ENVIRONMENT AND NATURAL RESOURCES
2015-16 Business Plan

1. DEPARTMENTAL OVERVIEW

MISSION

Environment and Natural Resources (ENR) works with all people and interested organizations to protect our environment by making sure our resources are used wisely and that people understand their part in keeping the environment healthy.

GOALS

1. The Northwest Territories' (NWT) air, land, water, wildlife, and forests are protected.
2. The NWT's natural resources are used and developed wisely in accordance with the Sustainable Development Policy.
3. Knowledge is gained through cooperating and sharing information with other organizations and people interested in the environment.
4. The NWT's environment and natural resources are managed with the understanding that forests, wildlife, air, land and water are connected.

OPERATING ENVIRONMENT

Issues having direct and substantial impacts on the Department of Environment and Natural Resources programs and services:

Climate Change
Climate Change is an overarching reality that increasingly defines environmental, economic and political challenges facing governments, communities and residents. Climate change impacts are beginning to have costly implications for many government departments and industrial sectors. For example, melting permafrost is requiring earlier than expected remediation and maintenance for existing infrastructure and more expensive construction techniques for new facilities. ENR is working with partners to better anticipate future changes and the implications for the NWT, share understanding of best practices to adapt to these changes and ensure all decision makers have the information they need to incorporate climate change considerations into their activities. ENR is developing an adaptation framework to assist in responding to effects resulting from changes to permafrost, wildlife populations and habitat, forest growth and regeneration, wild fire cycles and other aspects of the natural and human environment.

Giant Mine (Environment)
Remediation of the Giant Mine site poses the greatest contaminated site challenge in the NWT. ENR is a co-proponent with the federal government on this project. Measures arising from the Environmental Assessment will have an impact on GNWT services in the areas of future land use, transportation, health studies and environmental monitoring and standards.

Wildland Fire Management (Forest Management)

Reconciling the role of fire in maintaining ecosystems while considering the NWT Forest Fire Management Policy objectives of the protection of people, property, natural, and cultural resources from the negative effects of wildland fire presents a complex challenge. Wildlife management objectives including sustaining populations of important wildlife species (e.g. barren-ground caribou, boreal caribou, wood bison) place a larger burden on wildland fire managers to consider landscape level management objectives, while addressing local and significant protection issues.

Recommendations of the Wildland Fire Program Review, completed in 2011, continue to be implemented to ensure the program is addressing the needs of communities and residents, particularly in determining the values at risk and value placed on wildlife habitat. An Aviation Fleet Review that builds on previous studies on the serviceability of the current CL-215 fleet will inform future wildland fire management options.

Sustainable Forest Economies (Forest Management)

Forest managers must ensure that the full range of values that forest ecosystems offer is balanced and protected to maintain ecological integrity. At the same time, a viable forest industry requires sustained access to timber, biomass, and non-timber forest resources. ENR works with Aboriginal governments and communities to support sustainable forest economies through forest resource inventories; community capacity development through training and technical support; forest management planning; and, other specialized services.

Community-based sustainable forest economies are supported through the Forest Management Agreement (FMA) initiative. FMAs offer opportunities to manage community or traditional forest resources in a locally beneficial way. For example, FMAs offer community-held Aboriginal corporations the opportunity to participate in the development of a woody biomass industry which in turn supports government's green energy objectives.

The financial and structural support to new community corporations requires a significant level of funding and organizational support within ENR and across government. Cooperative funding arrangements with Canada (CANNOR, NRCAN-SINED programs, etc.) to access approximately $1.0 million of federal support assist in the program.

Forest Policy/ Forest Legislation (Forest Management)

Current forest management legislation (*Forest Protection Act, Forest Management Act)* does not provide the tools necessary to manage forest resources consistent with the NWT Sustainable Development Policy, current forest management principles and evolving socio-economic and land and resource management objectives.

The development of policy and new legislation to support sustainable forest management will require full and meaningful consultation with Aboriginal governments and organizations. ENR is currently consulting with Aboriginal groups and public boards regarding proposed amendments to the *Forest Management Regulations*. Currently, regulation changes include new licences (e.g.

Incidental Use of Forests) and permits (e.g. Import Permit), and the creation of a Forestry Fund to support forest renewal activities from the collection of forestry fees. The Incidental Use of Forests Licence addresses the long standing issue of the effect of industrial development on the ecological integrity of the northern forest resource.

Species at Risk Recovery Strategies (Wildlife)
Recovery strategies for species at risk in the NWT require management of wildlife populations and the landscape (habitat) upon which they rely.

The legal requirement under the federal *Species at Risk Act* to protect critical habitat for nationally endangered and threatened species has implications for public infrastructure, economic development, land claim and self-government negotiations and wildfire management in the NWT.

There are legal requirements to meet timelines for the completion of new NWT management plans and recovery strategies under the *Species at Risk (NWT) Act*. If new resources are not found, existing resources will have to be redirected to meet these legal requirements resulting in the deferral of some research and monitoring programs affecting the availability of information required for important wildlife management decisions.

In 2015-16, ENR must develop and implement Action Plans for National Recovery Strategies for boreal caribou, wood bison, Peary caribou and two species of bats (northern myotis and the little brown myotis). NWT Recovery Strategies are also required for boreal caribou, Peary caribou and hairy braya (a plant), and a Management Plan is needed for polar bears.

Barren-ground Caribou Management (Wildlife)
Barren-ground caribou are one of NWT's greatest natural resources and are integrally tied to Aboriginal culture, health and well-being. While management actions have helped some barren-ground caribou herds recover from declines documented in the early to mid-2000s, herds that are now stable are still low in number. In addition, monitoring conducted over the last two years suggests that some herds are once again in decline.

Making informed decisions on management actions to promote herd recovery require ongoing monitoring of herd trends and the factors that may be driving those trends, including harvest, predation, and the cumulative effects of development. Industrial development in particular is under close scrutiny as there is strong public concern that herd recovery and growth will be inhibited as more development occurs in the barren-ground caribou range. This may have long term implications for Aboriginal rights to harvest.

Any monitoring and management actions ENR undertakes must be done in collaboration with co-management partners. ENR is also legally required to consult with any Aboriginal groups whose rights may be impacted by management decisions. All of these activities will require new, ongoing funding to successfully implement. Financial requirements, as well as monitoring

and management priorities, will be detailed in the new 2016-2020 NWT Barren-ground Caribou Management Strategy. Work on the Strategy is underway and will be completed in 2015/16.

Cumulative effects of development on NWT's wildlife and wildlife habitat (Wildlife)

Increasing demand for northern resources has resulted in more than a five-fold increase in the number of new developments proposed in the NWT over the last two years. Most proposed projects undergo intense scrutiny, as they may have negative individual and cumulative effects on wildlife and wildlife habitat in the NWT. Key areas of concern are within boreal caribou range and the range of the Bathurst barren-ground caribou herd. In 2015/16, Wildlife Division will require a second full time Environmental Biologist position to ensure concerns over development impacts on wildlife and wildlife habitat are adequately addressed.

Protecting Territorial Waters (Water Resources)

Ensuring NWT waters remain clean, abundant and productive for all time is a priority for the people of the NWT. Communities are concerned about water quality, water quantity and traditional harvests of wildlife and fish. As the Mackenzie River Basin extends over a number of political jurisdictions, integrated watershed management is of primary concern. NWT interests extend to upstream development including the oil sands in Alberta and hydro development in British Columbia.

Implementation of the NWT Water Stewardship Strategy and Action Plan is crucial to partnership efforts. ENR's contributions focus on community source-water protection plans, community-based water monitoring programs and transboundary water management agreements. With Devolution, ENR's water quality and quantity responsibilities have expanded. In addition to operating larger monitoring networks, new program areas include provision of technical advice to land and water boards throughout the NWT, development of water-related guidance documents, and providing accredited lab services to private and public sector monitoring activities. The Minister of ENR is now responsible to approve all Type "A" water licences associated with activities on lands transferred through the Devolution Final Agreement. Internal mechanisms are in place to support the Minister through his decision-making process and ensure sound decisions continue to be made within legislated timeframes.

Conservation Planning (Conservation, Assessment and Monitoring (CAM))

Now that Devolution has occurred and the NWT Land Use and Sustainability Framework is completed, communities are looking to the GNWT to clarify its approach to managing lands in the NWT through Northern Lands, Northern Leadership and Northern Tools. The GNWT has indicated a preference for Northern Tools and is now prepared to initiate discussions with communities and demonstrate how Northern Tools can address GNWT and community interests in land management.

Communities and working groups are looking for tools which meet their conservation interests and allow for cooperative management agreements with Aboriginal governments. The GNWT will need to have ongoing discussions with Environment Canada, which has been a significant

source of funding in initiatives to date, to ensure that appropriate funding is provided for the management of protected areas.

As the Establishment Action Plan (2010-2015) for the NWT Protected Areas Strategy enters the final year, a new action plan is needed to help ensure NWT biodiversity and ecosystems are conserved.

Interim Resource Management Assistance Program (CAM)

Post devolution, ENR became responsible for the Interim Resource Management Assistance (IRMA) Program. IRMA is intended to strengthen the ability of Aboriginal communities in unsettled claim areas in the NWT to participate in land and resource management activities affecting surrounding land use areas. In correspondence to Aboriginal parties about the change in responsibility, the GNWT committed to providing IRMA funding in an efficient and timely manner. Given that the IRMA program is new to ENR and recognizing a need for some improvements, ENR will undertake a detailed review of the IRMA program focussing on its effectiveness and equity.

Cumulative Impact Monitoring (CAM)

In December 2013, seven Aboriginal governments sent a formal request to the Minister of ENR to provide partial funding towards a full-time environmental stewardship position for each organization to address the needs of multiple environmental programs for consistent Aboriginal participation and engagement. These environmental programs include the Cumulative Impact Monitoring Program, the Protected Areas Strategy, the NWT Water Strategy, and the Northern Contaminants Program. As a result of devolution, all of these programs, with the exception of the Northern Contaminants Program (AANDC), are now the responsibility of ENR.

The Minister provided a response to this request acknowledging that capacity building for Aboriginal governments is a shared responsibility amongst Aboriginal governments, the GNWT and the Government of Canada. ENR committed to working with other GNWT departments with land and resource management responsibilities to consider opportunities for building capacity of Aboriginal governments for effective participation in environmental, land and resource management initiatives. Aboriginal governments will be expecting a more fulsome response to their request in 2015/16.

Information Management and the digital age (Corporate Management)

As the public increases its expectations of government to improve its effectiveness and transparency, technology and information management services are being looked to as key enablers of improvements in program planning and delivery. The Service Innovation Strategy has highlighted and established the requirements for GNWT departments to look deeper into the manner in which programs are delivered to find innovative ways to improve value. This is especially true following the devolution of responsibilities for land, resource management and water.

Increasing demand for geomatics services, particularly online mapping applications, the trend

towards open data policies in government, and the desire to improve integration and information sharing to support improved decision making, not only between GNWT departments, but also with our partners and stakeholders are contributing to large increases in services required by the Informatics Division. While increasingly the departments will look to technology to increase the availability of Government services, we must also recognize that resources within the Government are under tremendous pressure. Careful planning and oversight will be required to ensure that those resources are allocated to those initiatives of the greatest importance to the goals and priorities of the department and the GNWT.

Transfer of Alternative Energy Programs

In 2015, the coordination of energy policy, planning and communications and functions are proposed to be consolidated within the Department of Public Works and Services (PWS).

ENR currently delivers project development work in alternative energy, including solar, wind, geothermal and biomass heating through its Environment Division and the Climate Change program. This includes planning, project development, implementation, and with respect to electricity, integration of alternative technologies into existing NWT electricity infrastructure. The Climate Change program also undertakes energy strategy development as reflected by the Greenhouse Gas (GHG) Strategy, and works with the Arctic Energy Alliance on the promotion of energy conservation and use of energy efficient technologies and alternative energy sources. Energy conservation and efficiency program funding is flowed through ENR to the Arctic Energy Alliance.

It is proposed that only those functions and resources in ENR that are dedicated to supporting alternative energy and energy conservation programs are transferred to PWS. This includes the coordination and delivery of energy projects and incentive programs delivered through the Arctic Energy Alliance and programs supporting the development of alternative energy options for the NWT.

Climate Change Policy, the Green House Gas Strategy and Forest Industry Biomass Initiative will remain with ENR.

2. RESOURCE SUMMARY

Departmental Summary

	Proposed 2015-16 Main Estimates	2014-15 Revised Estimates	2014-15 Main Estimates	2013-14 Actuals
	(thousands of dollars)			
Operations Expenses by Activity				
Corporate Management	11,748	11,464	11,369	11,554
Environment	4,534	8,697	8,197	7,639
Forest Management	32,631	80,013	32,684	43,696
Wildlife	15,185	16,118	16,118	14,787
Water Resources	8,029	11,319	10,737	3,351
Conservation, Assessment and Monitoring	11,584	8,430	8,423	2,114
Total Operations Expenses by Activity	**83,711**	**136,041**	**87,528**	**83,141**
	(thousands of dollars)			
Operations Expenses by Object				
Compensation and Benefits	39,683	44,176	38,529	34,061
Grants and Contributions	7,358	10,958	10,458	6,398
Other	34,205	78,516	36,150	40,491
Amortization	2,465	2,391	2,391	2,191
Total Operations Expenses by Object	**83,711**	**136,041**	**87,528**	**83,141**
Revenues	**4,797**	**4,797**	**4,197**	**886**

Human Resources Summary

	Proposed 2015-16 Main Estimates	2014-15 Revised Estimates	2014-15 Main Estimates	2013-14 Actuals
Yellowknife Headquarters	134	135	131	91
Regional / Area Offices	178	178	178	162
Other Communities	56	56	56	56
Total Number of Positions	368	369	365	309

KEY ACTIVITY 1 – CORPORATE MANAGEMENT

Description

The Corporate Management activity provides overall management, strategic planning, communication, and leadership to the Department's divisions and regions. Divisions and Units within this activity enable the Department to respond effectively to the environmental and resource management priorities of NWT residents.

The Corporate Management activity is carried out through Directorate, the Policy and Strategic Planning Division, Finance and Administration, and the Field Support Unit.

Directorate provides the overall leadership, management, and strategic planning for the Department.

Policy and Strategic Planning provides policy, legislative, strategic planning, coordination, and communications and media relations expertise to lead associated initiatives or provide support to the Department to make informed decisions on environmental and resource management issues.

Finance and Administration provides financial management and administrative services to the department. These services include providing advice to senior managers on financial management, financial controls, contracts, contributions, and corporate support services.

The **Field Support Unit** provides regional and divisional support on activities related to traditional knowledge, Aboriginal relations, licensing, compliance, public education, and employee training.

This activity also includes **Corporate Costs**, which captures the Department-wide specific costs such as lease payments, TSC Chargebacks, employee leave and termination benefits, and vehicle and building maintenance.

Information management services including information systems and internet development, implementation and operations, geomatics and geographic information systems, data and analysis, and records and library services are provided through **Informatics Shared Services** housed in the Department of Lands.

Responding to Goals and Priorities of the Legislative Assembly

Priority 1 – Building a Strong and Sustainable Future for our Territory

Field Support Unit will continue to ***strengthen our relationships with Aboriginal and other northern governments*** by providing grant funding to communities to carry out specific wildlife

and forestry research projects related to the collection of traditional knowledge (TK). Field Support will also continue to identify and monitor TK initiatives as a component of ENR's standard business planning processes and other planning activities.

ENR will continue to support ***implementing a devolution final agreement*** by ensuring the appointments of members to the Inuvialuit Water Board, created under the *Waters Act,* are made in a timely manner; participate on committees to ensure devolution responsibilities roll out in a timely manner; and senior officials will continue to participate in innovative approaches to resolving complex land, resources and governance matters through the Dehcho Bilateral.

