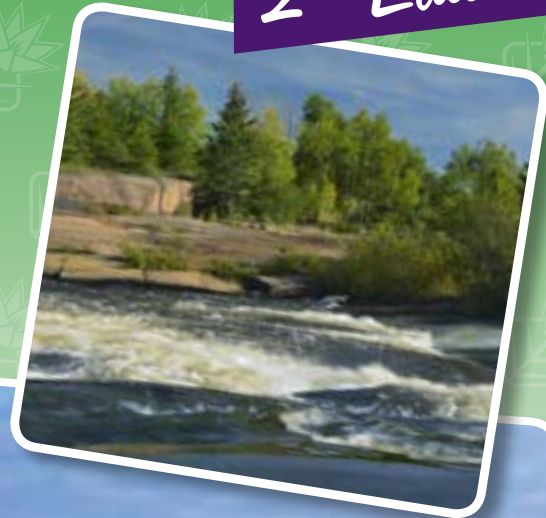


2nd Edition



Manitoba's **GREEN** Plan

Manitoba 



The Prairie Crocus, selected by school children as the province's floral emblem in 1906, heralds the arrival of spring on the prairies. This beautiful flower reflects the resiliency and can-do spirit of all Manitobans.

MINISTER'S MESSAGE

I thank all those who participated in the TomorrowNow public feedback process, which informed this final version of Manitoba's green plan following the initial release in June 2012. The plan is a 'strategy of strategies' intended to guide the activities of the provincial government into 2020, and encourage all Manitobans to play a role in reducing their ecological footprint and contribute to the green economy. Public feedback is integral to the success of TomorrowNow and will continue to play an important role over the life of the strategy.

Conservation and Water Stewardship received more than 200 written submissions on the green plan from individuals, industry associations, municipalities, environmental and other non-government organizations, and academics. Over 300 people attended a series of presentations made to industry associations, university groups, municipal leaders and others. I greatly appreciate all of the effort and time that individuals and organizations spent reviewing the plan and providing thoughtful and insightful feedback and innovative ideas on how to improve it and implement its goals.

Three themes were highlighted during the consultation process – concern for the health of Lake Winnipeg; concern over climate change; and the importance of protected areas. In this updated version of the document we have responded to these themes by adding a number of new initiatives such as the Lake Friendly Stewards Alliance; a stronger environmental enforcement team; and stronger penalties for poaching to better ensure the future of Manitoba's environment.

Not only has the feedback from Manitobans helped guide the additions to this green plan, but staff will also use the feedback received to help guide the implementation of the many actions that are included in the plan. The government will also partner with stakeholders and private industry to ensure that actions are taken that further strengthen Manitoba's green economy. As stated in TomorrowNow, all Manitobans have a role to play to reduce our consumption of water, energy and material resources to sustainable levels. Working together to create earth-friendly policies that encourage environmentally positive behaviour throughout society and the economy helps Manitobans lead by example. Manitoba has a lot to offer not only to our Canadian partners, but also the world as we move forward with our green initiatives, and travel our own unique path forward to a more sustainable future.


Thank you again for your interest in building a more sustainable Manitoba. This is your strategy Manitoba. Now it's up to all of us to act!



Gord Mackintosh, Minister
Conservation and Water Stewardship



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 This symbol indicates the new initiatives and notable changes that were made to the original version of TomorrowNow to reflect Manitobans' feedback and address the emerging issues and opportunities facing Manitoba's environment.

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INTRODUCTION

Globally and locally, environmental degradation, climate change, pollution, and biodiversity and habitat loss are urgent signals for improving how the environment is protected. This means making better choices, modifying lifestyles and being better caretakers of the water, air and land.

Manitoba will be open to collaborate with cities, towns, organizations and partners to ensure everyone has the opportunity to reduce their environmental footprint for the long-term health of the planet and future generations.

Manitoba recognizes the important role that First Nations, Métis and other Aboriginal people have with responsible environmental stewardship. Manitoba works collaboratively with Aboriginal and northern communities, and Aboriginal partnerships and engagement are an important part of Manitoba's environmental roadmap. This plan will only successfully proceed with Aboriginal community engagement.

This document sets out an eight-year strategic action plan for mobilizing Manitobans to work together to protect the environment while ensuring a prosperous and environmentally-conscious economy. In addition to the actions outlined in the plan, the province has other initiatives underway to ensure we protect the environment and sustainably manage our natural resources now, for tomorrow. **Manitoba's goal is to be one of the most sustainable places to live on earth.**

Green Prosperity Act

Public consultations began in 2012 to seek input from Manitobans on a strong, leading-edge law to replace *The Sustainable Development Act* that would move Manitoba into a new era of sustainability. Mechanisms will be developed to provide guidance and support to departments to ensure annual budgets consider all pillars of sustainable development, to report on sustainability achievement, and to oversee implementation of **TomorrowNow – Manitoba's Green Plan**. This new legislation will also lead the way for further engaging the private sector in sustainability initiatives.

OUR PRIORITIES

This proposed plan sets out actions around five key priorities.

- **GOOD FOR OUR ENVIRONMENT – GOOD FOR OUR ECONOMY**
- **CHANGING OUR WAYS FOR A CHANGING CLIMATE**
- **SAFEGUARDING OUR WATER, AIR AND LAND**
- **NURTURING OUR LIVING WORLD**
- **MOBILIZING MANITOBANS**

GOOD FOR OUR ENVIRONMENT – GOOD FOR OUR ECONOMY

Manitoba's water, air and land resources sustain a diverse range of economic, community and ecosystem needs. A strong, resilient green economy will be built to reduce environmental risks and ecological scarcities, while improving well-being and social equity for Manitobans.

A GREEN ECONOMY

The province already benefits from green businesses and jobs, and shifting to a low-carbon economy will enhance our global competitiveness, respect ecological balance and create genuine well-being for all Manitobans. All sectors of the local and global economies will need to transition towards the goals of sustainable development to achieve long-term prosperity. Key sectors in Manitoba's green economy include clean energy, energy efficiency, waste management, as well as bio-product development and production.

The United Nations Environment Programme (UNEP) defines green jobs as "...work in agriculture, industry, services and administration that contributes to preserving or restoring the quality of the environment. Green jobs are found in many sectors of the economy from energy supply to recycling and from agriculture and construction to transportation. They help to cut the consumption of energy, raw materials and water through high-efficiency strategies, to de-carbonize the economy and reduce greenhouse gas emissions, to minimize or avoid altogether all forms of waste and pollution, to protect and restore ecosystems and biodiversity."

GREEN ECONOMY ACTION PLAN

Manitoba will build on the province's advantages as a hub for sustainable development and green innovation by partnering with stakeholders and private industry to lead the development of a multi-sector action plan to further strengthen our green economy.

GREEN RESEARCH AND DEVELOPMENT TAX CREDIT

As part of the multi-sector green economy action plan, Manitoba will review all existing supports for research, development and commercialization to further the growth of clean technologies, products and services, bring together local expertise for green business activities, explore opportunities to attract international investment and clean technology entrepreneurs, and leverage local manufacturing expertise to produce clean technology products.

INVESTING IN THE GREEN COLLAR ECONOMY

A key activity for transitioning to a green economy is instilling green skills, knowledge and values within our existing and future workforce. This task will require a multitude of stakeholders to engage in educational and training efforts to enable change towards sustainable work practices. We will foster collaborative dialogue between industry, formal education, and training in order to support the identification, forecasting and provision of skills to support green sectors in Manitoba and a low-carbon future. This will include working with institutions and advancing our technical and vocational education and training in support of the transition to a green economy and launching a *Guide to Green Jobs and Sustainable Careers*.



1882

First recreational train line established from Winnipeg to Kenora



1903

Canadian Pacific train line established from Winnipeg to Winnipeg Beach. At its peak, 12 to 15 trains a day carried 40,000 holiday travelers.



Windfarm, St. Leon



1916

First passenger train service to Grand Beach



1930

Riding Mountain becomes Manitoba's first national park



1942

Whiteshell Fish Hatchery opens

ENERGY JOBS FUND

An Energy Opportunities Office and Renewable Energy Jobs Fund will maximize the local economic linkages of upcoming Manitoba Hydro investments and other renewable energy projects. The \$30 million fund will build on our manufacturing strengths and attract new investment in the production of equipment for hydro, geothermal, wind, next-generation biofuels, biomass heating, solar or smart-grid technology.

