,655
Geomatics	\$100,825
<b>Total Lands</b>	<b>\$241,031</b>
Parks and Natural Areas	
Parks and Natural Areas	\$5,558,004
Park Development	\$145,404
<b>Total Parks and Natural Areas</b>	<b>\$5,703,408</b>

Department of Environment and Conservation  
Annual Report 2008-2009



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Wildlife

Administration, Licensing and Operations	\$1,592,892
Endangered Species and Biodiversity	\$798,133
Stewardship and Education	\$1,432,741
Habitat, Game and Fur Management	\$2,517,848
Research	\$2,037,135
Cooperative Wildlife Projects	\$636,458
Institute for Biodiversity and Ecosystem Science	\$978,377

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**Total Wildlife**

**\$9,993,584**

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## Department of Environment and Conservation Annual Report 2008-2009

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### Appendix I

#### Lines of Business

The Department of Environment and Conservation provides the following lines of business:

##### Land Resources

Responsible for the administration and management of the province's land resources.

In particular the Department:

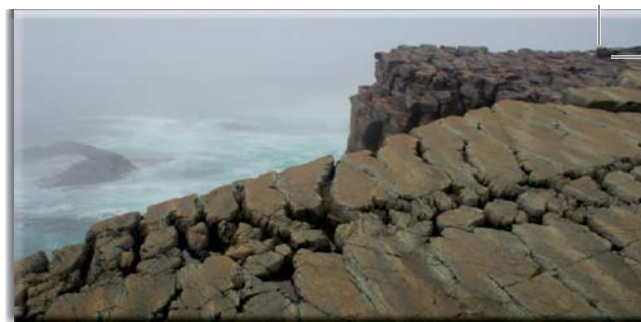
- maintains a map and air photo library services
- maintains the Provincial Crown Lands Registry;
- investigates adverse land claims;
- reviews and inspects legal surveys;
- prepares legal documents of title for all dispositions of Crown Land;
- produces and distributes topographic base maps for provincial departments and agencies;
- provides the geodetic reference system for legal and engineering surveys and topographic mapping;
- provides new aerial photography; a repository/archive of provincial aerial photography; and scanning/printing services;
- facilitates the official naming of geographical features and place names and maintains the joint federal/provincial data base;
- provides the central data-store and on-line base layers for GIS applications;
- provides standards and consultation services in geomatics;
- facilitates federal/provincial collaboration in geomatics (Building the Canadian Geospatial Data Infrastructure (CGDI) under the Canadian Geomatics Accord);
- produces Crown title maps;
- develops land use management plans;
- maintains the Land Use Atlas;
- enforces lands legislation and addresses incident of unauthorized occupation of Crown land;
- coordinates within Government the inter-departmental review of crown land development (ILUC);
- develops land use policy; and
- administers the leasing, sales and transfers of Crown land.

Provincial parks, ecological and wilderness reserves, natural areas, and Canadian Heritage rivers

- the management and administration of provincial parks (the Newfoundland T'Railway Provincial Park is jointly managed by a special T'Railway Council);
- designation and management of wilderness and ecological reserves under the Wilderness and Ecological Reserves Act;



## Department of Environment and Conservation Annual Report 2008-2009

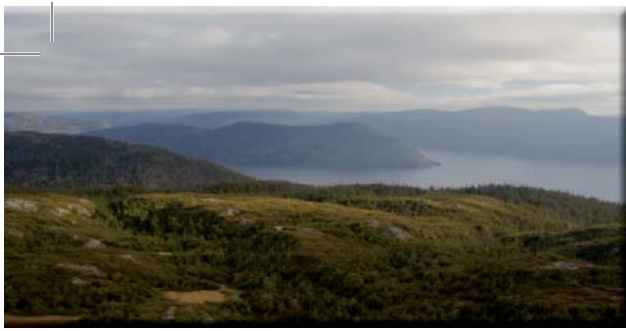


- development and implementation of environmental education programs within select provincial parks and wilderness/ecological reserves;
- implementation of protection measures for Canadian Heritage Rivers in the province;
- negotiation of the land transfer to the federal government for National Parks; and
- issuance of various permits for provincial parks, ecological and wilderness reserves:
  - wilderness and ecological reserves entry permit
  - provincial park daily / seasonal vehicle entry permit
  - commercial operator permit
  - commercial operator permit – tour boat
  - educational tour permit
  - scientific research permit
  - seabird ecological reserve special access permit
  - seabird ecological reserve guide permit