Departmental Highlights

- On April 1, 2014, ENR took over responsibility for managing inland waters through the administration of the *Waters Act* and Regulations.

Cross-Departmental Initiatives

Interdepartmental Green Advisory Team (IGAT)

The Interdepartmental Green Advisory Team (IGAT) was established in 2009 by the Deputy Ministers' Committee to provide advice on GNWT environmental stewardship and energy efficiency initiatives. ENR is the chair of IGAT and has organized meetings with the Team over the last several years. In 2015-16, ENR will work with IGAT to beginning developing a Greening Government Strategy.

Interdepartmental Traditional Knowledge (TK) Working Group

The Interdepartmental TK Working Group was established by the Deputy Ministers' Committee to facilitate government-wide implementation of the Implementation Framework for the Traditional Knowledge Policy. The TK Working Group coordinates interdepartmental information sharing related to TK implementation, and reports annually on the status of government-wide TK initiatives.

KEY ACTIVITY 2 – ENVIRONMENT

Description

The Environment Division works to prevent and reduce the impact of human activities on the natural environment so that a high quality environment is maintained for the benefit of current and future generations.

The Environmental Protection section provides information and advice within the NWT regulatory system, participates in national initiatives related to environmental quality, and develops and oversees programs in the areas of environmental protection standards for developments, cleanup standards and regulatory oversight of contaminated sites, hazardous substances management, hazardous waste management, and air quality.

The Waste Reduction and Management section develops, administers and promotes innovative strategies, policies, regulations, programs and initiatives in source reduction, waste diversion, and residual management. The unit works with municipalities, businesses, non-profit organizations, and other levels of government to advance sustainable policies and programs in integrated waste management and leads the development, coordination, and implementation of cross-departmental and GNWT-wide strategies, policies and initiatives in greening government.

The Climate Change Programs section coordinates the GNWT's response to climate change by developing strategies and activities to control and inventory greenhouse gas emissions, identifying climate change impacts, increasing awareness of climate change, and adapting to a changing climate.

The Contaminated Sites and Remediation section works with the federal government to ensure that historic development sites do not pose long-term risk to NWT residents or the environment. This section is also responsible for ENR's environmental liabilities. These liabilities increase and decrease based on the remediation of contaminated sites and the booking of new contaminated sites. The section identifies, assesses, prioritizes and manages the cleanup of contaminated sites throughout the NWT to ensure the protection of the environment and human health.

Given the tremendous role of science and traditional knowledge in the management of the NWT environment, the Environment Division leads the implementation of the GNWT Science Agenda. The Senior Science Advisor provides expertise, leadership, and vision across the GNWT as a champion for excellence in scholarship and research. The Advisor is responsible for promoting collaborative research priorities and themes relevant to the GNWT and northerners, engaging research partners in science policy development, encouraging investment in research and promoting major research initiatives.

Responding to Goals and Priorities of the Legislative Assembly

Priority 1 – Building a Strong and Sustainable Future for our Territory

Environment Division will continue to ***strengthen our relationship with Aboriginal and other northern governments*** through the implementation of the GNWT Science Agenda. Science Agenda Staff will continue to work with the Sahtu Environmental Research and Monitoring (SERM) Forum to identify and address key research themes in the region. This forum was developed in 2013 and formalized in 2014 with intent of improving the opportunities for Sahtu residents to inform research planning, receive results from science activities and identify opportunities for resident participation in field programs.

Environment Division will ***work with our partners to ensure responsible stewardship through our land and resource management regime,*** through the development and implementation of programs and initiatives. Planned activities to support this priority include:

Waste Reduction and Management

- In 2015-16, three major initiatives are planned: amendments to the *Beverage Container Regulations,* the development of *Electronics Recycling Regulations*, and the development of a Waste Resource Management Strategy.

Climate Change

- Continue to implement the NWT Greenhouse Gas Strategy while focusing upon a renewal in 2015.
- Continue to track and report NWT Greenhouse Gas Emissions on an annual basis and prepare and report an annual inventory of GNWT emissions to the Climate Registry.
- Release a Climate Change Adaptation Framework. This Framework will establish mechanisms to provide information and support to decision makers at all levels to incorporate climate change considerations into their actions.

Contaminated Sites

- Continue to work with the federal government on Giant Mine and participate on the Project Management Committees to guide and manage the planning, execution, monitoring and control of activities of the Giant Mine Remediation Project.
- Play a key role in the development of an Environmental Oversight Agreement with parties to the Environmental Assessment.
- Track, assess and book liabilities under the Environmental Liabilities Fund of waste sites that fall under the responsibility of the GNWT after devolution.
- Develop remediation plans to reduce the overall liabilities of the GNWT.

Science Agenda

- Working through the ADM Northern Science Working Group and other federal science planning bodies, identify opportunities for improving science outreach and education;

focus technology development funding on northern issues; develop NWT based projects to be supported by the new federal research station in Cambridge Bay.

- Identify opportunities for long-term research program planning with Canadian Universities.
- Work with ITI to develop and deliver a replacement for the federal Environmental Studies Research Fund.

Environment will support ***implementing a devolution final agreement*** through the following activities:

Contaminated Sites

- Review and assist in the assessment of the environmental risks associated with the negotiation of excepted waste sites listed in the Final Agreement.

Science Agenda

- Work with ITI, to develop and implement a new research funding program to address critical information gaps arising from upstream oil and gas industrial activity in the NWT. The NWT Environmental Studies Research Fund (NESRF) replaces the federally administered Environmental Studies Research Fund (ESRF). NESRF will provide additional resources to support GNWT science programs and answer research questions identified by a joint government/ industry management board.

Priority 3 – Strengthen and Diversify our Economy

Environment will continue to ***support the Mackenzie Gas Pipeline*** project by gathering baseline information. The Science Agenda will continue to work with government and university science teams to develop long-term science programs along the Mackenzie Valley to support future decision making and assess potential impacts of development.

Departmental Highlights

- The implementation of recycling programs in the NWT created economic benefits for the NWT through the creation of a "green economy". In 2012-13, $5.57 million dollars was spent in the NWT to operate the Beverage Container Program. There were a total of 13 full-time and 30 part-time jobs at NWT beverage container depots and processing centres, of this, over half were positions located in communities outside of Yellowknife.

- NWT residents diverted 1,592 tonnes of materials (mainly aluminum, plastic and glass) from NWT landfills in 2012-13. Even with the long distances to recycling markets, the greenhouse gases avoided by recycling these materials are equivalent to 2,416 tonnes of carbon dioxide savings, which is comparable to taking 474 cars off the road.

- A pilot electronic waste (e-waste) recycling project was introduced in four communities in 2013, resulting in the collection and recycling of approximately eight tonnes of e-waste.

- A new air quality station was established in Fort Smith in December of 2013. The station provides air quality information that is representative of the South Slave Region and helps to track transboundary pollutants generated in Alberta.

- In 2013, the Air Quality Health Index (AQHI) went online for the Northwest Territories. The AQHI informs NWT residents of air quality conditions in their community and provides guidance on how to reduce personal risk from pollution events such as smoke from forest fires. Good pollutant data capture at the air quality station has enabled ENR to forecast the AQHI for both Yellowknife (July, 2013) and Inuvik (July, 2014).

- A Regional Waste Management Tool or (RWMTool) was developed through funding from ESRF and guidance by a technical advisory group. RWMTool considers waste-streams and projects over regional, temporal and spatial boundaries, and ultimately, assists decision-makers in developing regional waste management strategies that are economically sound, cost effective, technically feasible, and socially acceptable, while minimizing the cumulative environmental impacts that may otherwise occur.

- ENR worked with their counterparts in Nunavut and Yukon to host the 2013 Pan-Territorial Permafrost Workshop held in Yellowknife in November 2013. Over 200 people attended in person and many others remotely through live webcasting. The workshop brought together researchers, scientists, facility maintainers and community representatives to discuss changes in permafrost regimes being observed in all three territories and how these problems are being responded to.

Cross-Departmental Initiatives

GNWT Interdepartmental Hazardous Waste Committee

The GNWT Interdepartmental Hazardous Waste Committee was established under the authority of the Deputy Ministers of the following Departments and Agencies: ENR (Chair), Education, Culture and Employment, Finance, Health and Social Services, Transportation, Public Works and Services, MACA, NWT Power Corporation and NWT Housing Corporation. The committee is mandated to identify hazardous waste disposal issues in GNWT departments and agencies; examine the implementation of regulatory requirements; and make recommendations for short and long-term measures to ensure compliance.

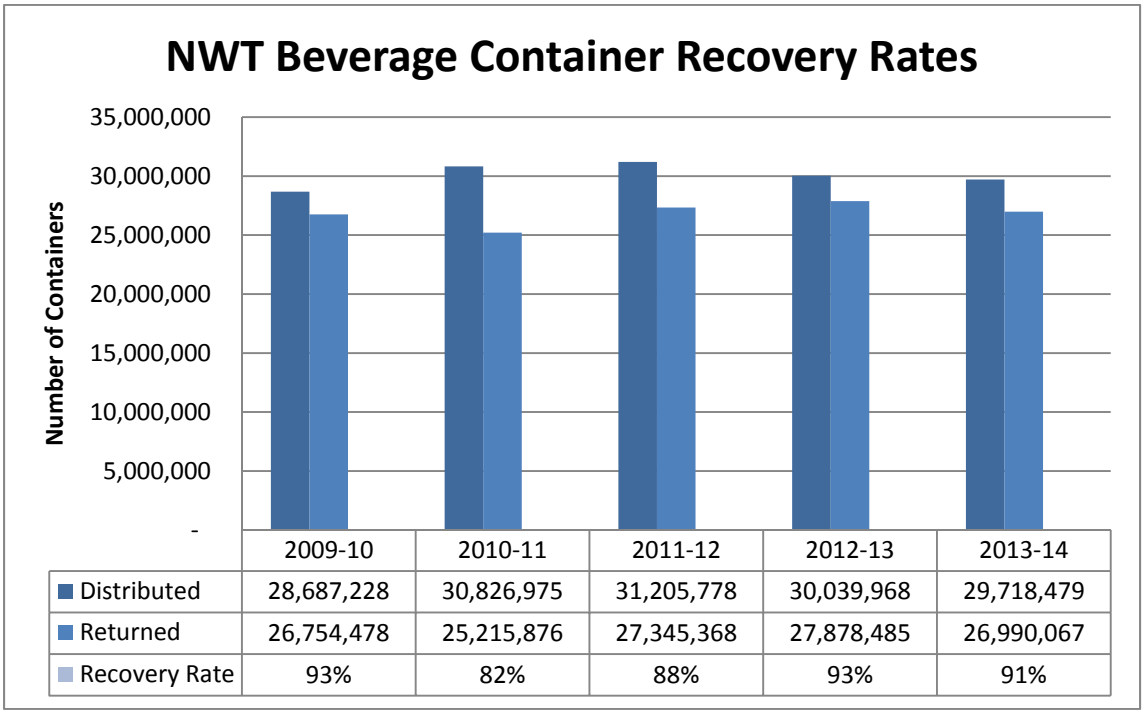
The Committee will be making recommendations including:

- Short and long term solutions to address current issues concerning compliance with regulations and guidelines;
- Resources needed for effective implementation of the proposed solutions; and
- A timetable to help ensure progress towards effective implementation of the proposed solutions.

Performance Measures

Outcome: Increased Waste Reduction and Management in the NWT
Measure 1: Annual Beverage Container Recovery Rate

The Beverage Container Program (BCP) was implemented on November 1, 2005. To date, approximately 217 million beverage containers have been returned in the NWT (November 1, 2005 to March 31, 2014). Each year, ENR tracks the number of containers distributed, and the number of containers returned to depots in order to calculate the annual recovery rate of beverage containers. ENR uses the recovery rate to track the overall performance and success of the BCP.



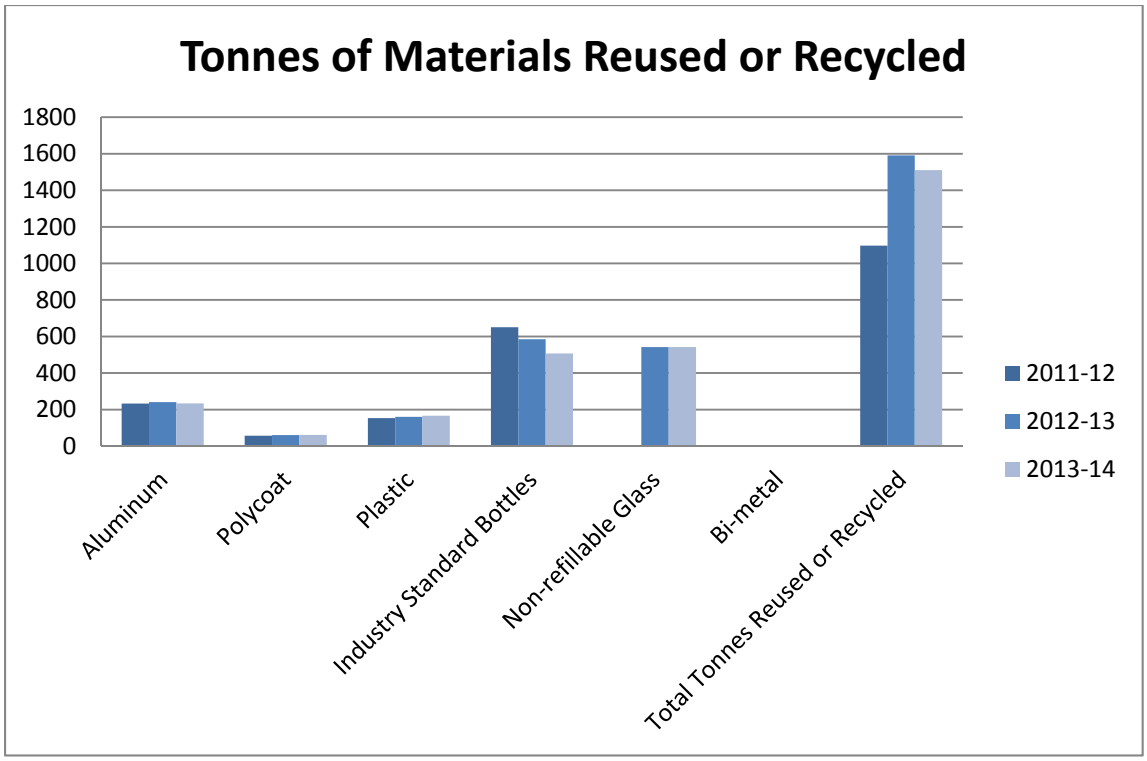
	2009-10	2010-11	2011-12	2012-13	2013-14
Distributed	28,687,228	30,826,975	31,205,778	30,039,968	29,718,479
Returned	26,754,478	25,215,876	27,345,368	27,878,485	26,990,067
Recovery Rate	93%	82%	88%	93%	91%

Note: 2013-14 numbers have not been verified.

Target for 2015/16: The program will be managed and operated to continue to achieve a recovery rate of 88% or higher.