BIOPRODUCTS STRATEGY

There are more than 30 companies in Manitoba that currently produce a wide range of products from renewable agricultural and forestry resources. Manitoba will work with partners, such as the Life Sciences Association of Manitoba, to implement the recommendations of *Growing Green: The Manitoba Bioproducts Strategy* with a goal to double the amount of revenue generated by the sector by 2020. Priority will be given to developing a sustainable supply of biomass fibre for use in energy, chemicals, textiles, building materials, composites and plastics.

LEADING CLEAN WATER TECHNOLOGY

With the advice and partnership of the Manitoba Environmental Industries Association, Manitoba will build on the Clean Water Technology Strategy released in 2011 and make legislative and regulatory amendments to encourage investment in innovative water and wastewater technologies, while ensuring the highest standards of protection for Lake Winnipeg and other provincial waterways.

NEW BIOECONOMY OPPORTUNITIES AND RECYCLING NUTRIENTS

Manitoba will work with local partners to assess pilot projects in cattail harvesting and support other projects that will improve water quality, while demonstrating the inherent value and economic opportunities in biomass refining and nutrient recovery. In addition, Manitoba will aggressively work towards recovering and recycling nutrients, returning them to the agricultural landscape where they will again produce high quality, Manitoba-grown food.

NATIONAL LEADER IN ENERGY EFFICIENCY AND GREEN COMMUNITY ECONOMIC DEVELOPMENT

Manitoba will stimulate demand for building energy retrofits through Manitoba Hydro's internationally recognized Power Smart program and improved building codes. Apprenticeship Manitoba will review trade designations and curriculum development through a 'green lens' to ensure the trades people of tomorrow have the skills they need to participate in the green economy. Manitoba Hydro will also support social enterprises such as Building Urban Industries for Local Development (BUILD) in Winnipeg that train and employ people facing barriers to employment to conduct energy and water retrofits in low-income neighbourhoods.



1953

Pineland Forest Nursery opens



1961

Manitoba Hydro is established



1961

Manitoba's first provincial parks established, including Grand Beach, Duck Mountain, Turtle Mountain, and Whiteshell

Made-In-Manitoba Model of Green Community Economic Development Receives National Recognition

Social enterprises such as Building Urban Industries for Local Development (BUILD), Manitoba Green Retrofits (MGR), Inner City Renovations (ICR) in Winnipeg, and the Brandon Energy Efficiency Project (BEEP) have developed a successful business model that combines social, economic and environmental objectives. These organizations employ people with barriers to employment to conduct energy and water retrofits in homes and apartments in low-income neighbourhoods. The benefits are enormous – reduced utility bills for low-income Manitobans, improved housing stock in older neighbourhoods, training and jobs for Aboriginal youth and others who are marginalized from the mainstream labour market, and reduced greenhouse gas emissions and energy use. In 2011, BUILD was the recipient of the Scotiabank EcoLiving Award in the category of Business Leadership. Manitoba is putting policies in place to help this innovative model expand and have an even bigger effect in low-income communities across the province.

ECOLOGICAL GOODS AND SERVICES RECOGNITION

Ecological goods and services are the environmental benefits from healthy ecosystems such as air and water purification. They also include market goods produced from ecosystems such as fuel and fibre. The province will develop further industry partnerships to encourage the preservation and development of ecological goods and services to benefit Manitoba's environment while supporting a strong economy. Manitoba will enter into discussion to determine how to account for the value of ecological goods and services and how they are reflected in land use and permitting decisions.



1961

Watson P. Davidson Wildlife Management Area, the first of more than 80 WMAs now in place, is established



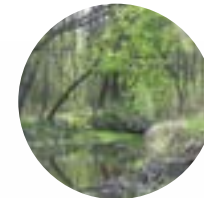
1967

Birds Hill Provincial Park is created



1968

The Red River Floodway is completed at a cost of \$63 million



1972

First conservation district established in Manitoba

CLEAN AND GREEN ENERGY HUB

There is increasing concern about energy security, pollution from fossil fuels and rising energy prices. Manitoba, however, is in the enviable position of having greater control over its clean energy destiny and is committed to creating the conditions for stimulating and encouraging green innovation especially in the green energy sector.

MANITOBA'S FIRST ENERGY STRATEGY

In 2012, a new provincial energy strategy was released with a focus on reducing our reliance on imported fossil fuels. The strategy addresses renewable electricity, heating in the built environment, transportation fuel and energy efficiency. We are committed to increasing the overall proportion of renewable energy use in Manitoba and will continue to put policies and programs in place to achieve this goal.

THE NEW GENERATION HYDRO STRATEGY

Manitoba's new-generation of northern hydro development is breaking from the past. Today, Aboriginal peoples are being engaged as partners from planning through to construction and operation, and stand to become long-term financial beneficiaries. Each project is designed to have as minimal an impact on the environment as possible. In terms

of land area, many modern urban shopping malls, residential developments and energy plants take as much or more land than is lost through a new-generation hydro project.

43% INCREASE IN HYDRO ELECTRICITY GENERATION

In the coming 15 years, new generation and transmission projects are expected to add more than 2,300 megawatts (MW) of renewable hydro electricity to the grid, further increasing Manitoba's role as a regional clean energy provider. Manitoba's new-generation hydro projects will provide a 43 per cent increase in hydro electricity generation from 2012 levels.

AN IMPROVED ELECTRICAL GRID

Manitoba Hydro has a number of new transmission priorities, including the expansion of north-south transmission which will be made more reliable by the development of the new, western Bipole III corridor line, new lines to the United States and enhanced connections to Saskatchewan. These projects will dramatically improve the long-term reliability of Manitoba's system in the face of climate instability and extreme weather events, enable enhanced new northern hydro and southern wind development, and boost the scale of Manitoba's exports and the range of its markets.



1974

Work begins to restore the former St. Andrews Bog into today's Oak Hammock Marsh Wildlife Management Area



1975

Dutch Elm Disease arrives in Manitoba



1980

Construction of Churchill's polar bear holding facility, the centerpiece of Manitoba's acclaimed Polar Bear Alert Program



1985

Atikaki is designated as Manitoba's first wilderness park

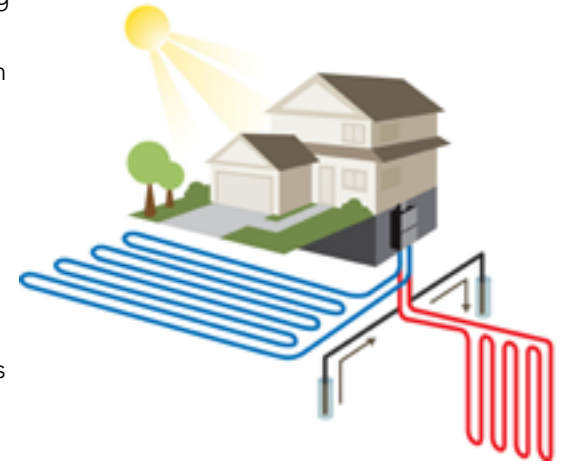


STRONGER POWER SMART PROGRAM

Manitoba Hydro's Power Smart program has saved over 700,000 tonnes of greenhouse gas (GHG) emissions and saves consumers more than \$36 million on their energy bills annually. The new *Energy Savings Act* will ensure Manitoba Hydro invests in programs that reduce energy consumption, saving money for Manitobans, increasing hydro exports and reducing greenhouse gas emissions. Through a new on-meter financing program enabled by legislation, Manitoba Hydro will finance the upfront capital costs of energy and water retrofits and will recover the costs through a monthly charge on the customer's utility bill.

MORE GREEN HEAT THROUGH GEOTHERMAL

Geothermal reduces heating and cooling energy expenses as well as Manitoba's dependence on imported fossil fuel such as natural gas. Geothermal systems are one of the largest single emission reduction options available to Manitoba homeowners. Efforts will be launched to provide long-term support for the take-up of geothermal energy as a renewable heat source and accelerate Manitoba's shift towards heating systems that use renewable energy sources.