### Wildlife and inland fish

Protects, manages and conserves the Province's biodiversity, wildlife resources and wildlife habitat. This includes:

- determining the status of species in the Province according to the national Accord for the Conservation of Species at Risk to which the Province is a signatory;
- developing and implementing stewardship agreements to support the recovery of species at risk;
- Identifying, designating and developing recovery strategies for species at risk according to the Endangered Species Act;
- developing and implementing strategies for the conservation of biodiversity;
- designating and managing wildlife areas;
- administering the Salmonier Wildlife Park, a wildlife rehabilitation, interpretation and research facility;
- developing management plans for consumptive species which are then published in the annual hunting and trapping guide;
- issuing hunting and trapping licenses and developing policies and guidelines regarding wildlife utilization that are consistent with the Division's mandate;
- issuing Newfoundland and Labrador Guide licenses and disabled angler and hunter permits;
- providing consumptive based education, awareness and training programs such as firearm safety / hunter education courses and trapper education courses;
- implementing the North American Waterfowl Management Plan, including providing assistance in the development of agreements to support wetland and coastal stewardship initiatives;
- developing long term landscape level planning to minimize conflicts between wildlife and other land uses;
- Permitting for the non consumptive use, possession, importation and export of wildlife and



## Department of Environment and Conservation Annual Report 2008-2009

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parts thereof;

- through the collection of scientific information, provide input into the sustainable management of wildlife and habitat, including inland fish populations; and
- utilizing education, awareness and stewardship programs and initiatives to foster appropriate attitudes, respect, behavior and appreciation towards our wildlife and habitat.

### **Environmental Assessments**

Coordinates the provincial environmental assessment process for new development, which includes:

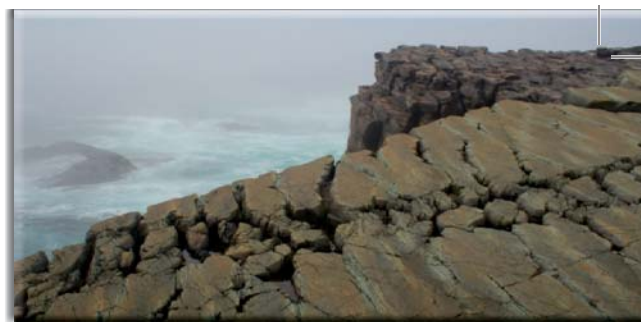
- registration and screening of undertakings;
- actively soliciting public input into registered undertakings;
- further environmental assessment of undertakings;
- communicating environmental science pertaining to registered undertakings;
- releasing projects from the environmental assessment process; and conducting select surveillance on projects released from the environmental assessment process

### **Air, soil and water pollution**

Responsible for prevention of pollution of the Province's air, water and soil ecosystems. Responsibilities include:

- preparing and issuing Certificates of Approval and licenses for
  - industrial operations;
  - waste management systems (in collaboration with Government Services Centre);
  - waste dangerous goods transporters;
  - pesticide operators and applicators; and
  - heating oil storage tank inspectors;
- developing policies, guidelines, protocols, and regulations;
- enforcing Certificates of Approval, license conditions and legislation through
  - inspections, other than those done by Government Services Centre;
  - the development of environmental monitoring programs in collaboration with industry;
  - audits of the environmental monitoring programs;
  - audits of environmental laboratories; and
  - the monitoring of criteria air contaminants;
- designating of contaminated sites (both commercial and residential) and risk assessments based on environmental site assessments;
- providing technical advice and outreach;
- managing remediation of select industrial and military contaminated sites that are the responsibility of Government; and

## Department of Environment and Conservation Annual Report 2008-2009



- maintaining a contaminated sites registry.