Outcome: Reduction in the amount of material entering NWT landfills
Measure 2: Tonnes of Materials Reused or Recycled

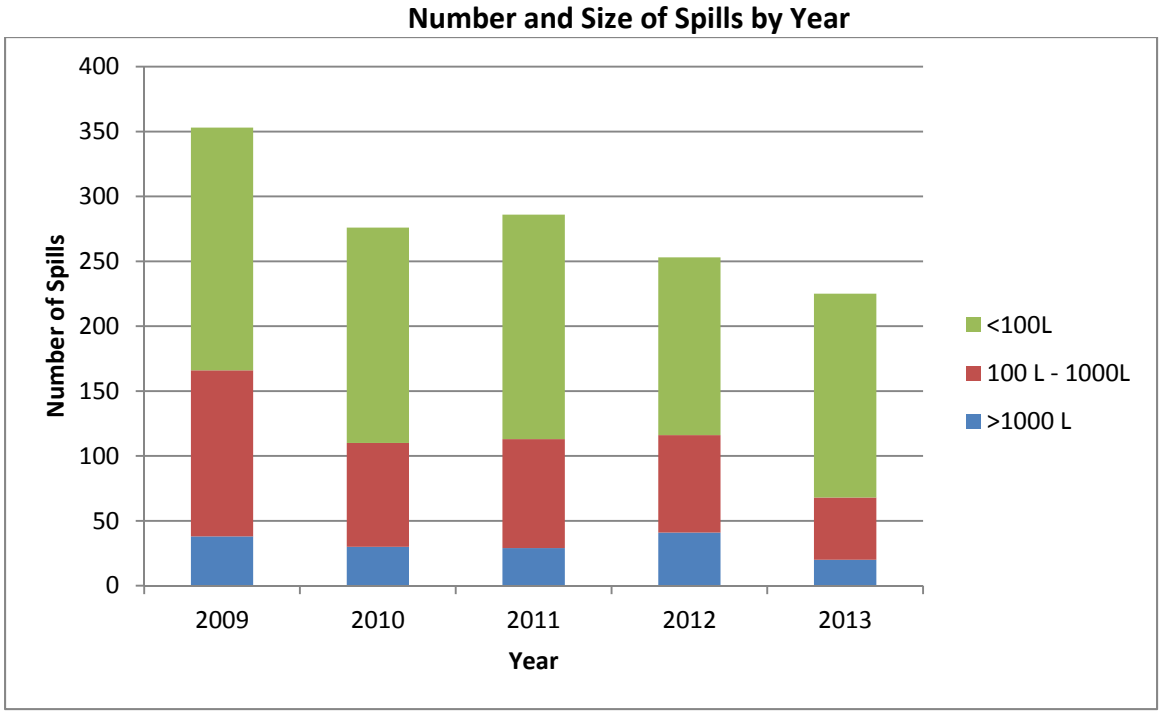
In addition to recovery rates, ENR also tracks the amount of materials reused or recycled by weight. An NWT-wide Electronics Recycling Program will begin in the fall of 2015. As part of annual program performance measure, the amount of electronic waste (e-waste) reused or recycled will be tracked and reported on annually.



Note: the NWT started to recycle all non-refillable glass in 2012-13. Prior to that, non-refillable glass was used as construction fill and landfill cover.

Target for 2015/16: Reuse and recycling programs will achieve a minimum recovery rate of 1400 tonnes per year.

Outcome: Reduced Discharge of Contaminants to the Environment Across the NWT
Measure 3 - Number and Size of Spills Recorded and Tracked Through the NWT Spill Line
There has been a continual decrease in the number of spills in the NWT over the last 5 years. While an overall downward trend can be observed in the number of large volume spills (>1000 L) and moderate volume spills (100 L - 1000 L) the number of small volume spills (<100L) have remained relatively unchanged. This overall trend indicates that ENR has been successful in the education of homeowners and industry on spill prevention and response (i.e. Homeowners Guide to Oil Tanks).



Target for 2015/16: Reduce the number of small volume spills in the NWT by 10%:

ENR will begin focusing education initiatives related to spills on the general public who utilize all-terrain vehicles, snow machines, chainsaws, etc. Education through advertisement, disposal options and availability of resources, will assist in decreasing the number of small volume spills that can contribute to localized cumulative impacts to the environment.

Outcome: Proper Disposal of Hazardous Wastes Generated in the NWT
Measure 4- Quantity of Hazardous Wastes Generated and Transported
The amount of hazardous waste generated, and information about where it is disposed of, is tracked by Environmental Protection to ensure that hazardous waste has been disposed of at appropriately registered receiving facilities. This is done in accordance with the *Environmental Guideline for the General Management of Hazardous Waste in the NWT*.

The information described in the tables below accounts for the estimated amount of hazardous waste being consigned from registered generators to registered receivers of hazardous waste. The receivers may be within or outside the NWT. A consignment is a single waste stream listed on a movement document (hazardous waste manifest). The information presented outlines the following trends with respect to hazardous waste management in the NWT:

- the number of annual hazardous waste consignments are increasing;
- the amounts of hazardous waste being consigned to registered receiving facilities are increasing; and
- the number of consignments with smaller amounts of hazardous waste are increasing.

Table 1 Hazardous Waste Consignments in the NWT			
Year	Liquids (L)	Solids (kg)	Consignments recorded by ENR
2006	1,375,632	8,947,990	649
2007	956,791	5,821,448	565
2008	478,110	5,324,799	778
2009	1,387,096	8,666,299	881
2010	1,263,211	4,510,053	1,120
2011	1,100,897	9,421,665	1,392
2012	2,295,425	6,101,332	1,652
2013	3,257,978	13,335,336	2,064
Average	**1,514,393**	**7,766,115**	**1,138**

Target for 2015/16: Increase the number of waste consignments in the NWT by 10% through education and public awareness.

Outcome: Representative Air Quality Reporting and Monitoring in the NWT
Measure 5 - Efficiency of NWT Air Quality Monitoring Network

ENR has been working to fulfill the air quality (AQ) monitoring and reporting commitments outlined in the Canadian Council for Ministers of the Environment (CCME) Air Quality Management System (AQMS). The AQMS requires comprehensive monitoring coverage of the Territory, as well as good data capture (operating efficiency) at each AQ station. ENR currently has an AQ station operating in 4 of the 5 Air Zones in the Territory, which were derived from GNWT's regional administrative boundaries.

Two of the AQ stations (Yellowknife & Inuvik) are also part of the National Air Pollution Surveillance (NAPS) network and record data that feeds directly into the Air Quality Health Index (AQHI). Maintaining a high operating efficiency is critical for these stations, as the AQHI is an important health risk tool that helps inform people of air quality conditions in their community and how they can reduce personal risks associated with exposure to pollutants, such as smoke from forest fires. The average overall operating efficiency and associated target for each of the GNWT's AQ stations are presented in the table below.

Region	Station	Parameters Measured	2011 Average Operating Efficiency	2012 Average Operating Efficiency	2013 Average Operating Efficiency	Operating Efficiency Target
North Slave	Yellowknife (NAPS)	SO2, NOx, O3, CO, PM & Speciation	96.3 %	95.5%	96.7%	**90%** (NAPS)
Inuvik	Inuvik (NAPS)	SO2, NOx, O3, CO & PM	89.6 %	71.1%	86.1%	**90%** (NAPS)
Deh Cho	Fort Liard (Removed 2013)	SO2, NOx, O3, & PM	69.2 %	70.8%	N/A	N/A
Sahtu	Norman Wells	SO2, NOx, O3, H2S & PM	95.0 %	77.5%	84.4%	**80%** (ENR)
South Slave	Fort Smith (Installed 2014)	SO2, NOx, O3, & PM	N/A	N/A	N/A	**80%** (ENR)

Target for 2015/16: Meet the operating efficiency target for each station as identified in the table above.

KEY ACTIVITY 3 – FOREST MANAGEMENT

Description

Forest Management initiatives provide for the stewardship of NWT forests through sustainable management of forest resources and forest fire management.

Sustainable forest management is ensured through the collection of information on the state of forest resources; forest management planning; monitoring of forest health and changes to forest landscapes; regulation of forest practices and planning; and, compliance and reporting.

Sustainable forest management includes collaboration with Wildlife, Water Resources, Conservation, Assessment and Monitoring and Environment Divisions on issues of climate change, biomass energy and Greenhouse Gas Strategy support, biodiversity and critical wildlife management concerns and decision processes of management planning at the landscape level.

Development of sustainable community forest economies is supported with appropriate consideration of the sustainable management of forest resources, community interests and aspirations, and recognizing the need for forest-based development that not only builds economic stability within communities, but is also culturally acceptable. Access to forest resources in the NWT recognizes Aboriginal rights and interests and is influenced by Interim Measures Agreements and Comprehensive Land Claim Agreements.

Forest fire management is achieved through prevention, preparedness and forest fire response. Using the best science, traditional knowledge, technology and effective use of available fire response resources, forest fire management provides for the protection of people, property and other values at risk from forest fire. Working in collaboration with the Wildlife Division, forest management assesses forest landscapes, natural disturbance patterns and current wildfire activity to develop and implement wildland fire management plans which recognize the ecological role of fire on the landscape while endeavouring to limit catastrophic levels of impacts on natural areas. Developing an increased capacity of individuals, communities, industry and others to take responsibility for reducing fire hazards and forest fires is also a priority.

Responding to Goals and Priorities of the Legislative Assembly

Priority 1 – Building a Strong and Sustainable Future for our Territory

Forest Management will continue to ***strengthen our relationships with Aboriginal and other northern governments*** through the following activities:

Forest Policy and Legislation

- Develop a new Forest Policy for the NWT and update Forest Management Legislation.

- Update *Forest Management Regulations* to address clarity of regulation and the impacts of non-renewable industrial development on northern forest landscapes.

Forest Economies

- Develop business and long-term forest planning for Forest Management Agreements with community Aboriginal government held corporations, in Fort Resolution and Fort Providence, and involving Deh Gah Gotie First Nation, Fort Providence Metis Council, Ka'a'gee Tu First Nation, Deninu Kue First Nation and Fort Resolution Metis Council.
- Develop forest industry opportunities with First Nations communities (e.g. Jean Marie River, Fort McPherson).
- Develop a regional forest management plan in consultation with Katlodeeche First Nation encompassing traditional territories of KFN.

Forest Management will ***work with our partners to ensure responsible stewardship through our land and resource management regime***. Planned activities to support this priority include:

- Climate change adaptation planning in coordination with Environment Division, Educational Institutions, other Departments and Canada.
- In coordination with the Wildlife Division, support the development of range management plans responding to the Boreal Caribou Recovery Strategy, Range Management Plans for Barren Ground Caribou, and the development of recovery plans for species such as Wood Bison.
- Develop a New Forest Policy for the NWT and update Forest Management Legislation.
- Negotiate Forest Management Agreements with Community Aboriginal Government held corporations.
- Develop forest industry opportunities with First Nations communities (e.g. Jean Marie River, Fort McPherson).
- Develop a regional forest management plan in consultation with Katlodeeche First Nation encompassing traditional territories of KFN.
- Implement recommendations of the Wildland Fire Management Program Review (2011) addressing the integration of the needs of NWT communities and the ecological basis of wildland fire.
- Develop a forest renewal strategy speaking to the sustainable continuation of the forest resource under sustainable forest development.
- Develop 10-Year and 25-Year Timber Harvest Plans for the Fort Resolution FMA and Fort Providence FMA.

Priority 2 – Increasing Employment Opportunities Where They Are Needed Most

Forest Management will support ***reducing dependency on government by encouraging people who are able to enter or remain in the workforce*** by partnering with skills development professionals to ensure appropriate training and development opportunities for communities pursuing forest industry development. A Forest Management Training Strategy audit will be

undertaken and re-developed to advance training and development skills across partners to meet future and developing opportunities and demands

Priority 3 - Strengthen and Diversify Our Economy

Forest Management will continue to ***support the traditional economy*** by updating the Harvesters Assistance Program to improve reflection of the needs of the traditional economy participants in the case of wildland fire impacts; and implement recommendations of the Wildland Fire Management Program Review (2011) addressing the integration of the needs of our communities and the ecological basis of wildland fire.

Forest Management will continue to support ***improving our regulatory processes*** through the development of a new Forest Policy and updating Forest Management Legislation and Regulations. Forest management plans will also be developed for traditional areas providing clear guidance and direction for resource harvesters, reducing the regulatory burden on northern harvesters.

Departmental Highlights

- Completion of the Aviation Fleet Review addressing the demands and future of the aviation fleet requirements of the Department's activities.

- Negotiation of Forest Management Agreements with Community Aboriginal government held corporations, currently underway in Fort Resolution and Fort Providence, and involving Deh Gah Gotie First Nation, Fort Providence Metis Council, Ka'a'gee Tu First Nation, Deninu Kue First Nation and Fort Resolution Metis Council.

- Developing forest industry opportunities with First Nations communities (e.g. Jean Marie River, Fort McPherson).

- Development of a regional forest management plans in consultation with Katlodeeche First Nation encompassing traditional territories of KFN.

- Training and employing northerners in wildland fire - 235 northern citizens employed in 2013, 200 received basic and advanced training in wildland fire activities, including skills development transferable to other employment opportunities in the North.

- ENR, in collaboration with MACA, hosted the inaugural Local FireSmart Representative (LFR) Workshop in Canada, April 30, 2013 to May 1, 2013. ENR provided financial support for travel, accommodations, and expenses. The workshop improved capacity and supported the FireSmart program at a local level. 29 representatives (including 5 Assistant Fire Marshals) from 13 communities attended.

- ENR, with technical specialists from Wildland Fire Operations Research Group – FP Innovations, provincial fire specialists from Alberta, and University collaborators, operates the Canadian Boreal fire research site along north of Fort Providence in the vicinity of Caen Lake. Research into community protection issues and opportunities continues at the site.

Cross-Departmental Initiatives

Community Wildland Fire Protection Plans (CWPP)
Completion of Community Wildland Fire Protection Plans (CWPP) for all communities at risk from wildland fire impacts. CWPP's are prepared in discussion with MACA, Public Safety Division, to pursue coordination of common objectives in dealing with emergency risks in communities – Forest Fire Management policy, Strategy for Management of Forest Fire Responses.

Territorial FireSmart Initiative
Implementing the Territorial FireSmart Initiative addressing hazard and risk reduction from wildland fire , involving MACA, Public Safety Division (Fire Marshall's Office), and community government representatives with responsibility at the community level for community protection – Forest Fire Management policy, Strategy for Management of Forest Fire Responses.

Biomass Energy Strategy
Implementation of the Biomass Energy Strategy ITI, ECE and PWS, ENR – FMD addressing the opportunities for woody biomass industry development utilizing northern forest resources; through the FMA process, inventory of forest resources to identify the resource potential, and supporting the biomass industry development (Fort McPherson, Aurora Wood Pellets, Tli Cho) – Biomass Strategy.

Best Management Practices
Development of Best Management Practices for minerals oil and gas development, forest resource development and other activities; in conjunction with ITI, other government Departments and Canada, to mitigate the environmental and sustainable management impacts of industrial development on the northern forests ecosystems.

Performance Measures

Outcome: NWT forest landscape inventory information is increased
Measure 1 – Area of the NWT having data on the current state of the forest resource

Forest Resource Inventories are essential for a variety of sustainable management initiatives. Forest inventory information provides essential information on the state of our forest resources, including quantity, types, age, growth and succession. The information is used for identifying potential biomass energy supplies, assessing the impacts of oil and gas activities;

landscape planning, climate change modeling, identifying wildlife habitat and special ecological places, managing wildland fire risk, and modeling the value of forests as carbon sinks.

Inventories support sustainable forest resource planning for community interests such as woody biomass supply, community forest industries, and community cultural, social and ecological objectives. Forest inventory information aids communities and governments in monitoring cumulative effects, minimizing environmental impacts and maintaining healthy ecosystems.

Detailed forest inventory information is available for approximately 5 million ha. Work commenced in 2013-2014, on the inventory of the Tli Cho area between Chan Lake and Wha'ti, an area of 1.8 million hectares. The ground work will be complete in 2014-2015, with a final report on the inventory published in 2015-2016.

Forest development opportunities rely on having accurate information on current and future forest resources. Forest sustainability assessments have been completed for 4.6 million ha of forest area. They provide information on where productive timber resources are found, as well as estimates of how much can be sustainably harvested in perpetuity.