1986

Manitoba Habitat Heritage Corporation established with a mandate to conserve, enhance and restore fish and wildlife habitat



1988

The Manitoba Roundtable on Environment and Economy is established. Government adopts sustainable development as part of its environmental and economic agenda.



1989

The Power Smart program for energy conservation is established



ELECTRIC VEHICLE LEADERSHIP

Transitioning to electric vehicles will reduce Manitobans' transportation costs, reduce the amount of money leaving the province each year to import fossil fuels, and significantly reduce greenhouse gas emissions. Partnerships with key stakeholders will facilitate the adoption of electric vehicles, demonstrate the reliability of all-electric passenger vehicles, and support the development of all-electric mass transit buses and rapid battery-charging technology.



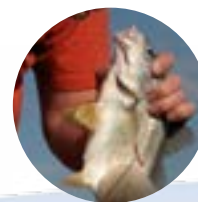
1989

Manitoba Tall Grass Prairie Preserve is established through a partnership between provincial and federal governments, national and local NGOs



1990

First curbside recycling program begins in Winnipeg. Manitobans now recycle over 70 million kilograms of materials a year.



1990

Manitoba is the first province in Canada to require barbless fishing hooks

INCREASED BIOFUEL PRODUCTION AND USE

Provincial mandates for ethanol and biodiesel have not only resulted in new economic development in Manitoba, but have led to the reduction of 400,000 tonnes of greenhouse gas emission reductions annually. Manitoba will consult with biofuel producers, fuel suppliers, feedstock producers and vehicle engine manufacturers to increase volumes of ethanol and biodiesel used in Manitoba. Manitoba will review opportunities for increasing volumes of ethanol produced from agricultural waste as one of the most green and sustainable approaches to our biofuel challenges. Manitoba will also evaluate the potential of other alternative fuel options to diesel, while ensuring that any alternatives meet the necessary vehicle performance, economic, environmental, jurisdictional as well as infrastructure requirements.

GREENER MINING IN MANITOBA

The province works with the mining and petroleum industries on the sustainable development of Manitoba's mineral resources. These industries sustain rural and northern communities and provide economic development opportunities for remote Aboriginal communities. Manitoba will work with stakeholders to develop a new mining strategy that will improve the mining sector's environmental performance, promote innovation in mining, and move Manitoba's mining sector toward greener mining technologies and practices.



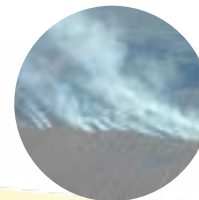
1992

Manitoba lists the first plants and animals under *The Endangered Species Act*



1993

Manitoba requires mandatory recovery and recycling of chlorofluorocarbons (CFCs), and mandatory training of industry technicians who service equipment that uses CFCs and other ozone depleting substances



1993

Regulations on the burning of crop residue are enacted to reduce the negative health and safety impact of smoke from producers' fields

WORLD CLASS ECO-TOURISM

Manitoba is blessed with unbelievable landscapes, natural wonders and rich cultures, and we intend to share this with the rest of the world. Eco-tourism has a minimal impact on nature and culture, is adventurous and educational, and supports the local economy. It's time that Manitoba became a leader in sustainable eco-tourism, which will be complemented by our eco-learning initiative.

MANITOBA'S FIRST ECO-TOURISM STRATEGY

A sector alliance including operators, government, Travel Manitoba and Aboriginal people will be formed to oversee the development of a new, community-based approach that will focus on product clusters and regional development, natural attractions and features, and on community-based opportunities.

HOTEL GREENING – GREEN KEY ECO-RATING PROGRAM

The public should enjoy access to comprehensive recycling and waste reduction programs and other programs that help reduce their environmental impact whether they are at home or traveling. Manitoba will work cooperatively with the Manitoba Hotel Association to expand their Green Key Eco-rating Program, which assesses a number of ecologically responsible practices, such as conserving energy and water, reducing waste, reusing as much as possible and recycling. Practices that reduce food waste and encourage composting will also be focused on. Working with the hospitality industry and promoting the national Green Key Eco-rating Program will help make Manitoba more sustainable and a destination of choice.



Oak Hammock Marsh



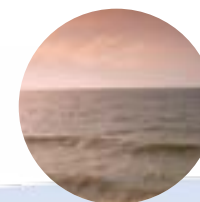
1993

Manitoba introduces the Fisheries Enhancement Stamp



1997

Industry-operated used oil recycling program established. Today, over 80% of used oil is recovered province-wide at over 79 collection centres



1998

Lake Winnipeg Research Consortium forms, gathering scientific data on Lake Winnipeg using the Naiman research vessel





Wolf Mural, Thompson

NEW ECO-TOURISM OPPORTUNITIES

New and enhanced destinations such as the eastside boreal forest, a nominated UNESCO world heritage site, the Waabanong Anishinaabe Interpretive Learning Centre, an eastside coastal trail, and Aboriginal eco-tourism will be promoted in partnership with Aboriginal communities. Churchill for Polar Bears and Thompson for Wolves will be centerpieces of increased tourism opportunities. New enhanced destinations such as birding trails, wildlife viewing, winter adventure, kayaking, canoeing and white-water rafting will be explored with private sector partners. Backcountry experiences will be made more enticing with a backcountry permit and tracking system, portage improvements and select remote camping amenities.

ECO-TOURISM STANDARDS AND CERTIFICATION

Based on international approaches, tourism sector quality will be ensured for safety, service, training, environmental stewardship, education and cultural sensitivity. Manitoba will increase local capacity for implementing a community-based vision for tourism, including youth engagement and business development.



1998

*The Sustainable Development Act
is proclaimed*

CHANGING OUR WAYS FOR A CHANGING CLIMATE

Scientists around the globe recognize that climate change is real and happening now. Changes to Manitoba's climate will affect natural ecosystems, the economy, and the health and well-being of all Manitobans. How emissions are reduced will shape our economy, our communities and our way of life. Climate change mitigation and adaptation policies must be considered at the same time. Looking forward, Manitoba will work to prevent and prepare for climate change by integrating these policies in a new provincial climate plan.

REDUCING GREENHOUSE GASES (GHG)

Manitoba faces unique challenges when it comes to reducing GHG emissions and needs a made-in-Manitoba solution that is aggressive, realistic, and collaboratively developed.

A NEW CLIMATE PLAN FOR MANITOBA

Manitoba will update the 2008 climate change plan to take a holistic approach by addressing both emissions that cause global climate change and the effects of climate change. Stakeholders in key sectors will help identify opportunities, determine strategies for action and establish new objectives.

MANDATORY REPORTING OF GHG EMISSIONS

To further improve Manitoba's GHG inventory and inform future climate change policy, the province will consult on regulations requiring mandatory GHG emissions reporting and outline thresholds and other key reporting requirements. Recommendations will be made based on input from stakeholders.

MANITOBA'S BIOMASS ENERGY SUPPORT PROGRAM

The Manitoba Biomass Energy Support Program is intended to provide support to Manitobans in the transition to the processing and use of biomass for heating in place of coal. The program is administered by Manitoba Agriculture, Food and Rural Development and provides financial assistance to coal users and biomass processors as they transition towards bio-based energy systems and supply chains.

Renewable biomass fuels are considered "carbon neutral" because the carbon that is released into the atmosphere when they are burned is reabsorbed when new biomass is grown. Manitoba has 3 to 5 million tonnes of biomass available annually in excess of the amount required for soil management and livestock. Using a portion of locally available biomass would reduce the import of fossil fuels and assist in the development of renewable industry and jobs in rural Manitoba.

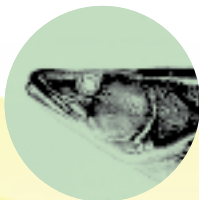
BIOMASS ECONOMY NETWORK

A new Biomass Economy Network has been created to help ensure effective regional linkages between market supply and demand to create a strong biomass market that will help replace the use of coal and other fossil fuels. The network will consist of stakeholders from various sectors and will help to identify the biomass energy market opportunities and help to develop biomass energy production. The province will solicit feedback from the network on implementation of Manitoba's coal ban.