### Water Resources

Ensures that the Province's water resources are protected, conserved and enhanced to provide the greatest possible sustainable benefits to the Province. Responsibilities include:

- designation of protected water supply areas and protected wellheads;
- monitoring and analysis of chemical water quality of community water supplies;
- issuance of well driller licenses;
- inspection of water well structures in accordance with requirements of the Well Drilling Regulations;
- comprehensive training for municipal water operators of community water and wastewater systems;
- hydrologic modeling;
- flood forecasting;
- investigation of water-related problems and complaints
- overseeing inspections of dams;
- granting of water rights;
- maintenance of a water rights registry;
- issuance of permits for community water and sewage systems, extensions and alterations;
- monitoring and inspection of community water and wastewater systems;
- provision of technical assistance on community water and sewage, hydrology, hydraulics, and environmental design of water related structures;
- maintenance of various online water quality and quantity databases and GIS resources; and
- conducting studies on groundwater resources, flooding, water resource impacts and water use.

### Horizontal Initiatives

Leads two key government-wide initiatives: Government's response to climate change and sustainable development. These are evolving initiatives thus the programs and services offered by this department in these areas are also evolving. The programs and services that the public can expect from the Department on these two initiatives are outlined below:

#### Climate Change

- Implementation of the provincial Climate Change Action Plan;
- administration of the Newfoundland and Labrador Green Fund; and
- creation of stakeholder awareness on greenhouse gas reduction strategies and climate change impacts and adaptation.
- Government is in the process of establishing the Office of Climate Change, Energy Efficiency and Emissions Trading which will be responsible for Climate Change policy development.



## Department of Environment and Conservation Annual Report 2008-2009

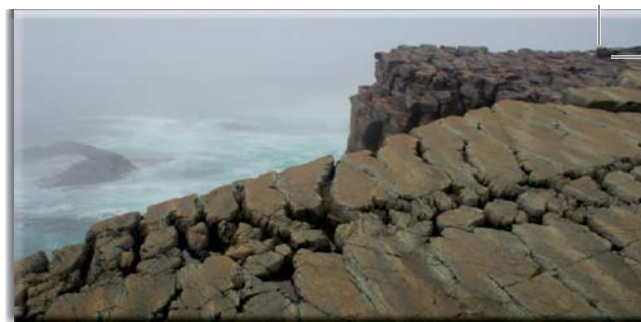
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- The Department will be responsible for developing a provincial Climate Change Adaptation Plan.

### **Sustainable Development and Strategic Science**

- Strategic research on wildlife species, notably caribou, in support of the sustainable development initiative;
- provision of support for the Sustainable Development Round Table, the development of indicators and a provincial sustainability report as directed by the Sustainable Development Act;
- development of public education and outreach information related to sustainable development;
- development and coordination of graduate research projects through the Institute of Biodiversity and Ecosystem Science; and
- general promotion of sustainable development within Government and the larger community.





## Appendix II

### Activities Related to the Newfoundland and Labrador (NL) Green Fund

In 2007 the Government of Canada announced \$1.5 billion for the ecoAction Trust Fund for clean air and climate change. The fund was distributed to the provinces on a population basis where Newfoundland and Labrador received \$23 million.