Mapping fire severity assists with spatial representation the forest landscape of the past and future sustainability projections.

Target for 2015/16: ENR will complete mapping forest fire severity assessments within known fire boundaries applying the concepts of Ecosystem Base Management within the multi-jurisdictional Landweb Program for the fires 2012 through 2014 in southern Taiga Plains ecoregion.

ENR will expand the Multi-Spectral Satellite Vegetation Inventory (MSVI) to include coverage of the Sahtu Region oil and gas play for forecasting. MSVI is a new tool developed with Canadian Forestry Service. MSVI is useful for areas without and which do not need detailed inventory, and offers a tool for measuring and forecasting forest carbon.

Outcome: All communities below the treeline will have Community Wildfire Protection Plans that are not more than five years since last review.

Measure 2: Number of operationalized Community Wildland Fire Risk Mitigation Plans completed

Proactively identifying and mitigating wildland fire risk in NWT communities improves public safety and helps protect infrastructure, valuable natural resources, and may reduce economic impact from wildland fire. Management of wildland fire risk in community areas is a shared responsibility of property owners, community governments, the Department of Municipal and Community Affairs (MACA) and ENR.

Community Wildfire Protection Plans (CWPP), reflecting FireSmart principles, identify and recommend mitigation measures addressing community wildland fire risk. CWPP's provide guidance to community governments and MACA on mitigation opportunities in those communities. With the support of ENR resources and commitments, all NWT communities at risk below the treeline have CWPP's completed.

ENR, in the next step in the community hazard and risk mitigation process, is encouraging communities to move forward with implementing the recommendations contained in the CWPPs.

Target for 2015/16: ENR proposes to conduct community FireSmart workshops, supporting CWPP implementation, in three administrative Regions.

Maintaining the validity of CWPP's requires periodic review and update. ENR will contract for technical expertise commencing review of the five oldest CWPP's in 2015-2016. The CWPPs will be reviewed, updated and rewritten as necessary.

Outcome: Wildland fire occurrences will be managed with the objective of maintaining a social, economic and environmental balance of fires on the landscape.

Measure 3 – Sustaining fire dependent ecosystems while maintaining a social, economic and environment balance of fires on the landscape

Wildland fire is an important agent of change on the boreal landscape. Determining how many natural-caused wildland fires (lightning, or other natural causes e.g. coal seams) should be actioned versus how many should be monitored all relate to a number of dynamic factors, such as time of year, proximity to values-at-risk, available resources, and other risk variables. All person-caused wildfires are actioned because of their proximity to values-at-risk. A decision to monitor a natural-caused wildfire is just as important as a decision to action one. In the past decade, ENR has reduced the average number of wildland fires actioned from 70 percent to approximately 50 percent.

Ongoing wildland fires such as those located within the Caribou Range continue to be monitored for potential effects on values-at-risk. Fire action is pursued where appropriate in a manner consistent with the Forest Fire Management Policy. Landscape level wildland fire decisions reflect community land and resource management objectives and interests (where information is available), and the ecological role of fire on the landscape while recognizing that catastrophic levels of fire may not be ecologically appropriate.

248 wildland fires were reported in the 2013 fire season. 93 fires received action and 155 fires were monitored for possible effects on values-at-risk. 231 fires were lightning caused, 16 fires were person-caused, and 1 fire was of unknown origin. A number of fires posed significant challenges to fire managers, due to risk to communities or significant community areas (Salt Mountain near Fort Smith, River Between Two Mountains and Fish Lake near Wrigley, Jean Marie River area including a significant event affecting Saamba Deh Park facility, in the vicinity

of Behchoko, and N'dulee Crossing fire damages). Fire areas were managed under policy guidelines for landscape objectives, and protection of communities and property.

Outcome: ENR will enter into forest management agreements with Aboriginal governments which reflect northern conditions, northern aspirations and the rights and interests of Aboriginal peoples, and which support sustainable community forest economies for the benefit of community citizens.

Measure 4 – Execution of forest management agreements with Aboriginal governments

The development of Forest Management Agreements (FMAs) with Aboriginal governments will support the orderly development of a sustainable forest industry in the north. The sustainable management of northern forest resources, including the advancement of social, cultural and economic objectives for northern communities, remains a core principle of natural resources management in the NWT.

The GNWT wishes to promote tangible benefits from forests to communities, through economic investment opportunities in the forest industry while maintaining and enhancing environmental stewardship and ecological sustainability of forest resources in the NWT. ENR is pursuing the development and implementation of forest management agreements which reflect northern conditions, northern aspirations and the rights and interests of Aboriginal peoples, and which support sustainable community forest economies for the benefit of community citizens.

ENR has successfully negotiated a FMA with a community corporation in Fort Resolution, and expects to complete the execution of an agreement in Fort Providence in 2014.

Target: In 2015-2016, implementation of the Forest Management Agreement with Fort Resolution and Fort Providence will be pursued. This will involve completion of the first 5-year Timber Harvest Plan for the FMA harvest planning area, the development of harvest sequencing, and commencement of the first year of harvest; all activities including the engagement of community governments in the two communities.

ENR is pursuing development of a forest management plan for the Katlodeeche traditional area, an engagement effort including Katlodeeche First Nation, Dehgah Gotie First Nation, Fort Providence Metis Council, Ka'a'gee Tu First Nation, and Hay River Metis Council. In 2015-2016, ENR expects to have completed a framework for forest management planning.

KEY ACTIVITY 4 – WILDLIFE

Description

The Wildlife Division is responsible for the stewardship of wildlife resources. Wildlife initiatives assess and monitor wildlife populations, habitat, species at risk, wildlife health, and biodiversity. Wildlife also coordinates initiatives to address individual and cumulative effects of disturbance on wildlife and wildlife habitat. Functions include developing legislation, strategies, management plans (including range plans) and programs to support the conservation and management of wildlife resources; participating in environmental assessment and review processes; participating in cumulative effects assessments; preparing public information materials on wildlife conservation and management; monitoring biodiversity; reducing wildlife/human conflicts; undertaking compliance activities; and administering the sport fishery. Wildlife decisions are made in collaboration with co-management partners using the best available scientific, traditional and community knowledge.

Wildlife programs and services are delivered by regional and headquarters staff. Regional staff work closely with wildlife co-management boards to co-ordinate wildlife research and monitoring programs. Regional and headquarters staff undertake wildlife surveys and involve communities and co-management boards in these activities. Regional and headquarters staff also participate in the development of management plans. Headquarters staff help co-ordinate and provide expertise to regional staff conducting wildlife research and monitoring programs. Headquarters staff liaise with national and international wildlife organizations and co-ordinate NWT-wide programs, such as biodiversity monitoring, major legislative reviews (e.g., Wildlife Act), species at risk programs, wildlife health studies, wildlife standard advice, wildlife cumulative effects studies, wildlife databases, and wildlife study publications. All wildlife and sport fishing compliance programs are delivered by regional renewable resource officers.

Responding to Goals and Priorities of the Legislative Assembly

Priority 1 – Building a Strong and Sustainable Future for our Territory

The Wildlife Division will continue to ***strengthen our relationships with Aboriginal and other northern governments*** by carrying out research and monitoring programs in collaboration with communities and co-management partners. Activities to support this priority include:

- Barren-ground caribou population surveys, calf recruitment surveys, and fall sex ratio surveys;
- Monitoring programs for other species, including boreal caribou, polar bears, wolverine, moose, small mammals and hares, and bison;
- Wildlife workshops on cumulative effects monitoring and management programs (e.g., Slave Geological Province Cumulative Effects Monitoring Program; the Sahtu Cumulative

Effects Monitoring Program);
- Regional wildlife workshops; and
- Community based harvest monitoring and health monitoring programs.

The Wildlife Division will continue to ***work with our partners to ensure responsible stewardship through our land and resource management regime*** through the implementation of the new *Wildlife Act* and the development of its regulations, the Conference of Management Authorities under the *Species at Risk (NWT) Act*, and through the development and implementation of several key wildlife management strategies and plans:

- The 2011-2015 and 2016-2020 NWT Barren-ground Caribou Management Strategies (includes herd monitoring and management, building capacity within Aboriginal governments and communities, enhanced compliance, and assessing and managing the cumulative effects of development on the Bathurst range via a range plan);
- Range plans for boreal caribou (as required under federal SARA and using Boreal Caribou Monitoring and Range Planning funds);
- Range plan to mitigate potential impacts of the proposed Mackenzie Valley Pipeline and other oil and gas initiatives on NWT's polar bears;
- Management planning process for the Bathurst herd;
- Porcupine Caribou Harvest Management Plan (HMP), HMP Implementation Plan, and Strategic Framework;
- Management plan for the Beverly and Qamanirjuaq herds;
- Technical support for the Advisory Committee for Cooperation on Wildlife Management (ACCWM)'s management plan for the Cape Bathurst, Bluenose-West, and Bluenose-East herds;
- Management plans for NWT's three Wood Bison populations;
- Management plan for polar bear and recovery strategies for hairy braya, boreal caribou, and Peary caribou, as required under SARA (NWT); and
- Wildlife Health Strategy (WHS) and WHS Implementation Plan.

Priority 3 - Strengthen and Diversify Our Economy

Wildlife will continue to support ***making strategic infrastructure investments such as the Inuvik-Tuktoyaktuk Highway and the Mackenzie Fiberoptic Link*** through the following activities:

- Work with Department of Transportation on the Wildlife Effects Monitoring Program and Wildlife and Wildlife Habitat Protection Plan for the Inuvik to Tuktoyaktuk Highway and proposed Mackenzie Valley Highway.
- Work with the Department of Finance to mitigate any potential impacts of the proposed Mackenzie fibreoptic link on wildlife and wildlife habitat.

Wildlife will continue to ***improve our regulatory processes*** by working with other Departments,

Aboriginal Governments, communities, and industry on regulations related to development under the new *Wildlife Act*. Other planned activities to support this priority include:

- Work to mitigate any potential impacts that timber harvested under Forest Management Agreements may have on wildlife and wildlife habitat (including boreal caribou); and
- Work on boreal caribou range plans, which will help ensure NWT remains compliant with the national Recovery Strategy for Boreal Caribou.

Departmental Highlights

- A new *Wildlife Act* was passed by the Legislative Assembly in October 2013 and will come into force in November 2014.
- Wildlife Divison worked with the Wildlife Act Working Group and the Stakeholders Wildlife Act Advisory Group to determine priorities for the development of new or updated regulations for the new *Wildlife Act*.
- The first four species (polar bear, Peary caribou, boreal caribou and hairy braya) were listed under the *Species at Risk (NWT) Act* in February 2014 and development of the relevant management plans and recovery strategies was initiated.
- A new Wildlife Management Information System (WMIS) was developed in March 2014 and planning for the final development cycle and future release is underway.
- Population size estimates were updated for all NWT barren-ground caribou herds.
- Hosted a cumulative effects workshop and hired a dedicated cumulative effects biologist to better prepare the department for assessing, managing, and monitoring the cumulative effects of development on wildlife and wildlife habitat.
- Drafted a framework for monitoring, assessing and managing the cumulative effects of human and natural activities on Bathurst barren-ground caribou.
- Held workshops with industry and other partners to standardize wildlife monitoring protocols and revamp industry's wildlife programming to better understand the impacts of development on wildlife and wildlife habitat.
- Drafted guidelines for proponents that need to develop Wildlife and Wildlife Habitat Protection Plans and Wildlife Effects Monitoring Programs
- Updated size and/or trend estimates for several moose, bison, Peary caribou, sheep, goat, and muskox populations.
- Hosted regional wildlife workshops in Dehcho and South Slave to get community input on regional research and monitoring priorities.
- Drafted a guidance document for developing a range plan for boreal caribou in the NWT and secured new, ongoing funding for boreal caribou range plan and monitoring activities.
- Released the final report of the NWT Ecological Land Classification program. All 5 of NWT's ecozones have now been reclassified.

Cross-Departmental Initiatives

GNWT Inter-departmental Species at Risk Committee

The Wildlife Division established and coordinates the GNWT Inter-departmental Species at Risk Committee (InterSARC). The InterSARC includes representatives from all Managing This Land departments and is consulted during the development and review of national and territorial species at risk documents and species range plans (e.g., boreal caribou, wood bison, Bathurst range plan, etc.).

The new *Wildlife Act* requires new and updated wildlife regulations that will affect NWT residents. Legal counsel and a dedicated drafter for the development of the regulations from Department of Justice have been assigned to work with ENR. As new regulations are developed after November 2014, ENR will also be engaging the departments of Aboriginal Affairs & Intergovernmental Relations and Industry, Tourism & Investment in the development and review of regulations of interest to those Departments.

To ensure current and future development is environmentally sustainable ENR works with a number of Departments:

- Joint work with Department of Transportation on the Wildlife Effects Monitoring Program and Wildlife and Wildlife Habitat Protection Plan for the Inuvik to Tuktoyaktuk Highway.

- Inter and Intradepartmental initiative to develop a range plan for the Bathurst herd. Participants include Departments of Transportation; Industry, Tourism and Investment; Education, Culture and Employment; and Lands. Government of Nunavut, Aboriginal organizations from Nunavut and Saskatchewan, industry, and non-government organizations are also participating in this process.

Performance Measures

Outcome: Informing the public on wildlife monitoring and management activities in the NWT
Measure 1 – Number of documents made available to the public

The release of public documents relating to biodiversity and species at risk conservation, data management, conservation education, public information, and wildlife legislation improves the Department's service delivery and accountability. These documents provide essential information to help maintain the integrity and biological diversity of wildlife and natural ecosystems by encouraging the public stewardship of wildlife resources.

Over 40 documents were completed in 2013-14 and made available to the public:

- 2013 South Slave Biennial Wildlife Workshop report
- 2013-2014 Sport Fishing Guide (English and French)

- 2013-2014 Summary of Hunting Regulations (English and French)
- Species Status Report for Northern Leopard Frog in the NWT (Species at Risk Committee 2013)
- Species Status Report for Dolphin and Union Caribou in the NWT (Species at Risk Committee 2013)
- 2012-13 Species at Risk Committee Annual Report
- 2012-13 Conference of Management Authorities Annual Report
- 2012-13 ENR *Species at Risk (NWT) Act* Annual Report
- Polar Bear Fact Sheet (in preparation to list under the *Species at Risk (NWT) Act*)
- Boreal Caribou Fact Sheet (in preparation to list under the *Species at Risk (NWT) Act*)
- Peary Caribou Fact Sheet (in preparation to list under the *Species at Risk (NWT) Act*)
- Hairy Braya Fact Sheet (in preparation to list under the *Species at Risk (NWT) Act*)
- Dehcho Boreal Caribou Working Group newsletters
- Dehcho Boreal Caribou Program progress report
- Cli Lake Ecology Camp report
- New Wildlife Act for the Northwest Territories – Plain Language Version
- Tundra Ecosystem Research Station brochure
- 14 Manuscript Reports
- 5 File Reports
- Species at Risk in the NWT: 2014 booklet (English and French)
- 2012 Annual Report of Wildlife Research in the NWT
- Be Bear Aware coloring booklet
- Northern Arctic Ecosystem booklet and posters
- Fire and Wildlife in the NWT Northern Forests brochure

Target for 2015/16: Complete and release 20 public documents

Outcome: Wildlife Management is supported by research and monitoring
Measure 2 – Number of wildlife research and monitoring programs, workshops and conferences where wildlife programming was discussed

Ongoing monitoring programs are necessary to establish the status of various species in the NWT (e.g., size, distribution, trend, etc.). This information is used to determine if and what type of management actions are needed to ensure a given population is available for current and future generations (e.g., harvest management actions, etc.).

Research programs address specific program needs and are typically done in collaboration with industry and/or university partners. Research helps us understand the factors that drive the status of a given population and if and how any negative factors can be mitigated (i.e., why a given population may be increasing or decreasing).