2000

Formation of Aboriginal Relations Branch



2001

Most successful spawning year for walleye in Lake Winnipeg in recent memory



2002

The Drinking Water Safety Act passes, setting standards and licensing requirements for drinking water systems and establishing the Office of Drinking Water

MANITOBA'S 2014 COAL HEATING BAN

In the 2011 Budget Speech, Manitoba announced that an emissions tax on coal would be implemented, that revenue from the tax would be used to help coal users convert to cleaner energy forms, and that Manitoba would also ban the use of coal for space and water heating to be phased-in beginning January 1, 2014. *The Emissions Tax on Coal Act* came into force in January 2012 and revenues from this tax are being redirected to Manitoba Agriculture, Food and Rural Development's Biomass Energy Support Program.

The province has convened the Biomass Economy Network to provide advice and expertise to government regarding development of Manitoba's biomass sector and implementation of Manitoba's coal heating ban. Reducing Manitoba's reliance on imported coal will stimulate economic activity along the value chain including boiler upgrades and maintenance, sourcing, and the collection and production of biomass. These activities will increase the availability and affordability of biomass in Manitoba and create value-added biomass fuel products.

PETROLEUM COKE HEATING BAN

Manitoba implemented a ban on the use of petroleum coke for space and water heating effective December 31, 2013. Petroleum coke is a by-product of the oil sands upgrading process and is currently being stockpiled in large amounts. Manitoba will be the first jurisdiction in Canada to enact such a ban.

SHIFTING DEBRIS BURNING TO BIOMASS PRODUCTION

Manitoba will work with the forest industry to increase the use of woody debris from forest harvesting operations to produce biomass for emerging biofuel and bioenergy markets, creating a climate for investment and business development.

MANITOBA EMISSIONS REDUCTION CHALLENGE

Everyone has to do their part to reduce GHG emissions on a daily basis to achieve significant emissions reductions in Manitoba. Through new initiatives, Manitoba families and businesses will be encouraged to reduce their GHG emissions. Manitoba will partner with environmental organizations, industry associations, and waste management and community groups to spur individual and community action.

REDUCED TAILPIPE EMISSIONS

Daily commuting habits, well-established agriculture and resource sectors, and a burgeoning transportation and logistics sector all contribute tailpipe emissions in the province. Manitoba's new climate plan will seek ways to reduce tailpipe emissions while looking at ways to make supply chains and transportation corridors more resource efficient and promote green commuting options for the public.

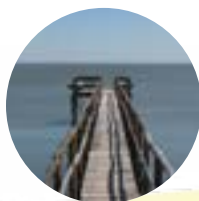
REDUCED LANDFILL GAS EMISSIONS

To further reduce GHG emissions from landfills, the province will expand the regulatory system for controlling, collecting, or using these emissions.



2002

Manitoba proclaims
The Polar Bear Protection Act



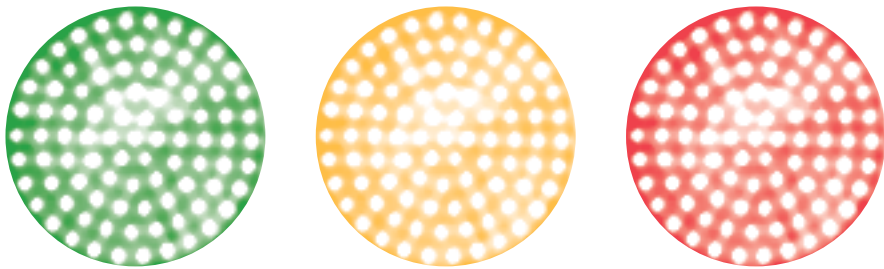
2003

Lake Winnipeg Action Plan released
and Lake Winnipeg Stewardship Board forms



2005

"Green and Growing" – the Manitoba government's green strategic framework is published, containing many examples of collective accomplishments and providing direction for building a green and prosperous future for all Manitobans



ENERGY EFFICIENT LIGHTING AND TRAFFIC SIGNALS

Manitoba has already made significant progress in converting traffic signals on provincial roadways from incandescent to LED displays, resulting in significant power consumption reductions and cost savings. The government will work with Manitoba Hydro to build on traffic signal conversions and explore the feasibility for phasing in widespread LED street lighting in the province.

ACTIVE TRANSPORTATION STRATEGY

Manitoba will move forward with key recommendations made in the *Greater Strides: Taking Action on Active Transportation* report, including the development of a provincial active transportation policy, appointing a provincial co-ordinator responsible for active transportation and establishing a permanent public stakeholder advisory committee.

CAPITAL REGION TRANSPORTATION MASTER PLAN

Manitoba will be working with the Partnership of the Manitoba Capital Region (PMCR) to develop a master plan for the future development of transportation in the capital region that identifies the challenges and opportunities of transportation in the Winnipeg region and creates a map to meet the future needs of its residents and municipalities.

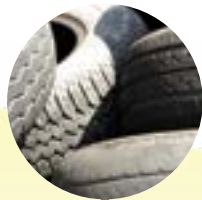
PLANNING RESOURCES GUIDES

The province will provide guides on climate change mitigation and adaptation to support municipalities, planning districts, conservation districts and planning consultants, and outline what they can do to achieve various goals in the provincial planning regulation.



2006

Manitoba's first wind farm begins operating near St. Leon



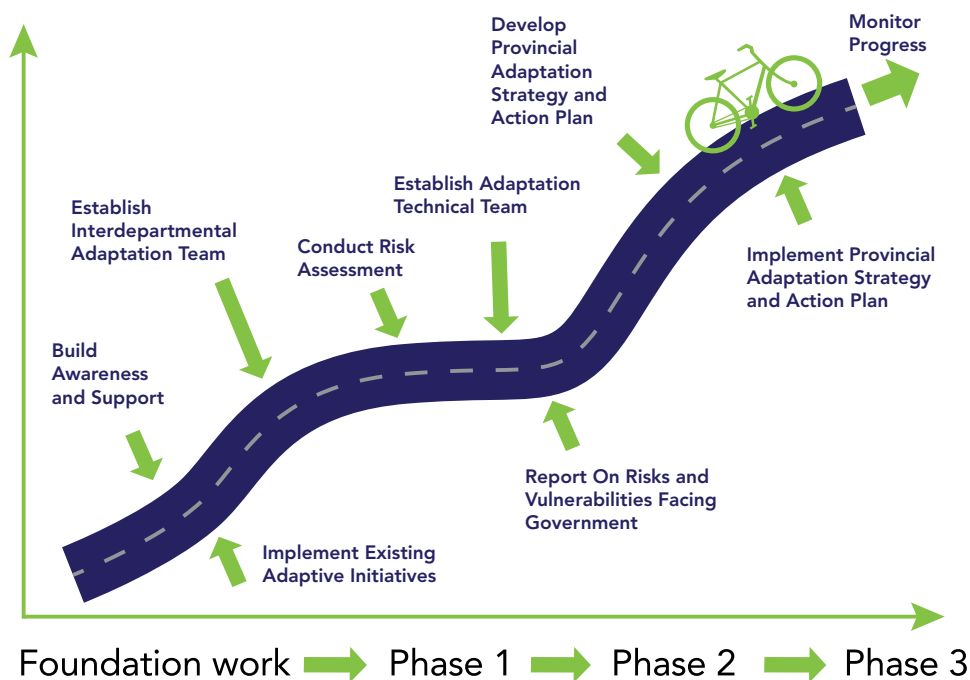
2006

Industry-operated tire recycling program established to manage all car, truck and off-the-road tires. Today 100% (more than 12,000,000 kilograms of tires) are processed and recycled in Manitoba.

ADAPTING TO A CHANGING CLIMATE

Adapting to a changing climate requires collaboration, attention and innovation. Manitoba's involvement in the Prairies Region Adaptation Collaborative, as well as, adaptation activities occurring across provincial departments has established a foundation for continued collaboration and progress. Manitoba's climate change adaptation strategy will employ a three-phased approach outlined in Manitoba's adaptation pathway.

Manitoba's Climate Change Adaptation 'Pathway'



PHASE 1: GOVERNMENT-WIDE RISK ASSESSMENT

The province will establish a cross-department adaptation team to conduct climate change risk assessments across government departments and examine potential climate change risks and vulnerabilities which could impede delivery of essential programs and services.