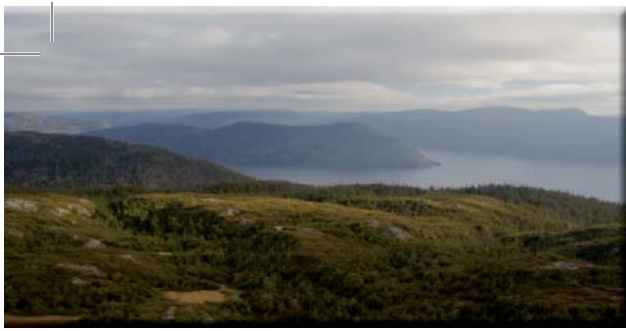
In general, the money was earmarked to assist Newfoundland and Labrador in delivering actions in the 2005 Climate Change Action Plan relating to energy efficiency and clean energy. In addition, the money indirectly supported to the province's Energy Plan as well as the principles of sustainability in the province.

More specifically, this Trust Fund was intended for investment in initiatives that would result in measurable reductions in greenhouse gas (GHG) emissions. These projects were to include a range of different projects such as: measures to improve the energy efficiency of public buildings; greenhouse gas reductions through enhanced waste management techniques, including methane gas recovery and utilization, and expanded composting under our Provincial Waste Management Strategy. Funding was also intended for climate change innovation supporting energy efficiency and the reduction of GHG production; particularly in rural and remote areas.

As a result, the Province created the NL Green Fund which, with a \$2 million contribution from the Province, totalled \$25 million in funding over 3 years. The NL Green Fund is open to businesses, institutions, environmental groups, or individuals seeking to develop innovative projects in Newfoundland and Labrador. The program was designed to fund initiatives, through grants, that reduce the province's GHG emissions and increase the environmental sustainability of the province. Examples of projects that are eligible include:

- education campaigns;
- technologies that create energy efficiency;
- research and development of alternative and greener transport;
- fuel substitution;
- alternative energy technology;
- waste heat recycling;
- carbon capture and sequestering technology;
- activities related to green innovation enhancement; or
- projects that increase the environmental sustainability of the province.

Currently the Newfoundland and Labrador Green Fund is fully subscribed. The Province has received applications in excess of \$25 million.



## Department of Environment and Conservation Annual Report 2008-2009

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### Selection Criteria

The base selection criteria for NL Green Fund applications and projects include the:

- amount of GHG emissions projected to be reduced;
- likelihood of project success;
- capacity of the organization, individual or business to complete the project;
- quality of submissions;
- innovative quality of the initiative;
- potential for technology transfer;
- potential for self-sustainability after funding terminates; and
- support for the action items in the 2005 provincial Climate Change Action Plan.

Due to the innovative nature of the NL Green Fund and the diversity, scope and scale of the applications received, the assessment criteria included additional factors. For example, the economic development potential of the project, potential to support certain sectors both economically and in terms of greenhouse gas reductions, the area of the province where the projects is located and the general potential to increase environmental sustainability.

### Summary

As of March 31st 2009, there were a total of sixty-seven projects applied, approved or rejected to the fund totalling about \$31,738,000. Fifty-four projects are applications to the Fund totalling about \$25,950,000. Thirteen of the projects are preapproved energy efficiency upgrades in government buildings totally \$5,000,000. Four projects have been rejected totalling \$788,000.

There are currently eight projects totalling about \$6,117,000 in a priority wait list which are in excess of the \$25,000,000 allotment of the Fund. The remaining projects under consideration or approved exceed \$24,833,000. These numbers are subject to change as allocations change and projects are approved or rejected.

To date twenty-six projects have been approved (including thirteen government buildings) totalling about \$10,200,000. Funds have been distributed or contracts have been signed with fourteen of the twenty-six approved projects totalling \$5,328,712.

The projects range from waste reduction to methane capture and to renewable energy initiatives. It is estimated that these fourteen approved projects have the potential to avert the release of up to 90,000 tonnes of greenhouse gas emissions into the atmosphere. This represents approximately 1% of the total emission from Newfoundland and Labrador. If the trend in GHG reduction per dollar remains constant then the \$25 million fund has the potential to reduce GHG by 400,000 tonnes or about 4% of the total.