Conferences and workshops are a way of bringing partners together to discuss wildlife issues, including new ways of monitoring, how to address given management concerns, and if there is a need for new or additional research and monitoring work. Partners include governments (federal, territorial/provincial, and Aboriginal), academia, and industry.

The following table describes the wildlife surveys completed by regional and headquarters staff from 2009 to March 2014. It also describes conferences and workshops where wildlife programming was discussed with co-management partners.

Description	2009/10 surveys		2010/11 surveys		2011/12 surveys		2012/13 surveys		2013/14 surveys	
	#	Location	#	Location	#	Location	#	Location	#	Location
Barren-ground Caribou (Tuktoyaktuk Peninsula, Cape Bathurst, Bluenose West, Bluenose East, Bathurst, Beverly, and Ahiak herds; monitoring also includes ongoing harvest monitoring and ongoing monitoring of movements via collars)										
Calf recruitment, population size, fall sex ratio, calving ground reconnaissance surveys	15	Inuvik, Sahtu, North Slave, South Slave, Nunavut	11	Inuvik, Sahtu, North Slave, South Slave, Nunavut	13	Inuvik, Sahtu, North Slave, South Slave	7	Inuvik, Sahtu, North Slave, South Slave, Nunavut	14	Inuvik, Sahtu, North Slave, South Slave, Nunavut
Bats										
Distribution, White Nose Syndrome, hibernaculum	1	South Slave	1	South Slave	1	South Slave	1	South Slave	1	South Slave
Dall's Sheep										
Productivity, recruitment, population size	1	Sahtu	2	Sahtu, Inuvik	1	Sahtu	1	, Sahtu	1	Sahtu
Ecoregion Mapping										
ground surveys	1	Inuvik, Sahtu, North Slave	1	Inuvik	1	Inuvik	0		0	
Furbearers										
Winter track count and trapping success	1	North Slave	1	North Slave	1	North Slave	1	North Slave	1	North Slave
Grizzly Bears (monitoring includes ongoing harvest monitoring in Inuvik)										
Population size - DNA surveys	0		0		0		1	North Slave (led by diamond	2	Inuvik to Tuktoyaktuk Highway, North Slave

Description	2009/10 surveys		2010/11 surveys		2011/12 surveys		2012/13 surveys		2013/14 surveys	
	#	Location	#	Location	#	Location	#	Location	#	Location
								mines)		(led by diamond mines)
Invasive Species										
Baseline monitoring	1	All regions	1	All regions	1	All regions			1	All regions
Moose										
Number and productivity	2	South Slave; Dehcho	3	Dehcho; Gwich'in Settlement Area and Inuvialuit Settlement Region	2	Dehcho, South Slave	4	North Slave, Sahtu, Dehcho, South Slave	1	Dehcho
Mountain Goat										
Number and distribution	0		0		1	Dehcho	1	Dehcho	1	Dehcho
Muskox										
Number and productivity of muskox	1	North Slave Region	2	Inuvik	1	South Slave	1	Inuvik	0	
Northern Leopard Frogs, Chorus Frog, Canadian Toad, Wood Frog										
Densities and prevalence of diseases	1	South Slave	1	South Slave	1	South Slave	1	South Slave	1	South Slave
Peary Caribou										
Population survey	1	Northwest Victoria Island, Inuvik	0		0	1	Melville and Prince Patrick Islands, Inuvik			
Peregrine Falcons										
North American Peregrine Falcon Survey (once every 5 years)	0		2	North Slave, Dehcho, Sahtu, Inuvik	next survey in 2015	0	next survey in 2015	0	next survey in 2015	0
Polar Bears (monitoring includes ongoing harvest monitoring in Inuvik and a traditional knowledge study on polar bears)										
Subpopulation updates	0		0		2	Inuvik - pilot aerial survey (Southern Beaufort Sea subpopulation); Viscount Melville	1	Inuvik - Viscount Melville	1	Inuvik - Viscount Melville
Rare species										
Distribution and abundance	0		0		1	Inuvik (for *Braya pilosa*)	0		1	NWT wide
Small mammals (e.g., mice, voles, and lemmings) and snowshoe hares										
Live and snap trapping and pellet counts	28	All regions	28	All regions	21	All regions	24	All regions	24	All regions
Wolf										
Monitor productivity at den sites	2	North Slave	2	North Slave	2	North Slave	2	North Slave	2	North Slave
Carcass collection	3	North Slave, Inuvik, Dehcho	3	North Slave, Inuvik, Dehcho	5	All regions	5	All regions	3	Inuvik, Sahtu, North Slave
Wolverine										
Monitor density of wolverine	1	North Slave	0		1	North Slave	0		1	North Slave
Carcass collection	5	All regions	5	All regions	5	All regions	5	All regions	1	Inuvik
Wood Bison (for the Nahanni population, monitoring includes ongoing monitoring of movements via collars)										

Description	2009/10 surveys		2010/11 surveys		2011/12 surveys		2012/13 surveys		2013/14 surveys	
	#	Location	#	Location	#	Location	#	Location	#	Location
Monitoring (calf recruitment, population surveys)	3	Dehcho, North Slave, South Slave	1	Dehcho	5	Dehcho, North Slave, South Slave	2	Dehcho, North Slave, South Slave	4	Dehcho, North Slave, South Slave
Woodland Caribou (monitoring includes ongoing monitoring of movements and survival via collars in the Dehcho and South Slave regions and previously in the Sahtu, Inuvik, Dehcho and South Slave regions)										
Calf recruitment surveys	4	Inuvik, Sahtu, Dehcho, South Slave	4	Inuvik, Sahtu, Dehcho, South Slave	2	Dehcho, South Slave	2	Dehcho, South Slave	2	Dehcho, South Slave
Conferences and Workshops										
13th International Arctic Ungulate Conference	0		0		1	Yellowknife	0		0	
Regional wildlife workshops	1	South Slave	1	Dehcho	1	South Slave	1	Dehcho	1	South Slave
Slave Geological Province Wildlife Workshop and Cumulative Effects Workshop	0		0		1	Yellowknife	2	Yellowknife	1	Yellowknife
Tundra Ecosystem Research Station										
R&M program (wildlife, water quality and quantity, vegetation, climate change, and insects)	15-20	North Slave	15-20	North Slave	15-20	North Slave	15-20	North Slave	15-20	North Slave
Tundra Science Culture Camp	1 (~16 students)	North Slave	1 (~16 students)	North Slave	1 (~16 students)	North Slave	1 (~16 students)	North Slave	1 (~16 students)	North Slave

Target for 2015/16: Conduct at least 60 wildlife research and monitoring programs across the NWT (including at TERS); hold a minimum of 2 wildlife workshops, and hold a Tundra Science Culture Camp.

Outcome: Ongoing monitoring and timely detection of wildlife disease

Measure 3 - Number of samples analyzed for disease

Ongoing disease monitoring is necessary to verify the health of the NWT's wildlife, which provides sustenance for many NWT residents. Ongoing monitoring is also necessary to quickly identify any new diseases (e.g., chronic wasting disease) and to ensure that measures meant to curtail the spread of a given disease are implemented quickly (e.g., anthrax surveillance measures for wood bison).

The following table describes wildlife health studies conducted from 2008 to 2014.

Study	Positives (samples tested) 2008-09	Positives (samples tested) 2009-10	Positives (samples tested) 2010-11	Positives (samples tested) 2011-12	Positives (samples tested) 2012-13	Positives (samples tested) 2013-14
Wildlife & Zoonotic Diseases						
Anthrax Cases (Wood bison)	0 (7 surveillance flights)	0 (7 surveillance flights)	55 (7 surveillance flights)	0 (7 surveillance flights)	451 (detected on 1st surveillance flight)	0 (8 surveillance flights)
Anthrax Serology (non-lethal exposure – Wood bison)	n/a	n/a	81 (356)	81 (356)	n/a	n/a
Avian Influenza & West Nile (Birds)	0 (38 birds)	0 (50 birds)	not detected	not detected	not detected	not detected
Brucellosis & Tuberculosis in Wood Bison - Mackenzie & Nahanni herds	0 (60)	0 (399)	0 (36)	not detected	not detected	not detected
Brucellosis (Caribou)	not detected	5 (227)	not detected	not detected	not detected	not detected
Caribou Health & Condition Monitoring	94 tested	300 tested	230 tested	100 tested	194 tested	168 tested
Chronic Wasting Disease (Caribou)	0 (104)	0 (75)	0 (100)	0 (100)	not detected	not detected
Giardia (multiple species)	n/a	Detected (100)	n/a	n/a	n/a	n/a
Hunter submitted samples	Various diseases detected (200)	Various diseases detected (100)	Various diseases detected (400)	Various diseases detected (200)	Various diseases detected (~200)	Various diseases detected (~200)
MAP (Johne's disease)	n/a	n/a	n/a	34/144	n/a	n/a
Mosquite borne viruses (animal and zoonotic)	0 (12 weeks of mosquito sampling)	0 (12 weeks of mosquito sampling)	0 (12 weeks of mosquito sampling)	0 (12 weeks of mosquito sampling)	0 (12 weeks of mosquito sampling)	0 (12 weeks of mosquito sampling)
Rabies (canids)	4 (17)	5 (57)	5 (59)	4 (10)	11 (17)	6 (188)
Small mammal – zoonotic diseases	n/a	Various diseases detected (520)	Various diseases detected (500)	n/a	Various diseases detected (~100)	Various diseases detected (~100)
Toxoplasma (caribou)	n/a	5 (227)	n/a	n/a	n/a	n/a
Trichinella (Bear & Wolves)	77% of wolves +ve	50% of wolves +ve	52% of wolves +ve	n/a	n/a	TBD
	n/a grizzly bears	73% grizzly bears	73% grizzly bears	n/a	n/a	TBD
	7% black bears +ve	5% black bears +ve	6% black bears +ve	n/a	n/a	TBD
	282 tested	140 tested	158 tested	n/a	n/a	Testing Pending (157)
Wolves (parasite survey)	n/a	n/a	n/a	72 tested: 49% prevalence	n/a	Testing Pending (51)
Contaminants						
Moose	Health Advisory Issued in 2009 (46)	Health Advisory Issued (46)	Normal Background Levels (64)	Normal Background Levels (20)	Normal Background Levels (30)	Testing Pending (40)

Study	Positives (samples tested) 2008-09	Positives (samples tested) 2009-10	Positives (samples tested) 2010-11	Positives (samples tested) 2011-12	Positives (samples tested) 2012-13	Positives (samples tested) 2013-14
Caribou	Normal Background Levels (108)	Normal Background Levels (43)	Normal Background Levels (20)	Normal Background Levels (15)	Normal Background Levels (16)	Testing Pending (60)

Target for 2015/16: Continue to test for over 20 diseases and contaminants in wildlife.

KEY ACTIVITY 5 – WATER RESOURCES

Description

The Water Resources Division ensures the water resources stewardship and management objectives of the government and of the Department are met in an integrated and timely manner. The Division maintains continuous liaison with all public and private sector organizations with responsibilities for sound water resources stewardship in the NWT.

Working closely with NWT boards that issue water licences, the Water Regulatory section advises on technical matters such as impact assessment, mitigation measures, best management practices, contingency plans, closure planning and water licence conditions related to development projects in the NWT. The section also coordinates the Ministerial decision process for Type 'A' water licences. The division keeps pace with innovative means to address the water-related implications of development in the NWT. The section is responsible for the provisions of policy and procedural advice related to the *Mackenzie Valley Resource Management Act*, the *Waters Act*, and associated Regulations. The section is also responsible for assessing and estimating the security provisions on behalf of ENR for the consideration of the NWT regulatory Boards. Upon request, the section also assists in the development of land claims and other government agreements.

The Watershed Programs and Partnerships section bears the key responsibility of ensuring the NWT Water Stewardship Strategy is implemented effectively. This section is also responsible for establishing transboundary water agreements with other jurisdictions throughout the Mackenzie River Basin, undertaking community-based monitoring programs, and leading source water protection and Traditional Ecological knowledge (TEK) initiatives. The principles of ecosystem-based management within watersheds and informing decisions through science, local and traditional knowledge are key to this work. This section works with other sections within the division to ensure that the quality, quantity, flow and safety of water resources in the NWT remain protected for future generations.

The Water Research and Studies section ensures that knowledge required to inform water resources management decisions and develop water resources programs is current and relevant. This section is responsible for collecting information about the existing water quality and quantity conditions throughout the in the NWT. Additionally, the section works with specialists and researchers to better understand the northern climate and environment, and utilizes this knowledge and information to identify water management priorities for the NWT.

The Taiga Environmental Laboratory is also managed through Water Resources. This accredited Lab offers services to public and private enterprises throughout the NWT. Samples analyzed at Taiga contribute to baseline datasets, are utilized in the regulation of northern projects, and help ensure drinking water is safe. Overall, the analysis conducted at Taiga supports sound environmental decision-making across the NWT. Further, several staff at Lab are designated an

"Analyst" under the *Waters Act* and have obligations for the provision of specialist advice to co-management boards throughout the NWT.

Responding to Goals and Priorities of the Legislative Assembly

Priority 1 – Building a Strong and Sustainable Future for our Territory

Water Resources Division (WRD) will continue to ***strengthen relationships with Aboriginal and other northern governments*** through the following activities:

Water Stewardship Strategy and Action Plan:

- Continue to engage all water partners during the implementation of the Strategy and development of a new Action Plan.
- Continue to work with the Aboriginal Steering Committee as an advisory body and information conduit to respective Aboriginal governments.
- Enable communities to identify research and monitoring prioritizes in their local water shed and provide mechanisms for becoming involved in monitoring research activities.

Traditional Knowledge Implementation:

- Continue to identify and monitor TK initiatives as a component of ENR's standard business planning processes and other planning activities.
- Include local and traditional knowledge throughout the implementation of the Strategy.

WRD will continue to assist in the ***implementation of the devolution final agreement*** through the following activities:

Agreements:

- Work with Parties to the Mackenzie River Basin Board to ensure that the Mackenzie River Basin Transboundary Waters Master Agreement is amended to reflect changes associated with Devolution.
- Work with the Government of the Yukon to ensure that the NWT-YT Bilateral Water Management Agreement is amended to reflect changes associated with Devolution.
- Establish annual bilateral agreement with Environment Canada for the operation of hydrometric monitoring stations throughout the NWT, to reflect the GNWT's new role as the primary water manager in the NWT.

Contaminated Site Assessments:

- Through coordination with Environment's Contaminated Sites Unit, undertake water-related studies and assessments at contaminated sites which would include site visits.

- Provide analysis and criteria for determining if these sites are fully remediated and could be transferred to the GNWT.

WRD will continue ***working with our partners to ensure responsible stewardship through our land and resource management regime.*** Planned activities to support this priority include:

NWT Water Stewardship Strategy and Action Plan:

- Continue to coordinate the implementation of the Strategy and Action Plan.
- Work with all water partners to create a new Action Plan for 2016-21.
- Remain active in the Joint Canada-Alberta Implementation Plan for Oil Sands.
- Monitor and promote NWT-related research and monitoring.
- Work with national and international organizations to fund implementation of the Strategy and Action Plan.
- Continue to support NWT communities on the NWT-wide community-based water quality monitoring program by providing water quality monitoring equipment and associated training materials. Training will also be delivered to interested communities upon request.
- Continue to develop and implement collaborative research partnerships with NWT communities, water partners and academic institutions, (e.g., the Wilfrid Laurier-GNWT Partnership Agreement, the Slave Watershed Environmental Effects Program, the Delta Dialogue Network, etc.) that can inform effective watershed decision-making, support community-based monitoring, support development of aquatic ecosystem health indicators, improve mechanisms of knowledge mobilization and support locally- and culturally-appropriate approaches to linking multiple knowledge systems.
- Building on community workshops to gather traditional and local knowledge perspectives, and ongoing work with the Canadian Water Network and other western science experts, ENR will continue to work with partners to collaboratively define appropriate aquatic ecosystem health indicators for NWT waters that draw on multiple knowledge perspectives.
- Work with communities, non-government organizations and other GNWT departments (Municipal and Community Affairs, Health and Social Services, and Public Works and Services) on source water protection initiatives.
- Undertake the development and implementation of municipal wastewater effluent regulations for Canada's Far North under the *Canada-wide Strategy for the Management of Municipal Wastewater Effluent*.