PHASE 2: PROVINCE-WIDE RISK ASSESSMENT

Manitoba will undertake a province-wide climate change risk assessment to examine potential risks facing Manitoba's communities, ecosystems and economy. Recommendations will be made on managing these risks while simultaneously identifying potential opportunities. This work will include new efforts to collaborate with research bodies, academic institutions and key stakeholders.

PHASE 3: ADAPTATION STRATEGY AND ACTION PLAN

One of Canada's first comprehensive adaptation strategies will be developed, including a monitoring and evaluation framework to evaluate progress on adaptation.

ENHANCED DISASTER PREVENTION, MITIGATION AND MONITORING

Manitoba will enhance its capacity for flood protection with upgrades to protection structures. We will also enhance capacity to protect forests and northern communities by providing increased public education, supporting prevention strategies, community wildfire protection plans and FireSmart wildfire mitigation. The modernization of Manitoba's fleet of water bombers will remain a priority.

MONITORING AND PROTECTING THREATENED SPECIES

Because some threatened species are susceptible to a changing climate, the province will maintain the monitoring and protection of threatened species. Since they are affected by climate change, more attention will be given to creating or maintaining protected areas as migration corridors for plant and animal species.

RESEARCH ON CARBON SINKS AND STORES

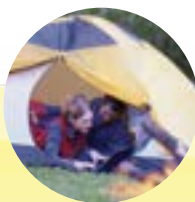
Manitoba recognizes the importance of provincial forest, wetland and peatland ecosystems. The province's Terrestrial Carbon Management Action Plan and the new boreal plan will help ensure responsible management of these landscapes by improving our understanding of carbon dynamics and sequestration values within forest, peatland and agriculture ecosystems, promoting stewardship of carbon pools, and considering terrestrial carbon within climate change initiatives. In addition, carbon modelling and accounting will be a component of all forest management plans developed in Manitoba.

MILLIONS MORE TREES

This successful afforestation initiative will see millions of additional trees planted by 2020, building on the six million trees planted between 2008 and 2012. As public demand grows, a modified program will be developed for the long term.

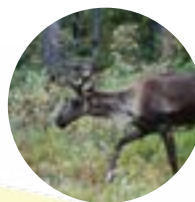


Pineland Forest Nursery



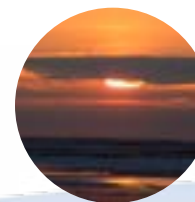
2006

Made-in-Manitoba Parks
Reservation System deployed



2006

Boreal Woodland Caribou listed
as threatened under Manitoba's
Endangered Species Act



2007

Manitoba joins the Western Climate
Initiative with six western U.S. states
and the province of British Columbia

SAFEGUARDING OUR WATER, AIR AND LAND

Manitoba's abundant fresh water sustains ecosystems, communities and the economy, and must be protected. Pollution prevention must include reducing contamination from toxins and wastes to water, air and land, and encouraging the use and development of clean technologies.

STEWARDSHIP OF OUR WATER, SAVING LAKE WINNIPEG

Our precious great lake is facing real challenges and everything possible must be done to restore its health, and to protect the health of lakes and waterways across the province.

LEADING THE WAY ON WATER

Manitoba is showing leadership in water protection and conservation through a number of interconnected initiatives including international co-operative efforts on Lake Winnipeg, a surface water management strategy, a wetland strategy, integrated watershed management planning, a peatlands stewardship strategy, and a new water conservation strategy. Numerous agencies, communities, and individuals are already doing what they can to protect and conserve water in Manitoba. Manitoba will explore and develop new ways to co-ordinate these activities through a refreshed Manitoba Water Strategy that will bring together a clear vision for everyone's benefit and ensure we are working as one.

LAKE FRIENDLY ACCORD

Manitoba will work to co-ordinate efforts and promote leadership to ensure the protection of water quality across Manitoba and throughout the Lake Winnipeg basin. The Lake Friendly Accord will be established to encourage cooperation on nutrient reduction. Manitoba will work with the South Basin Mayors and Reeves to build on the success of the "Lake Friendly" program to ensure that this new Lake Friendly Accord will engage all sectors of society in action plans to protect our lakes and rivers. In partnership with many, the Accord will build a co-ordinated and committed effort among a network of stakeholders (including the general public and non-governmental organizations) towards a common goal of protecting lakes and rivers by reducing nutrient loading.

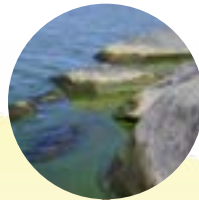
Excess nutrients are causing an increase in the frequency and severity of algal blooms not only in Lake Winnipeg but in lakes across the Lake Winnipeg Basin. Over the past several decades, significant increases in nutrient loading to waters in the Lake Winnipeg basin have been documented. Algal blooms can:

- cause taste and odour problems in drinking water
- make shorelines and beaches unsuitable for swimming and other recreation
- impair ecosystem health by negatively impacting aquatic life and habitat
- impact commercial and recreational fishing potential
- produce toxins that can be dangerous to people, livestock and pets



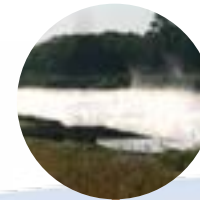
2007

E-waste collection depots are established throughout the province to collect and properly recycle unwanted electronic equipment



2007

Manitoba is the first Canadian jurisdiction to introduce legislation virtually eliminating phosphorus in dishwashing detergent through *The Phosphorus Protection Act*



2007

Red River formally designated as a Canadian Heritage River

LAKE FRIENDLY STEWARDS ALLIANCE

The Accord will establish a Lake Friendly Stewards Alliance that will provide a forum to facilitate information sharing; enhance collaboration and co-ordination; improve reporting and accountability; increase efficiencies and technology transfer; and enhance stewardship and economic opportunities.

The Alliance will meet at least annually and will strive to have broad representation from governments, First Nations and Métis communities, conservation districts, agriculture, business and industry, local governments, cottage associations and environmental non-governmental organizations. The Alliance Steering Committee and Working Groups will also meet regularly to advance the work being done under the Lake Friendly Accord.

Nutrients are contributed by virtually all of our activities across the Lake Winnipeg Basin including point sources such as wastewater and industry and non-point sources such as agriculture, golf courses and urban and cottage areas. In addition, activities across the Lake Winnipeg Basin such as the loss of wetlands and riparian areas, increased drainage, and other land use changes have increased the transport of nutrients from land to water.

LAKE FRIENDLY ACTION PLAN

All residents living within the watershed have a role to play in reducing nutrient loading. Reducing nutrient loading throughout the Lake Winnipeg Basin will improve water quality not only for Lake Winnipeg, but also for all lakes, rivers and streams throughout the watershed.

The Lake Friendly Accord will ask all signatories to create and implement individual plans for reducing nutrient loading that reflect their unique circumstance and role in the watershed. These individual plans will be published as Annexes to the Accord. Together the Annexes drafted by all parties – including the province of Manitoba and other governments – will form the Lake Friendly Action Plan. In this way, the action plan will include commitments and timelines for all stakeholders who will work collectively to improve water quality and reduce nutrient loading.



2007

The Drinking Water Safety Regulation and Drinking Water Quality Standards Regulation come into force. Key health related national guidelines become enforceable standards.

THE SURFACE WATER MANAGEMENT STRATEGY

The Surface Water Management Strategy outlines a more integrated approach to managing surface water, striving to ensure that environmental, engineering, social and economic perspectives are considered in surface water management decisions. It emphasizes the need to more effectively consider cumulative downstream impacts, effects on the health of our rivers, lakes, wetlands and vulnerable riparian shorelines. In particular, it emphasizes the need for water retention and storage on the landscape, which will provide multiple beneficial outcomes such as flood and drought mitigation and protection of water quality.

HIGHLIGHTS INCLUDE:

MOVING TOWARDS SUSTAINABLE WATER

MANAGEMENT – accomplished by partnering with researchers, conservation districts, agricultural producers and environmental non-government organizations to evaluate and implement strategies aimed at storing more water, in a distributed fashion within watersheds. Both natural (ex: wetlands) and engineered storage solutions will be included.

IMPROVING AND PROTECTING WATER QUALITY – surface water management, land management practices and surface water quality are strongly linked and interconnected. Manitoba will continue to employ a broad range of innovative approaches to reducing nutrient inputs through the Lake Friendly Accord.