Transboundary Agreements:

- Negotiate Bilateral Transboundary Water Management Agreements with Yukon and Saskatchewan. Continue to consult with northern and Aboriginal groups about the agreements.
- Implement completed Bilateral Transboundary Water Management Agreements with Alberta and British Columbia.

Regulatory Review:

- Continue to provide technical review comments on behalf of ENR to NWT Land and Water Boards related to water use, waste disposal, monitoring plans, mitigation plans, contingency plans, closure and reclamation and security.
- Continue to provide policy and procedural advice internal to the GNWT, and externally to Land and Water Boards and industry, related to major development projects in the NWT.
- Continue to coordinate the Ministerial decision process for Type "A" water licences issued by regulatory Boards.
- Continue to contribute to effective land and resource management in the NWT.

Laboratory Services:

- Continue the provision of water quality analytical services to the public and private sector.
- Maintain accreditation through the Canadian Environmental Laboratory Association.
- Continue to provide technical advice to Land and Water Boards as the "Analyst" designated under the *Waters Act*.

Water Research and Studies (other than Community Based Monitoring):

- Continue long-term water quality and quantity monitoring networks throughout the NWT. Ensure timely compilation of data and placement in Lodestar database.
- Prepare detailed and summary reports on NWT water quality conditions at locations sampled (e.g., transboundary rivers). Review and update as required.
- Prepare annual reports on hydrometric monitoring activities.
- Disseminate information to water partners. Hold community meetings to discuss results, where required. Ensure reports are publicly available on the Divisional website.

Information Systems:

- Continue work on the development and implementation of the water quality database system (LodeStar). LodeStar will help improve the timeliness and availability of water quality data queries, reports and water quality analyses for the NWT.
- Work with external organizations to develop online information systems which could facilitate the timely dissemination of community based monitoring information.

Priority 3 – Strengthen and Diversify Our Economy

WRD will continue to assist **strategic infrastructure investment such as the Inuvik-Tuktoyaktuk highway, the Mackenzie fiberoptic link, and hydro initiatives** through the following activities:

- Provide technical input to assist proponents (i.e. DOT, NTPC, etc.) in the development of mitigation, monitoring and follow-up programs for the construction and operation of all strategic investment projects.
- Provide technical comments related to water use, waste disposal, monitoring plans, mitigation plans and contingency plans.
- Provide policy and procedural advice internally to the GNWT and externally to Land and Water Boards on major infrastructure projects in the NWT.
- Continue to coordinate the Ministerial decision process for Type "A" water licences.
- Work with other Departments and Crown Corporations to fill information gaps with respect to environmental conditions (i.e., water quality and quantity) at proposed or existing infrastructure.

WRD will work to ***support the Mackenzie Gas Pipeline project*** through the following activities:

- Provide technical comments and guidance to applicable Land and Water Boards during regulatory permitting processes.
- Coordinate the Ministerial decision process for any Type "A" water licences issued by the Land and Water Board(s) for the pipeline.
- Re-visit historical sampling program conducted along the proposed pipeline route. Working with the proponent and other stakeholders, collect additional baseline information on stream crossings along the pipeline right-of-way, as necessary, to assist in design and assessing impacts of the pipeline on water quality and quantity.
- Continue to use the existing and future baseline data to assess and mitigate the potential impacts to water quality and quantity from the project.

WRD will support ***developing a socially responsible and environmentally sustainable economic development and mining strategy*** through the following activities:

- Finalize development of and implement the framework document for the derivation of water quality standards, also referred to as site-specific water quality objectives (SSWQOs), for development projects in the NWT.
- Work to further the development of the water classification system designed to consider the sensitivities of NWT waters based on physical, chemical and social aspects.
- Conduct information sessions and engagement activities with local Aboriginal groups, industry and other stakeholders to describe the framework document and the derivation process.

WRD will assist in ***improving the regulatory process*** through the following activities:

- Work internally with other ENR Divisions to develop and revise guideline documents focused on assisting industry in understanding regulatory requirements for: aquatic effects monitoring programs, closure and reclamation, waste management plans, spill contingency plans, baseline collection, etc.
- Work internally with other ENR Divisions to develop and or update policy documents formally issued by Aboriginal Affairs and Northern Development Canada related to the mining industry (e.g. Mine Site Reclamation Policy, Policy respecting Bulk Water Removal in the NWT, etc.).
- Continue to coordinate the Ministerial decision process for Type "A" water licences.
- Work to update internal and external regulatory procedures (as required) to assist in the implementation of a single Land and Water Board for the Mackenzie Valley, scheduled for April 1, 2015.

Departmental Highlights

- The NWT-wide community-based water quality monitoring program has grown substantially; now working with over 20 communities on 41 sites.

- ENR, as part of the Slave River and Delta Partnership, collaborated with the University of Saskatchewan, the Peace-Athabasca Delta Ecological Monitoring Program and communities in Saskatchewan to develop and submit a proposal to the Social Sciences and Humanities Research Council (SSHRC). The proposal to create the 'Delta Dialogue Network' was successfully funded for two years. The project will focus on knowledge mobilization and developing locally- and culturally-appropriate tools for sharing information related to aquatic ecosystem health research and monitoring.

- ENR, in collaboration with the Mackenzie River Basin Board Traditional Knowledge and Strengthening Partnerships Steering Committee and the University of Alberta, collaborated to develop and submit a Letter of Intent (LOI) to SSHRC for a seven-year, large-scale, multi-jurisdictional research project on traditional knowledge and its role in water governance. The LOI was successful, and the team has been invited to submit a full proposal in Fall 2014.

Cross-Departmental Initiatives

Interdepartmental Water and Wastewater Management Committee

ENR works with Municipal and Community Affairs, Health and Social Services, and Public Works and Services) on source water protection initiatives and as technical support to the Interdepartmental Water and Wastewater Management Committee.

Performance Measures

Outcome: Active participation on interjurisdictional water initiatives contributes to the protection of NWT waters

Measure 1 - Number of Inter-jurisdictional meetings attended on water initiatives

Protecting territorial waters is a strong priority for the people of the Northwest Territories. This means that water management decisions must be made in a way that considers what happens throughout basins or watersheds. Improvements are made as multiple jurisdictions discuss a more integrated approach to knowledge and decision-making from regional to national scales. One way to measure this interaction and collective dialogue is tracking inter-jurisdictional meetings on water initiatives. Regionally, work has focused on increasing understandings and process related to the Mackenzie River Basin's transboundary water management since much of the NWT's water resources are influenced by decisions made on upstream activity in British Columbia, Alberta, Saskatchewan, and the Yukon. Rapid and extensive development of oil sands in Alberta's Lower Athabasca region and the anticipated Site C hydroelectric development downstream from the Bennett Dam in British Columbia have heightened community concerns about water quality, water quantity and traditional harvests of wildlife and fish.

Year	Number of meetings
2010/2011	6
2011/2012	16
2012/2013	13
2013-2014	12

Target for 2015/16: 12 meetings

Outcome: Internal and external water partners remain engaged in NWT Water Stewardship Activities

Measure 2: Number of engagement activities undertaken within regions to promote water stewardship

Water stewardship engagement activities are an essential means to ensure sustainable water resources management in the NWT.

In 2013/14, 32 activities were undertaken within regions to promote water stewardship. These activities included engagement on the Water Strategy as a whole, preparation for transboundary water management agreements, community-based monitoring workshops and monitoring events, source water protection workshops, and the Wilfrid Laurier Partnership meetings.

Year	Number of Engagement Activities
2010/2011	25
2011/2012	35
2012/2013	60
2013-2014	32

Target for 2015/16: 30 engagement activities.

Outcome: NWT water management is supported through ongoing monitoring and availability of information

Measure 3 - Number of water monitoring locations

Water monitoring information is required throughout the territory to support water management activities and decision making. To this end, the Water Resources Division of Environment and Natural Resources undertakes independent water monitoring activities to better understand NWT water resources. In addition, the Department works directly with NWT communities to undertake community-based monitoring programs, which adds to this baseline understanding while also potentially addressing community concerns. It is important to note that on April 1, 2014, ENR water monitoring activities expanded with the transfer of staff and resources from AANDC.

Where possible, data sharing activities are encouraged through partnerships with other government departments, other levels of government, research institutions and universities.

Community-based Monitoring Program

ENR's community-based monitoring program began monitoring sites across the NWT in the summer of 2012. The program has expanded significantly since that time. The program uses grab samples, YSI sondes, polyethylene membrane devices (PMDs) and diffusion gradient thin-films (DGTs) to sample water quality during the ice-free season.

Year	Number of Monitoring Locations
2012	**25**
2013	**39**

Target for 2015/16: 42 monitoring locations

The following outlines monitoring activities conducted since April 1, 2014:

The Water Research and Studies section of the Water Resources Division conducts general monitoring throughout the NWT; the responsibility for this monitoring has been transferred to the GNWT from AANDC. The monitoring includes water quality and quantity as well as meteorological monitoring which is used to inform water balance assessments for the Territory. The data collected is used to support water management decisions and to track natural and non-natural (human induced) changes on water quality and water quantity. Note that the Water Resources Division is in partnership with the Water Survey of Canada (WSC) to support the operations of the NWT Hydrometric Network Program. The following monitoring activities are described according to its purpose:

NWT Water Quality Network

Grab samples of water quality and quantity are measured at multiple locations across NWT. Number of monitoring locations for 2014/15 will be reported on in the next business plan. Target for 2015/16: 16 monitoring locations

NWT Hydrometric Network

In addition to a Baker Creek hydrology study and the annual snow survey, hydrometric monitoring (water flow and level) occurs across NWT and meteorological parameters, including water level, air temperature, wind, precipitation, wind direction, evaporation, etc., are measured at various sites in NWT. Number of monitoring locations and meteorological stations for 2014/15 will be reported on in the next business plan. Target for 2015/16: 91 hydrometric monitoring locations and 8 meteorological stations.

Outcome: Sound and timely resource management decisions continue to be made in the NWT
Measure 4 - Number of water licence/environmental assessment processes participated in

The Water Regulatory section of the Water Resources Division is responsible for providing technical advice and support to the Land and Water Boards of the NWT. The Water Regulatory section provides technical review of resource development project and associated management plans required under water licences. Technical reviews include all aspects of the project from the initial application through environmental assessment (if applicable), permitting, licencing, and approval processes which may require Ministerial approval in accordance with the Waters Acts and Regulations.

Regulatory reviews are required regularly throughout the year and can be related to: annual reports, monitoring programs, water management plans, spill contingency plans, waste management plans, tailings management plans, erosion and sedimentation plans, operation and maintenance plans, closure and reclamation plans, geotechnical investigations, etc.

Number of water licence/environmental assessment processes participated in 2014/15 will be reported in the next business plan.

Target for 2015-2016: The regulatory process is dynamic with applications that are delayed, sent to Environmental Assessment and or cancelled.

- Technical review comments anticipated for over 150 plans, applications, etc.
- Participation in at least 3 technical sessions
  - Mackenzie Valley Highway, CZN All-weather Road, Diavik Diamond Mine Renewal
- Represent ENR at 3 Public Hearings
  - Mackenzie Valley Highway, CZN All-weather Road, Diavik Diamond Mine Renewal

Outcome: Internal and external clients are provided with high quality and timely analytical services

Measure 5 - Laboratory analyses on time and within hold times

The Taiga laboratory is an accredited laboratory providing water quality analytical services to municipalities, explorations project, major development projects and infrastructure developments activities throughout the NWT and Nunavut. Services provided by Taiga compliment regulatory authorizations, as all licences require proponents to conduct compliance monitoring. Water quality analytical data is required in order to determine compliance with regulatory limits. Having a laboratory in the NWT is critical at ensuring time sensitive water quality analyses can occur even from remote development projects located throughout the NWT.

The Taiga Laboratory receives numerous water samples over the year and processes them in a timely manner in order to meet client demands and quality assurance requirements (i.e. hold times).

Target for 2015-2016: Taiga Lab forecasts to analyze 1000+ sets of samples and 50+ sets of legal samples. Greater than 90% of standard lab analysis samples and 95% of rush lab analysis samples will be on time. Taiga Lab will work to ensure no exceedences of hold times for samples in their custody.

KEY ACTIVITY 6 – CONSERVATION, ASSESSMENT AND MONITORING

Description

The Conservation, Assessment and Monitoring Division (CAM) works to ensure that the NWT environment figures prominently in regional land use planning, including conservation lands, and the review of proposed development within the regulatory system. The division also leads the development of appropriate monitoring of valued environmental components to assist in the determination of cumulative impacts resulting from development. Secretariat functions are provided through this division to ensure that Aboriginal governments are able to participate in CAM initiatives.

The Conservation Planning section leads the establishment of protected areas and the development of an ecological representation network to help maintain a healthy environment in the NWT. Initiatives are undertaken to ensure that economic development is balanced with the protection of important ecosystems and special cultural areas. Conservation planning involves all people and groups with an interest in the land. It promotes a sound approach to land use decision-making by including the best available traditional, ecological, cultural, and economic knowledge. Additionally, Conservation Planning coordinates ENR's input into overall Government initiatives and approval related to regional land use planning.

The Environmental Impact Assessment (EIA) section oversees departmental participation in the NWT regulatory process including environmental impact assessment and water license and land use permit approvals. EIA advises the Impact Review Board and land and water boards on measures to be taken to protect or mitigate impact on the environment and following up to ensure that these measures have been taken. This section also administers a funding program (IRMA) to build capacity to participate in the regulatory process in areas of the NWT where Aboriginal claims have not been finalized. Additionally, it oversees the GNWT input and requirements of Environmental Agreements.

The Cumulative Impact Monitoring Program works with Aboriginal governments to ensure that the legal and land claims requirements of cumulative impact monitoring are undertaken throughout the NWT. Initiatives ensure that valued components of the environment are monitored effectively so that the cumulative impacts of concurrent and sequential uses of land and water and deposits of waste are understood. This monitoring relies upon scientific data and traditional knowledge. Every five years the program coordinates an environmental audit of the NWT's environmental management system required under the *Mackenzie Valley Resource Management Act.*

Responding to Goals and Priorities of the Legislative Assembly

Priority 1 – Building a Strong and Sustainable Future for our Territory

Conservation Assessment and Monitoring (CAM) will continue to ***strengthen our relationships with Aboriginal and other northern governments*** by continuing to have CIMP activities guided by recommendations from an Aboriginal Steering Committee that includes representatives from eight Aboriginal governments, the territorial and federal government, as well as a variety of observers. In 2015-16, the Committee will meet four times to make recommendations on topics ranging from strategic planning to project funding, and will also hold two meetings to provide guidance and advice on the NWT Environmental Audit. Involvement of the Aboriginal Steering Committee ensures that CIMP and the audit meet the needs of Aboriginal governments. Conservation planning will re-engage Aboriginal and other northern governments partners who have invested into existing candidate protected area initiatives and outline reasonable timelines for final decisions on these areas.