NO NET LOSS OF WETLAND BENEFITS – accomplished through a new Regulatory Approach to Manage Drainage and Water Retention and a new Wetland Strategy and supported by continued efforts to raise the profile of the multiple benefits of wetlands, including improved water quality, carbon storage, environmental resilience, water retention, and provision of habitat for a diverse array of plants and animals.

PREPARING FOR EXTREME EVENTS – implementing infrastructure improvements and integrating infrastructure planning with land use and development planning will decrease our vulnerability to flooding, long-term drought and other severe weather events. The development of the Manitoba Imagery Strategy will continue to work to provide co-ordinated Light Detection and Ranging Digital Imagery (LiDAR) data acquisition to support geospatial mapping and analysis for improved planning and risk reduction.

ENVIRONMENTAL AND COMMUNITY RESILIENCE FOR

CLIMATE CHANGE ADAPTATION – protecting sources of drinking water and enhancing aquatic ecosystem health will be paramount in climate change adaptation strategies and will provide Manitoba with its best chance for building environmental resilience in the face of climate change. Many of the actions in the Surface Water Management Strategy will support Manitoba's Climate Change Adaptation Pathway currently being developed for the province.



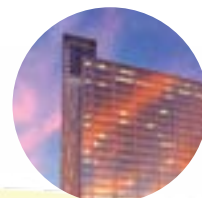
NEW PROTECTION FOR WETLANDS AND RIPARIAN AREAS

Wetlands are often referred to as “nature’s kidneys” because of their ability to filter pollutants and sediment out of water. They are also critical in flood control and act as carbon sinks in the fight against climate change, and as habitat for fish and wildlife.

- The province will develop a wetland strategy to protect prairie pothole wetlands and coastal marshes along Manitoba’s large lakes, as well as areas of marine coastline that provide important habitat for polar bears, caribou herds and beluga whales.
- Manitoba will achieve the substantial restoration of the Delta and Netley-Libau marshes by 2020, and move ahead with the protection of significant wetlands under new powers in *The Save Lake Winnipeg Act*.

INTEGRATED WATERSHED MANAGEMENT PLANNING AND CONSERVATION DISTRICTS

Manitoba will work with conservation districts to emphasize public outreach and education, provide incentives to help reach environmental priorities and develop and implement community-led plans for the future of land and water use at the local level. The implementation of integrated watershed management plans in all watersheds across agro-Manitoba will ensure co-ordinated action for reducing nutrient inputs to Lake Winnipeg, ensuring our water security for the future and providing ecosystem and community resilience to support climate change adaptation.



2007

Manitoba introduces its *Green Buildings Policy* to ensure that new provincially funded buildings use less energy and produce less greenhouse gases than conventional buildings

TOWARDS SUSTAINABLE DRAINAGE

A new regulatory approach to drainage and water retention licensing will be developed so that several classes of drainage and water retention projects can be established through a regulation-based approach under *The Water Rights Act*, each with increasing requirements based on impact. The concept will include environmentally friendly design, construction and maintenance of drains, protection of wetlands, and development of conservation district-based surface water management or drainage plans.

FACILITATING THE MOVE TOWARD GREEN INFRASTRUCTURE

The province will work with major cities and northern communities to identify world-leading practices on green infrastructure and storm water management such as green roofs, permeable pavement and rainwater harvesting to help Manitoba communities become urban leaders. Manitoba will also consider legislative changes to recognize the environmental, financial and social value of green infrastructure and require further implementation of these innovative and beneficial approaches to building sustainable communities.



2008

Launch of Manitoba Geothermal Energy Incentive Program



2008

Manitoba the first Canadian jurisdiction to list the polar bear as a species at risk



Windfarm, St. Leon

AGRICULTURAL INDUSTRY-LED SOLUTIONS

The province will work with the agricultural industry to further foster green leadership in the industry by incenting the acquisition of new technologies to manage manure responsibly through the new Nutrient Management Tax Credit, and by building lake-friendly practices such as reduced animal contact with waterways into farm practice guidelines for different commodity groups.

URBAN SOLUTIONS TO WASTEWATER EFFLUENT IMPROVEMENTS

Working with major towns and cities, the province will facilitate the development of implementation strategies to upgrade infrastructure to meet newly enacted water quality legislation. Along with other initiatives, this will ensure Manitoba remains a leader in protecting the valuable Lake Winnipeg resource.

MINING AND PETROLEUM GREEN SOLUTIONS

Manitoba's legislative framework for mining and petroleum development is designed to protect surface and groundwater sources and promote sustainable development. Within this framework the province will support Manitoba's mining and petroleum industries which are developing green solutions for mine tailings and water management, recycling processed water, and reducing water consumption, energy usage and greenhouse gas emissions.

ADDRESSING EMERGING THREATS

Ongoing research into potential threats to lake health has uncovered the need for additional vigilance around emerging threats such as pharmaceuticals and endocrine disruptors that can negatively affect human and aquatic ecosystem health. Manitoba will further examine this potential area of concern to help provide advice on further action. Freshwater research is critical to the restoration of Lake Winnipeg. Manitoba will work with others to ensure that important freshwater research into emerging threats continues.

NORTHERN WATER INFRASTRUCTURE

The province will work with the federal government to explore alternate wastewater funding mechanisms. Manitoba will place a heavy focus on nutrient reduction in the funding of wastewater plant upgrades and encourage regional planning and co-operation in wastewater management. Manitoba Aboriginal and Northern Affairs will work with Northern Affairs communities to ensure that substantial infrastructure renewal is achieved by 2020.



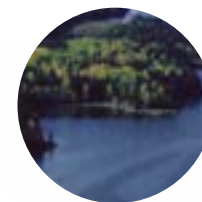
2008

Manitoba establishes
*The Climate Change and
Emissions Reductions Act*



2008

"Trees for Tomorrow" program
launched. Over 6 million seedlings
distributed to date.



2008

Transfer of lands to First Nations for
Treaty Lands Entitlement is completed
for over 450,000 acres of land

KEEPING WATER SAFE FOR TOMORROW

Water is an essential element to life on this planet and Manitobans cherish the clean and safe water found here.

NEW GROUNDWATER PROTECTION

The province is modernizing 50-year old legislation regulating groundwater and water wells to better protect the 30 per cent of Manitobans who rely on well water. Rules governing the drilling, construction, maintenance and sealing of wells will be strengthened and broadened to also apply to geothermal, geotechnical and monitoring wells. First-in-Manitoba certification requirements will be introduced for well drillers and sealers. The new rules will also set out a formal process for aquifer management planning. The province has also launched a new eight-point groundwater protection strategy that will include new education materials for well owners, improved mapping of groundwater, new oversight and support to small (semi-public) water systems, and increased technical support for compliance with *The Drinking Water Safety Act*.

DROUGHT MANAGEMENT STRATEGY FOR MANITOBA

Droughts can occur over the short-, medium- and long-term on a local or regional basis and can significantly affect the economy, people and the environment. Recent climate change work predicts that droughts will occur more frequently and could contribute to water shortages on the prairies. Manitoba is committed to the development of a comprehensive, science-based drought management strategy for the province. The strategy will include Manitoba-based drought indicators and regular watershed-based reporting and apportionment.

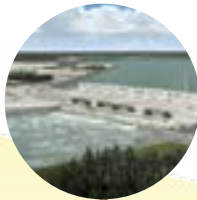
NEW WATER CONSERVATION STRATEGY

Manitoba's *WaterSmart* initiative has significantly reduced water consumption by getting low-flow fixtures such as toilets and showerheads into Manitoba homes, and the Water Soft Path work is an innovative approach to community demand side-water management.



2009

Manitoba is the first province in Canada to implement a law requiring biodiesel in its diesel fuel



2009

Manitoba Hydro and four First Nations sign a partnership agreement to develop Keeyask Generating Station on the Nelson River



2009

The Lake Friendly campaign is established to help improve the health of Lake Winnipeg



Winnipeg Beach Provincial Park

IMPROVED DRINKING WATER SAFETY

Access to safe, quality drinking water is something every Manitoban deserves. The Office of Drinking Water will be expanded to regulate semi-public systems across the province. Data reporting structures will be strengthened to improve public access to information on drinking water quality. Ensuring safe drinking water for Manitobans also requires integrated watershed management planning, and this will be an important element of the province's broad Surface Water Management Strategy. Manitoba will work with system owners on compliance with stronger standards while continuing to lobby the federal government for national recognition of the right to clean drinking water. Manitoba will also work with the federal government on national drinking water guidelines.

CLEAN AND SAFER BEACHES

Manitoba has successfully launched a clean beach program to monitor beach quality, and a beach safety program to provide safety information to the thousands of families who enjoy Manitoba's beaches every year. As proof of our vigilance on beach health and safety, the province received Blue Flag recognition for Grand Beach, a world-class beach, that has met international standards for water quality, education, safety and environmental management. Manitoba will further pursue such recognition and will expand its efforts by making public beaches and playgrounds in provincial parks smoke-free beginning in the summer of 2014.

EXPERIMENTAL LAKES AREA

Manitoba has committed funding to support the internationally-renowned Experimental Lakes Area (ELA) research facility. This unique facility has led research in a number of critical areas, such as increased nutrient loads, greenhouse gases, mercury, and acid rain. The ELA, under the management of the International Institute for Sustainable Development, will provide Manitoba, and the world, with key information to address issues of emerging concern and serve as a long-term data source for addressing issues such as climate change. The findings of the ELA will enable Manitoba to make scientifically sound decisions that will further protect our freshwater ecosystems.



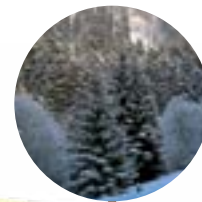
2009

Real-time Air Quality Health Index for Winnipeg released in partnership with the federal government



2009

The East Side Traditional Lands Planning and Special Protected Areas Act is proclaimed into law in Manitoba



2009

In effect since 2009, The Forest Health Protection Act is proclaimed to better protect Manitoba forests from disease outbreaks and insect pests

PROTECTING OUR AIR AND LAND FROM POLLUTION

Clean air and land is good for all Manitobans. Working together, pollution reduction will build a safer environment and healthy communities.

REGULATING PESTICIDES

There are concerns that pesticides may have negative effects on human health and the environment. Improperly applied pesticides may leach through soil and impact surface and ground water. The Manitoba government is engaging Manitobans in a discussion on the appropriate use of pesticides in a broader framework of integrated pest management and will introduce legislation to address the use of pesticides to control weeds on lawns, school grounds and playgrounds.

RESTORING AREAS IMPACTED BY POLLUTION

Manitoba supports the polluter pays principle. Human and environmental health are protected by government oversight of the identification, assessment and remediation of contaminated sites by those responsible for any environmental effects. The province will amend *The Contaminated Sites Remediation Act* to enable a site to be designated as a contaminated site, if it poses a threat to human health or safety or to the environment; or as an impacted site, if the site is contaminated at a level that may pose such a threat.

The amendments will impose a duty on the owner or occupier of a site to notify government if he or she becomes aware of information about contamination on a site. Government will promote the restoration to useful purposes of impacted and contaminated sites.

NEW AIR QUALITY STANDARDS

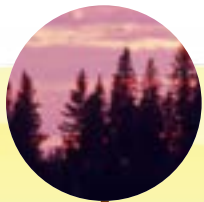
Manitoba will co-ordinate with other jurisdictions to implement a new Air Quality Management System that includes ambient air quality standards for air pollutants, base level industrial emission requirements for large industries, provincial air management zones, additional controls for mobile sources and enhanced monitoring and reporting.

KEEPING INDOOR AIR QUALITY HIGH

Health risks in the environment are not simply an “outdoor” problem. The average Canadian spends up to 90 per cent of time indoors, especially over the winter months, so efforts need to be made to ensure that air quality is as high inside homes and workplaces as it is outdoors. The Manitoba government will continue to implement measures that can help ensure citizens have clean, safe air to breathe in all settings, raise awareness of potential indoor health risks, and identify ways to maintain a healthy air quality environment.

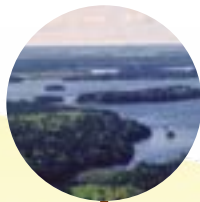
NEW ALL-TERRAIN AND OFF-ROAD VEHICLE STRATEGY

The province will develop and seek public input on a strategy for off-road vehicles that will ensure safe, environmentally and economically sustainable off-road vehicle use in Manitoba.



2009

Logging banned within provincial parks



2009

Kaskatamagan and Kaskatamagan Sipi Wildlife Management Areas added to protected area network, protecting almost 400,000 hectares of important boreal tundra transition area



2009

WaterSmart launched with dual-flush toilet rebate program; 11,000 new toilets will conserve an estimated 270 million litres of water per year

BETTER APPROACHES TO STUBBLE BURNING

Stronger enforcement of the Burning of Crop Residue and Non-Crop Herbage Regulation will take place. Alternatives to stubble burning such as crop residue reclamation, direct seeding and crop rotation will be explored and promoted.

STRONGER ENVIRONMENTAL ENFORCEMENT TEAM

Manitoba is safeguarding and protecting the environment by training a specialized enforcement team to pursue complex investigations. The goal of the team is to ensure more effective and successful prosecution of major environmental offences. The province is also initiating advanced training in compliance activities for environment officers.

ENVIRONMENTAL EMERGENCY STRATEGY

Manitoba is ensuring continued environmental health and safety within the province by developing a leading-edge program for responding to environmental emergencies including spills of oil and other harmful contaminants. Manitoba will maintain and enhance an expert team to prevent environmental emergencies from happening in the first place. Plans and legislation will be developed in consultation with other jurisdictions to ensure a coordinated and consistent response to large-scale environmental emergencies, involving planning, prevention, response and recovery.

ENVIRONMENT ACT ONLINE REGISTRY

Manitoba has made environmental proposals available online to make these files more readily accessible to the public while also reducing paper demand.

ROBUST PUBLIC AWARENESS OF ENVIRONMENT ACT PROPOSALS

To increase public awareness and participation in the environmental assessment process, Manitobans can now sign up to receive automatic notifications when new environment act proposals are posted online.



STRONG NEW LEGISLATION TO PROTECT THE ENVIRONMENT

Manitoba's environmental legislation will be amended to include innovative compliance tools such as administrative penalty provisions. In 2014, the government will consult on new protocols for environmental assessments to make them more effective and enhance public communication while ensuring developments are sustainable.

REHABILITATION OF FORMER MINE SITES

Manitoba will continue to rehabilitate former mine sites under the Orphaned and Abandoned Mine Site Rehabilitation Program that was established in 2000 to address public safety, environmental and health concerns. Over \$120 million has been spent to date and remaining high hazard and high priority sites will be largely completed in 2014.

INTEGRATED COMMUNITY SUSTAINABILITY PLANS

The province will continue to work with municipalities and planning districts on an integrated approach to planning for infrastructure, land use and financial sustainability to achieve social, economic and environmental goals.



2010

Waste Reduction and Recycling Support landfill levy introduced to discourage waste disposal and reward Manitoba municipalities for recycling waste

LEADING THE WAY ON REDUCING WASTE

More can be done to reduce the amount of waste produced, starting with thinking about a product's complete lifecycle. What happens to what we use when we don't need it?

WASTE PREVENTION AND REDUCTION STRATEGY

A new aggressive Manitoba Waste Reduction and Prevention Strategy will report on provincial waste reduction and prevention efforts and outline specific goals to enhance the province's performance. The strategy will focus on the following objectives:

- Reducing the volume of waste generated and disposed
- Separating hazardous from non-hazardous waste
- Improving waste management practices

Manitobans will be asked to share their views on proposed goals and actions as the strategy is developed.

NEW RECYCLING TARGETS

As the number of recyclable products expands and the means of recycling those products are established, Manitoba will prohibit additional materials from our landfills through legislation. Manitoba will support the recovery and recycling of agricultural plastic products such as grain bags, bale wrap

and twine to keep these wastes out of rural landfills. Manitoba has set a target of recycling 75 per cent of beverage containers which should be achieved by 2016. The provincial government will extend this approach to other product categories and establish targets, timelines, evaluation criteria and reporting requirements for designated materials.