CAM will continue ***working with our partners to ensure responsible stewardship through our land and resource management regime*** by building and refreshing partnerships established through the PAS and work with these partners on the enhancement of territorial protected areas designations (Northern conservation tools); further develop the Ecological Representation Network Plan, including an Action Plan; develop a communication plan and release the first edition of the NWT State of the Protected Areas Report; develop guidance around the use Conservation Areas under the new *Wildlife Act* and appropriate designations under the *NWT Parks Act*; and through CIMP provide funding, logistical support and direction to research and monitoring projects that address priority questions. Research and monitoring results are reported in publications, online and through regulatory processes. This information is then used to make responsible stewardship decisions.

Priority 3 – Strengthen and Diversify Our Economy

In support of ***developing a socially responsible and environmentally sustainable economic development and mining strategy,*** CAM will complete the review of the PAS Non-renewable Resource Assessment Guidelines to ensure the guidelines are appropriate and useful for anticipated needs for GNWT.

CAM will continue to ***support the traditional economy****, by* building linkages between Conservation Planning and NWT Tourism initiatives, as appropriate, such as culture-based tourism and conservation economic strategies.

CAM will continue to help ***improve our regulatory processes*** through the following activities:

- CIMP will monitor regulatory processes and provide advice on cumulative impact monitoring and monitoring results as appropriate;

- CIMP will continue to fund projects that have a direct impact on regulatory decision-making. CIMP will produce a hydrodynamic model of Lac de Gras, developed in collaboration with industry and regulators that will allow parties to regulatory processes in the Lac de Gras region to model cumulative impacts on water quality;
- CIMP will facilitate the 2015 NWT Environmental Audit by engaging Aboriginal governments through an Audit Committee, contracting an independent auditor, supporting the auditor as required, and publically releasing the audit recommendations;
- Ensure regulations and management plans for established protected areas are consistent and compatible with current regulatory processes and do not add unnecessary duplication or complexity;
- Contribute to reporting and implementation guidance of the Sahtu and Gwich'in Land Use Plans; and
- Complete a review and evaluation of the Interim Resource Management Program.

Departmental Highlights

- There were major accomplishment in 2013 with the signing of the Sahtu Land Use Plan and the completion of the Tłı̨chǫ (private lands) Land Use Plan. The five-year review of the Gwich'in Land Use Plan is ongoing and in 2014 an amendment was made to ensure land withdrawals remained in place during this review. Dehcho Land Use Planning Committee has been developing an interim Dehcho Land Use Plan and this work is ongoing.

Cross-Departmental Initiatives

n/a

Performance Measures

Outcome: Provide timely information and technical analysis on proposed projects undergoing regulatory review to enable wise decision making

Measure 1 - Number of regulatory project reviews coordinated

EIA coordinated the submission of technical comments and recommendations from ENR Divisional and regional staff to resource management boards and agencies on 240 applications. These applications were for water licenses and land use permits throughout the territory as well as leases on Commissioner's Lands and Crown Land.

Table 1. Regulatory Applications Reviewed							
	2007-08	**2008-09**	**2009-10**	**2010-11**	**2011-12**	**2012-13**	**2013-14**
Water Licenses	29	3	39	32	36	52	51
Land Use Permits (Mackenzie Valley only)	93	56	66	64	65	62	56
Leases	40	132	51	65	73	84	98
Other Screenings (Inuvialuit region)	31	39	55	62	77	35	35
TOTAL	**193**	**230**	**211**	**223**	**251**	**233**	**240**

Target for regulatory applications reviewed in 2015/16 is 96%.

Outcomes: Meet all milestones within timeframes for environmental assessment, projects are reviewed to ensure minimal environmental impacts and appropriate compensation if any infringement on existing or potential Aboriginal or Treaty rights.

Measure 2 - Number of engagement activities for each environmental assessment and amendments for environmental agreements coordinated by EIA

Coordination is required for each phase of an environmental impact assessment and includes many internal ENR meetings, GNWT meetings, meetings with proponents, training and communication, information requests development and collation (of ENR departmental materials), technical report development, preparation for technical sessions and public hearings as well as representing and coordinating the department during the Report of Environmental Assessment decision phase.

Target for 2015/16: 50 engagement activities.

Outcome: Provide research and monitoring that assists environmental decision making processes

Measure 3 - Number of current environmental management decision making processes that CIMP-supported monitoring and research informs.

CIMP produces research and monitoring information that improves environmental management decisions. The results are used by NWT decision makers to make sound environmental management decisions. These decisions can include environmental assessments, land and water license reviews and wildlife management planning. Data users

include Aboriginal organizations, co-management boards, government, and industry.

Target for 2015/16: CIMP's target is to inform 20 current decision making processes.

Outcome: Partnerships ensure that CIMP research and monitoring addresses northern priorities

Measure 4 - Number of formal monitoring partnerships with Aboriginal governments, co-management boards, federal and territorial departments, academia and industry.

CIMP builds monitoring partnerships to produce information that is used to ensure responsible stewardship of the land. These partnerships are an important component of building environmental monitoring capacity and expertise in the NWT. In particular, CIMP builds strong partnerships with Aboriginal governments and co-management boards.

Target: In 2015/16, CIMP aims to maintain monitoring partnerships.

Outcome: Ongoing community and Aboriginal government engagement in creating core protected and other conservation areas.

Measure 5 - Number of community organizations and Aboriginal governments engaged in protected areas initiatives and dialogues with the conservation planning section.

NWT Protected Areas Strategy (PAS) guides protected areas planning and establishment within the NWT. The PAS partnership operates among communities, governments, environmental non-governmental organizations, and industry to identify, evaluate, establish, and ultimately manage protected areas across the NWT.

In 2013/2014, a total of 24 activities were undertaken in the NWT to promote establishment of protected areas. These activities include public engagement in general promotional booths at a variety of events, educational events, candidate protected area working group meetings, PAS Steering Committee meetings, PAS Team meetings and social media activities. We also visited 7 communities and published 12 different publication pieces.

It is anticipated that in 2014/2015 the number of engagement activities will increase due to reinitiating work on current candidate protected areas and moving forward with preliminary work on planning for ecological representation areas.

Consultation/Engagement	2013/2014 Candidate Core Protected areas and Conservation Areas Planning	2015/2016 Candidate Core Protected Areas and Conservation Areas Planning (Target)
# of Public Engagement Activities	24	30
# of Communities visited	7	10
# of publications distributed in total	12	19

Public Engagement consists of the following:

1. Public events, education and conferences:
    - Geoscience Conference: Presentation/poster/ booth
    - Aboriginal Assemblies and other regional community events
    - NWT school presentations and events
    - Local Yellowknife community events such as Folk on the Rocks, Traditional Knowledge Festival, Film Festival
    - Regional conferences focused on conservation
2. Candidate Protected Area Working Group Meetings sessions/meetings and public events coordinated by us - including conference calls.

A community refers to NWT communities visited as part of on-going engagement events.
Publications includes reports, newsletters, films, media stories, site sheets, fact sheets, public review processes, educational materials, web site updates, and advertisements developed and disseminated by Conservation Planning or in collaboration with PAS partners.

Outcome: Representative land in the NWT is set aside as core protected and conservation areas

Measure 6 - Number of core protected areas and other conservation areas (established and proposed) and area conserved

In the NWT, core protected areas and other conservation areas are key components of responsible land and resource stewardship by conserving biodiversity, ecological processes, and special natural and cultural values. Core protected areas are an integral component of a healthy conservation network and must meet the following criteria:

- limit industrial development through legal or other effective means;
- be ecologically intact;
- maintain a natural state in perpetuity;
- be large enough to be resilient; and
- have effective management and monitoring.

These criteria are in direct correlation to the International Union for the Conservation of Nature (IUCN) definition of protected areas. As a result, core protected areas in the NWT can be easily

measured using the IUCN protected areas classification system. Other conservation areas that are not core protected areas do not meet all IUCN criteria, but provide a valuable and complementary conservation function for the network.

For 2015-16, the goal is move at least 25% of the existing proposed candidate areas (i.e. at least two areas) into establishment as either core protected areas or other conservation areas.

Table 1: Core Protected Areas and other Conservation Areas – Established and Proposed (as of March 31st 2014)

Category	Total Number of Areas	Total Area (km²)
Established Core Protected Areas	**18**	**130,908**
IUCN Ia – Strict Nature Reserve	2	145[1]
IUCN Ib – Wilderness Area	4	44,875
IUCN II – National Park	5	74,570
IUCN III – Natural Monument or Feature	2	1,648
IUCN IV – Habitat/Species Management Area	0	0
IUCN V – Protected Landscape/Seascape	0	0
IUCN VI – Protected with Sustainable Use of Natural Resources	1	5,560
IUCN - not ranked	17	5,905
Established Other Conservation Areas	**49**	**53,593**
Proposed Candidate Areas	**8**	**75,140**
TOTAL ESTABLISHED AND PROPOSED AREAS	**75**	**259,641**

Note: These figures include the marine components of Migratory Bird Sanctuaries, but do not include Marine Conservation Areas.

[1] Banks Island Migratory Bird Sanctuary No. 2 overlaps completely with Aulavik National Park.

APPENDICES

Environment and Natural Resources

Appendix I - Financial Information

Schedule 1 - Operations Expense Summary

Schedule 2 - Explanation of Proposed Adjustments to Operations Expenses in 2015-16

Schedule 3 - Major Revenue Changes: 2014-15 Main Estimates to 2015-16 Business Plan

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Appendix II - Human Resources Reconciliation

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Schedule 2 - Human Resources Statistics

Appendix III - Infrastructure Investments

Appendix I - Financial Summary

Operations Expense Summary

Schedule 1

(thousands of dollars)

	2014-15 Main Estimates	PROPOSED ADJUSTMENTS						2015-16 Business Plan
		Sunsets	Initiatives	* Forced Growth	Internal Transfers	** Inter-Departmental Transfers and Other Adjustments	Amortization	
Corporate Management								
Directorate	**2,326**	-	-	63	-	(21)		**2,368**
Policy & Strategic Planning	**2,118**	-	159	39	-	(21)		**2,295**
Finance and Administration	**2,578**	-	32	109	-	(15)		**2,704**
Field Support	**1,411**	-	-	29	-	(14)		**1,426**
Corporate Costs	**2,805**	-	-	24	5	(12)		**2,822**
Amortization	**131**	-	-	-	-		2	**133**
	11,369	**-**	**191**	**264**	**5**	**(83)**	**2**	**11,748**
Environment								
Program Management	**781**			18		(20)		**779**
Environmental Protection	**2,064**			47		(34)		**2,077**
Climate Change	**4,882**	(1,990)	2,815	20		(4,511)		**1,216**
Waste Reduction	**100**							**100**
Waste Sites and Remediation	**357**		7			(15)		**349**
Amortization	**13**							**13**
	8,197	**(1,990)**	**2,822**	**85**	**-**	**(4,580)**	**-**	**4,534**
Forest Management								
Program Mgmt. & Presuppression	**20,392**			261		(314)		**20,339**
Suppression	**7,489**		(112)					**7,377**
Forest Resources	**3,121**			67		(10)		**3,178**
Amortization	**1,682**						55	**1,737**
	32,684	**-**	**(112)**	**328**	**-**	**(324)**	**55**	**32,631**
Wildlife								**-**
Wildlife Management	**584**			9				**593**
Biodiversity	**2,530**			34		(150)		**2,414**
Wildlife Research and Management	**6,660**	(1,000)		86		(25)		**5,721**
Field Operations	**5,884**	(10)		140		(34)		**5,980**
Amortization	**460**						17	**477**
	16,118	**(1,010)**	**-**	**269**	**-**	**(209)**	**17**	**15,185**
Conservation, Assessment and Monitoring								
Environmental Impact & Assessment	**3,084**		10	32		(7)		**3,119**
Program Management	**510**			9		(13)		**506**
Conservation Planning	**1,405**	(427)	7	25		(20)		**990**
CIMP	**3,382**		35			(45)		**3,372**
Amortization	**42**							**42**
	8,423	**(427)**	**52**	**66**	**-**	**(85)**	**-**	**8,029**
Water Resources								
Program Management	**1,212**		31					**1,243**
Watershed Management	**3,370**	(1,560)		1,595				**3,405**
Water Research & Studies	**2,560**		35	249	(1)	(45)		**2,798**
Taiga Environmental Lab	**1,436**		604		(4)	(10)		**2,026**
Water Regulatory	**2,096**		43			(90)		**2,049**
Amortization	**63**							**63**
	10,737	**(1,560)**	**713**	**1,844**	**(5)**	**(145)**	**-**	**11,584**
TOTAL DEPARTMENT	**87,528**	**(4,987)**	**3,666**	**2,856**	**-**	**(5,426)**	**74**	**83,711**

** Forced Growth amounts include Collective Bargaining increases.*

*** This category includes departmental reductions.*

(thousands of dollars)

		PROPOSED ADJUSTMENTS					
	Explanation of Proposed Adjustments	Sunsets	Initiatives	* Forced Growth	Internal Transfers	** Inter-Departmental Transfers and Other Adjustments	Amortization
Corporate Management							
Directorate	Collective Bargaining			63			
	Permanent Reduction					(21)	
Policy & Strategic Planning	Collective Bargaining			39			
	Permanent Reduction					(21)	
	French Language and Communications		139				
	Devolution-Collective Bargaining		20				
Finance and Administration	Collective Bargaining			109			
	Devolution-Collective Bargaining		32				
	FSS-Collective Bargaining Increases to Finance					(15)	
Field Support	Collective Bargaining			29			
	Permanent Reduction					(14)	
Corporate Costs	Collective Bargaining						
	Permanent Reduction					(12)	
	Transfer fr Taiga Lab-TSC Costs				5		
	TSC			24			
Amortization	Increase						2
		-	**191**	**264**	**5**	**(83)**	**2**
Environment							
Program Management	Collective Bargaining			18			
	Permanent Reduction					(20)	
Environmental Protection	Collective Bargaining			47			
	Permanent Reduction					(22)	
	Permanent Reduction-Energy Program Transfer to PWS					(12)	
Climate Change	Collective Bargaining			20			
	Energy Efficiency Incentive Program Enhancemer	(100)	100				
	Commercial Energy Conservation and Efficiency I	(200)	200				
	Biomass: Funding for Biomass Projects	(275)	275				
	Biomass: Promotion, Community Engagement and Project Evaluation	(175)	175				
	Solar: PV Electricity Generation	(500)	500				
	Solar: Smart Grid Technology	(125)	125				
	Wind: Storm Hills Wind Project	(50)					
	Wind: Wind Monitoring	(50)	50				
	Innovation: Alternative Energy Technology Program	(100)	100				
	NWT Greenhouse Gas Strategy						
	Core funding to Arctic Energy Alliance	(400)					
	Electric Vehicle Demo Project	(15)	15				
	Arctic Energy Alliance Contribution		400				
	NTPC: LED Streetlights		400				
	NTEC: Storm Hills Wind Feasibility		175				
	Hot Water Heater Replacement		300				
	Energy Program Transfer to PWS					(4,433)	
	Permanent Reduction-Energy Program Transfer to PWS					(78)	
Waste Sites and Remediation	Collective Bargaining						
	Devolution-Collective Bargaining		7				
	Permanent Reduction					(15)	
Amortization							
		(1,990)	**2,822**	**85**	**-**	**(4,580)**	**-**
Forest Management							
Program Mgmt. & Presuppression	Collective Bargaining			191			
	Contract Cost Increases for Crews			70			
	Permanent Reduction					(314)	
Suppression	Collective Bargaining						
	Final Phase Procurement Services		(112)				
Forest Resources	Collective Bargaining			67			
	Permanent Reduction					(10)	
Amortization	Increase						55
		-	**(112)**	**328**	**-**	**(324)**	**55**
Wildlife							
Wildlife Management	Collective Bargaining			9			
Biodiversity	Collective Bargaining			34			
	Permanent Reduction					(150)	
Wildlife Research and Management	Collective Bargaining			86			
	Permanent Reduction					(25)	
	Caribou Management Strategy	(1,000)					
Field Operations	Collective Bargaining			140			
	Permanent Reduction					(34)	
	Sahtu Oil & Gas-O&M Funding	(10)					
Amortization	Increase						17
		(1,010)	**-**	**269**	**-**	**(209)**	**17**

(thousands of dollars)

		PROPOSED ADJUSTMENTS					
Explanation of Proposed Adjustments		Sunsets	Initiatives	* Forced Growth	Internal Transfers	** Inter-Departmental Transfers and Other Adjustments	Amortization
Conservation, Assessment and Monitoring							
Environmental Assessment & Monitorin	Collective Bargaining			32			
	Transition Allowance		1				
	Devolution-Collective Bargaining		9				
	Permanent Reduction					(7)	
Program Management	Collective Bargaining			9			
	Permanent Reduction					(13)	
Conservation Planning	Collective Bargaining			25			
	Devolution-Collective Bargaining		7				
	Permanent Reduction					(20)	
	Protective Areas	(427)					
CIMP	Collective Bargaining						
	Transition Allowance		6				
	Devolution-Collective Bargaining		29				
	Permanent Reduction					(45)	
Amortization							
		(427)	**52**	**66**	**-**	**(85)**	**-**
Water Resources							
Program Management	Collective Bargaining						
	Transition Allowance		3				
	Devolution-Collective Bargaining		28				
Watershed Management	Collective Bargaining			12			
	Water Stewardship Strategy	(655)					
	Water Stewardship Strategy	(905)					
	Water Strategy Action Plan			1,583			
Water Research & Studies	Collective Bargaining						
	Transition Allowance		2				
	Devolution-Collective Bargaining		33				
	Permanent Reduction					(45)	
	Water Research and Studies-Hydro Geologist			249			
					(1)		
Taiga Environmental Lab	Collective Bargaining						
	Devolution-Collective Bargaining		23				
	Permanent Reduction					(10)	
	Transition Allowance		4				
	Taiga Environment Laboratory		577				
	Transfer to Corporate Services-TSC Charges				(4)		
Water Regulatory	Collective Bargaining						
	Transition Allowance		13				
	Devolution-Collective Bargaining		30				
	Permanent Reduction					(90)	
Amortization							
		(1,560)	**713**	**1,844**	**(5)**	**(145)**	**-**
TOTAL DEPARTMENT		**(4,987)**	**3,666**	**2,856**	**-**	**(5,426)**	**74**

** Forced Growth amounts include Collective Bargaining increases.*

*** This category includes departmental reductions.*

(thousands of dollars)

	PROPOSED ADJUSTMENTS				
	2014-15 Main Estimates	2015-16 Business Plan	Increase (Decrease) Proposed	Increase (Decrease) %	Explanation of Increases (Decreases) that are 10% or Greater
TRANSFER PAYMENTS					
Capital Transfers	2,856	2,856	-	-	
	2,856	**2,856**	**-**	**-**	
GENERAL REVENUES					
Revolving Funds Net Revenue	150	150	-	-	
Regulatory Revenue	1,159	1,759	600	51.8	Increased revenue for the Taiga Environment Lab-Water and Soil Analysis
Service and Miscellaneous	32	32	-	-	
	1,341	**1,941**	**600**	44.7	
TOTAL REVENUE	**4,197**	**4,797**	**600**	**14**	

(thousands of dollars)

	Explanation of Proposed Adjustments	2014-15 Main Estimates	PROPOSED ADJUSTMENTS Sunsets	Initiatives	* Forced Growth	Internal Transfers	Inter-Departmental Transfers and Other Adjustments	2015-16 Business Plan
Corporate Management								
Contributions								
Traditional Knowledge		65	-	-	-	-	-	65
NWT Water Board	Devolution-Collective Bargaining	900	-	-	13	-	-	913
		965	**-**	**-**	**13**	**-**	**-**	**978**
Environment								
Contributions								
Arctic Energy Alliance	Transfer to PWS	1,863	(515)	515			(1,863)	-
Energy Conservation	Transfer to PWS	200		300			(300)	200
Alternative Energy Program	Transfer to PWS	300	(100)	500			(700)	-
Biomass Energy	Transfer to PWS	450	(450)	450			(300)	150
Adaptation Plan	Transfer to PWS	51						51
Business Support Program	Transfer to PWS	200	(200)	200	-		(200)	-
Solar Energy Strategy	Transfer to PWS	625	(625)	625	-		(625)	-
Wind Energy	Transfer to PWS	100	(100)	225	-		(225)	-
Environmental Baseline	Transfer to PWS	100	-	-	-		-	100
		3,889	**(1,990)**	**2,815**	**-**	**-**	**(4,213)**	**501**
Forest Management								
Grants								
Fire Damage Compensation-Grant		100	-	-	-	-	-	100
Contributions								-
Wildfire Risk Management Plans		50						50
Wildfire Research Support		50	-	-	-	-	-	50
Forest Science		10	-	-	-	-	-	10
		210	**-**	**-**	**-**	**-**	**-**	**210**
Wildlife								
Contributions								
Wildlife Management Boards		178						178
Stewardship Program	Permanent Reduction	500	-	-	-	-	(60)	440
Caribou Management Strategy	Caribou Management Strategy	275	(275)	-	-	-	-	-
Disease Contaminants		16	-	-	-	-	-	16
		969	**(275)**	**-**	**-**	**-**	**(60)**	**634**
Conservation, Assessment and Monitoring								
Contributions								
Interim Resource Management Assistance Program		1,655	-	-	-	-	-	1,655
Conservation Planning		140	-	-	-	-	-	140
Cumulative Impacts Monitoring Prog		1,540	-	-	-	-	-	1,540
		3,335	**-**	**-**	**-**	**-**	**-**	**3,335**
Water Resources								
Contributions								
Mackenzie River Basin Board	Water Strategy Action Plan	40	-	-	10	-	-	50
Aquatic Ecosystems Research Partnership Program		200	-	-	-	-	-	200
NWT Water Strategy		250	-	-	-	-	-	250
Water Research and Studies		600	-	-	-	-	-	600
Watershed and Management	Water Strategy Action Plan				600			600
		1,090	**-**	**-**	**610**	**-**	**-**	**1,700**
TOTAL DEPARTMENT		**10,458**	**(2,265)**	**2,815**	**623**	**-**	**(4,273)**	**7,358**

Appendix II - Human Resources Reconciliation

Position Changes: 2014-15 Main Estimates to 2015-16 Business Plan

Schedule 1

		REGION / AREA							
	Community	Yellowknife / HQ	North Slave	Tli Cho	South Slave	Deh Cho	Sahtu	Beaufort-Delta	TOTAL
2014-15 Main Estimates		**135**	**28**	**6**	**83**	**54**	**20**	**39**	**365**
Restatements									
NWT Water Board Administrator	Inuvik	(1)	-	-	-	-	-	1	**-**
Science and Regulatory Coordinator	Inuvik	(1)	-	-	-	-	-	1	**-**
Executive Director, NWT Water Board	Inuvik	(1)	-	-	-	-	-	1	**-**
NWT Water Board Public Registry Assistant	Yellowknife	(1)	1	-	-	-	-	-	**-**
2014-15 Restated Main Estimates		**131**	**29**	**6**	**83**	**54**	**20**	**42**	**365**
Sunsets									
Consultation & Engagement Advisor		(1)	-	-	-	-	-	-	**(1)**
Watershed Management Advisor		(1)	-	-	-	-	-	-	**(1)**
Transboundary Support		(1)	-	-	-	-	-	-	**(1)**
		(3)	**-**	**-**	**-**	**-**	**-**	**-**	**(3)**
Initiatives									
Consultation & Engagement Advisor		1	-	-	-	-	-	-	**1**
Watershed Management Advisor		1	-	-	-	-	-	-	**1**
		2	**-**	**-**	**-**	**-**	**-**	**-**	**2**
Forced Growth									
Hydro Geologist		1	-	-	-	-	-	-	**1**
Laboratory Technologist		4	-	-	-	-	-	-	**4**
		5	**-**	**-**	**-**	**-**	**-**	**-**	**5**
Internal Transfers		**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Interdepartmental Transfers and Other Adjustments									
Alternative Energy Specialist		(1)	-	-	-	-	-	-	**(1)**
		(1)	**-**	**-**	**-**	**-**	**-**	**-**	**(1)**
Increase (decrease)		**3**	**-**	**-**	**-**	**-**	**-**	**-**	**3**
Total 2015-16 Business Plan		**134**	**29**	**6**	**83**	**54**	**20**	**42**	**368**

	2014-15	%	2013-14	%	2012-13	%	2011-12	%
All Employees	**331**	**100.0%**	**281**	**100.0%**	**272**	**100.0%**	**270**	**100.0%**
Indigenous Employees	197	59.5%	177	63.0%	165	60.7%	173	64.1%
Aboriginal	148	44.7%	136	48.4%	129	47.4%	133	49.3%
Non-Aboriginal	49	14.8%	41	14.6%	36	13.2%	40	14.8%
Non-Indigenous Employees	134	40.5%	104	37.0%	107	39.3%	97	35.9%
Male	200	60.4%	187	66.5%	179	65.8%	180	66.7%
Female	131	39.6%	94	33.5%	93	34.2%	90	33.3%
Senior Management	**18**	**5.4%**	**17**	**6.0%**	**16**	**5.9%**	**14**	**5.2%**
Indigenous Employees	11	61.1%	11	64.7%	10	62.5%	10	71.4%
Aboriginal	7	38.9%	7	41.2%	6	37.5%	5	35.7%
Non-Aboriginal	4	22.2%	4	23.5%	4	25.0%	5	35.7%
Non-Indigenous Employees	7	38.9%	6	35.3%	6	37.5%	4	28.6%
Male	13	72.2%	13	76.5%	12	75.0%	10	71.4%
Female	5	27.8%	4	23.5%	4	25.0%	4	28.6%
Non-Traditional Occupations	**132**	**39.9%**	**135**	**48.0%**	**111**	**40.8%**	**117**	**43.3%**
Indigenous Employees	98	74.2%	100	74.1%	82	73.9%	89	76.1%
Aboriginal	91	68.9%	91	67.4%	75	67.6%	83	70.9%
Non-Aboriginal	7	5.3%	9	6.7%	7	6.3%	6	5.1%
Non-Indigenous Employees	34	25.8%	35	25.9%	29	26.1%	28	23.9%
Male	116	87.9%	118	87.4%	97	87.4%	104	88.9%
Female	16	12.1%	17	12.6%	14	12.6%	13	11.1%

Appendix III - Infrastructure Investments

Infrastructure investments planned for 2015-2016.

Large Capital

Fort Simpson - Regional Laboratory - ENR biologists and wildlife officers routinely handle biological samples that may contain wildlife diseases and parasites that can also infect people and domestic animals. To be compliant with Health Canada's National Laboratory Standards and to continue processing biological samples in support of wildlife program delivery obligations access to a Level 2 laboratory facility is required in the Dehcho Region. This project would see the construction of a 150m2 Level 2 Laboratory to secure storage and workspace.

Forest Management – Air Tractor 802AF FireBoss Air Tankers - The current air tanker fleet supporting wildland fire operations consists of two groups of two GNWT-owned Canadair CL-215 skimmer air tankers, and two groups of land-based heavy air tankers contracted from Buffalo Airways Ltd. (Buffalo). The GNWT-owned CL215s are aging and due to the associated high cost of maintenance and inventory, parts availability and shortage of AvGas, replacement needs to be considered immediately. ENR proposes the acquisition of eight (8) Air Tractor AT-802AF FireBoss air tankers with acquisition commencing in 2015-2016. The procurement process for the operations and maintenance services of a GNWT-owned Air Tractor 802AF Fire Boss fleet will commence in 2017-2018.

Shell Lake - ENR Complex Replacement - It is proposed to replace the existing ENR warehouse complex and wildlife laboratory with a new building on site. The new building will house the forest management function of the Department on site, as well as provide seasonal operating space for the seasonal forest fire management and forest management operations of the Department in the Inuvik Region. Services of material management, wildland fire response, and wildland management laboratory and assessment cannot be housed elsewhere in the

Small Capital

Deline – District Office Land - The existing office is beyond its useful life. Repairs or renovations are not a cost effective option. In addition, the community has grown around the current office location with the land being valued by the community for residential development. Present uses of the current lands do not reflect community land use objectives. A new location in an appropriately zoned part of town is required for future development of a new district office.

Lightning Location System - Maintenance, repair and replacement - ENR maintains a network of nine lightning sensors located across the NWT. The Lightning Location System provides real-time information on lightning in the NWT and is a key part of ENR's ability to respond to wildfire events. No other system is available to northern forest managers to provide this information. Regular replacement of sensors is required to maintain the current capacity of the GNWT Lightning Location System.

Wrigley - Mount Gaudet Lookout replacement - The Department operates lookout towers as part of its forest fire detection program, a recognized method of practice. Fixed detection sites with observers provide almost continuous observation of key areas for forest fires, provide communications links and provide weather services in support of forest fire decision- making. An evaluation of lookout towers across the NWT determined that Mount Gaudet Tower is a valued component of the Department's forest fire detection system at critical periods and should be retained. The existing Mount Gaudet lookout (cabin with cupula) burned to the ground in 2013. Replacing it is a priority as the area observed includes a community and a high-valued area along the Mackenzie River Valley.

Type IV - Wildland Fire Engine - Design and acquisition of Type IV Wildland Fire Engine suitable for moving fire crews and equipment storage.

Incident Response Standby -Wildland Fire Fort Simpson - The Wildland Fire Response program requires a Wildland Fire Crew Standby to support the operations and activities of Wildland Fire Crews at the Fort Simpson operations base. The current structure is from the 1960s and has reached the end of its current life. The building is not upgradeable to current standards and requirements. The new structure would be an 80 m^2 facility, providing personnel standby areas, personnel equipment storage, personal care and hygiene services and dispatch centre services.

North Slave Cold Storage Building - ENR utilizes cold storage buildings to store and protect mobile assets and equipment (i.e. Wildland fire equipment). The existing North Slave cold storage building is beyond its useful life and is in disrepair. This project will dismantle the existing cold storage building and erect a new cold storage building in its place.

Enterprise Lookout Cabin - The Enterprise Lookout Tower was erected in 2014 and overlooks the community of Enterprise (protection of human life and property), and the valuable natural resources (protection of natural resources) of the Hay River corridor. A facility to house the lookout observer is required. No shelter or accommodations are on site. The health and safety of the Lookout Observer at the tower site is at risk if suitable shelter and standby accommodations are not provided.

Shiltee Rock Lookout Tower - Fort McPherson - This project would see the replacement of the Shiltee Tower with a 30 m^2 cabin/cupola at a more suitable location. This relocation will continue to support wildland fire detection objectives in the Fort McPherson area of the Gwich'in Settlement Region.

Communications Network Upgrades - There is a need to maintain the current capacity of the GNWT ENR radio repeater network. While the technology and systems are reasonably secure, as with any technology, system failures demand replacement equipment and backup systems, and as technologies stagnate, new equipment is required to maintain the effectiveness of the system. Radio repeater technology has a lifespan of approximately ten to fifteen years. To ensure this capacity, regular replacement of network modules (region-wide components) is warranted.

Tuktoyaktuk Warehouse Complex Betterment - The Tuktoyaktuk Warehouse Complex requires upgrades to the building envelope and windows. The building, while being maintained, has not kept up with changes to current codes and standards. The upgrades will extend the building's usable lifespan.

Repeater Towers - Communication Infrastructure - A scheduled replacement of communications facility infrastructure in the South Slave, North Slave, Dehcho, Sahtu and Inuvik regions is planned. This includes Comm-Shell units, antennas and repeaters.