INCREASED WASTE DIVERSION

Already, more than a dozen products, including packaging and printed paper (blue box materials), tires, used motor oil, batteries and antifreeze, can be safely disposed or recycled through industry-run programs. Building on the success of the *Waste Reduction and Recycling Support* (WRARS) landfill levy program, Manitoba will encourage more diversion of waste from landfills and improve the waste management system. Manitoba's network of electronic waste depots will be greatly expanded providing convenient collection services province-wide. New household hazardous waste depots across the province will give Manitobans more convenient access to safe collection options for potentially harmful products such as solvents, pesticides and corrosive materials.



2010

The first of a series of Integrated Watershed Management Plans are completed



“WHERE CAN I RECYCLE” WEBSITE

The province is taking the lead on co-ordinating and increasing educational awareness for provincial, municipal and industry-run recycling programs. A single-window web portal “Find Your Nearest Eco-Depot” enables Manitobans to find the closest drop-off locations for hazardous household materials and all other recyclables.

ORGANIC WASTE REDUCTION TARGET

Manitoba is setting a target of diverting 85 kg of organics from landfills per capita by 2020 – more than a threefold increase from current levels, and more than the national average of 65 kg per capita. This is equivalent to diverting over 15,000 garbage trucks from landfills each year. To help meet this goal, Manitoba will support municipal and community composting programs to achieve province-wide composting. Up to \$1 million will be available annually through the newly-launched Manitoba Composts Fund to develop public and private sector composting operations and to support composting initiatives that encourage the diversion of organic waste from landfills.

EXPANDED COMMERCIAL SECTOR RECYCLING

Manitoba will work with municipalities and industry to expand recycling options for construction and demolition materials.

REDUCING DEPENDENCE ON PLASTIC BAGS

Further to the existing target of a 50 per cent reduction in single use plastic bags by 2015, Manitoba will work with industry and stakeholders to continue steadily reducing plastic bags in the retail market.

RECYCLING AND REUSING NUTRIENTS TO IMPROVE WATER QUALITY

Manitoba will explore new ways of improving the capture, recycling and reuse of nutrients by finding new markets for recycled nutrients, supporting innovation and exploring options to reduce phosphorus. In combination with the Lake Friendly Accord, measures to capture, recycle and reuse nutrients will improve water quality while supporting agriculture and fuel production.



2010

Manitoba section of the Pine to Prairie International Birding Trail established; an 800 km trail featuring 68 wildlife viewing sites between Detroit Lakes, Minnesota, and Hecla-Grindstone Provincial Park

NURTURING OUR LIVING WORLD

Natural ecosystems are the foundation of extensive life-giving ecological services such as air and water, and provide habitat, offer recreational and economic opportunities and support traditional lifestyles.

We actively protect our biodiversity by establishing new parks, ecological reserves, wildlife management and other protected areas, by developing management plans and recovery strategies for species at risk, and by striving to ensure sustainable development of all our natural resources.

PROTECTING OUR BIODIVERSITY FOR TOMORROW

We need to do our best to protect natural spaces, wildlife and plants in Manitoba. Natural spaces with healthy land and water ecosystems provide essential habitat for the long-term survival of all species. Healthy ecosystems have the capacity to recover from and adapt to stresses for the benefit of present and future generations.

NEW LEGISLATION AND POLICIES TO PROTECT SPECIES AND HABITATS AT RISK

Increased protection of endangered and threatened species and their habitats, as well as, protection of habitats at risk will be pursued through stronger legislation and policy that ensures the timely inventory, monitoring and assessment of species at risk, the development of recovery and conservation strategies and the enhanced protection of habitat for listed species. The protection of rare natural habitat types would reduce the need to designate individual species at risk, and more efficiently focus resources on conservation at the landscape level. The critical habitat protection and restoration work of the Manitoba Habitat Heritage Corporation will be enhanced through the expansion of its mandate to deliver innovative conservation initiatives.

POLICY TO OFFSET BIODIVERSITY LOSS

Development can have negative effects on the natural environment unless measures are in place to manage and mitigate the effects. Manitoba will develop a provincial habitat protection policy for the mitigation of habitat loss resulting from industrial, recreational and commercial development. The policy will balance unavoidable habitat loss, environmental impacts and natural resource losses, through mitigation on a project-by-project basis.

NEW FISH AND WILDLIFE ENHANCEMENT FUND

A new fund was announced in 2012 that will address the need to enhance and increase monitoring and conservation of key species, and their habitats. Funding will be provided to projects that help inventory, monitor, protect, enhance, conserve and/or rehabilitate species and the habitats they rely upon, and partnerships will be encouraged.

RESTITUTION PENALTIES FOR POACHING

The loss of an animal killed illegally means a loss for Manitobans. Whether that animal is there for future economic opportunities such as hunting or eco adventures, or simply to view as an integral part of nature, its loss has far-reaching impacts including impacts to animal populations and biodiversity. In addition to fines determined by the courts, offenders will be required to pay a set value for the loss of the animal as determined in a new framework under *The Wildlife Act*. These fees will be directed into the new Fish and Wildlife Enhancement Fund for use in future wildlife management initiatives.



2011

Manitoba Hydro announces new sales of electricity to Minnesota and Wisconsin totaling 475 MW, with an estimated value of \$4 billion



2011

"Greater Strides – Taking Action on Active Transportation" report is released, with recommendations to improve active transportation infrastructure

STRONGER INVASIVE SPECIES MEASURES

Invasive species threaten forests, agricultural lands, aquatic habitats, fisheries, infrastructure and valuable recreational resources. Manitoba is implementing measures to control their spread, including:

- supporting the Dutch elm disease management program
- completing preparedness plans for invasive forest pests such as the emerald ash borer and mountain pine beetle
- promoting integrated and environmentally sustainable control programs for noxious weeds
- strengthening efforts to prevent and mitigate invasion of zebra mussels and other aquatic invasive species such as spiny water flea and Asian carp through inspection, monitoring and public education programs

ENHANCED WILDLIFE DISEASE CONTROL

Manitoba makes a strong effort to prevent the spread of wildlife diseases. The battle to keep chronic wasting disease from entering Manitoba will continue to protect the health of deer and elk populations. The control of bovine tuberculosis, which can affect both wildlife and nearby domesticated animals that are economically important to producers, also remains a priority.

HEALTHY FISHERIES AND ECO-CERTIFICATION

Many Manitobans rely on fisheries as a source of food, employment and recreation. Manitoba will work to achieve eco-certification status for the province's fisheries, and work with fishers to explore new markets and the development of value-added products from underutilized fish.



Top to bottom:
Zebra mussels; Aquatic invasive species
mobile decontamination unit; caribou



Belugas near Churchill

NEW WOODLAND CARIBOU CONSERVATION STRATEGY

Based on the key principle that conservation of scale-appropriate intact habitat is the cornerstone of caribou protection, a strong, new conservation strategy will work to help conserve this iconic and threatened species of the boreal forest. The strategy will focus on four main tasks.

- The development of action plans for each of Manitoba's caribou ranges to ensure each population remains self-sustaining.
- The formalized engagement with Aboriginal peoples, environmental organizations, industry and other key stakeholders to assist the government in making sound decisions on protection measures.
- The increased habitat protection for woodland caribou and other species, to allow populations to adapt to sudden changes such as forest fires.
- The enhanced efforts for tracking caribou, to improve our understanding of caribou distribution and abundance for better decision-making.

MOOSE AND OTHER BIG GAME ACTION PLANS

Large mammal species such as moose, elk and deer are culturally, environmentally and economically important and affected by a variety of complex environmental and natural resource demands. Monitoring of these populations has been increased and action plans will be developed in partnership with regional communities, Aboriginal peoples, and wildlife organizations to return declining big game populations to healthy levels.

COMPREHENSIVE BELUGA WHALE PROTECTION

Manitoba will collaborate with partners and local communities to develop management plans to conserve vital beluga whale habitat. The first plan will focus on the estuary located in the Seal River and subsequent plans



Lake Sturgeon

would be completed for the Churchill and Nelson rivers. Working with the federal government, Manitoba will propose that a comprehensive beluga strategy be developed.

STRONG NEW MEASURES TO CONSERVE LAKE STURGEON

Manitoba recognizes the cultural and ecological importance of lake sturgeon, a species which was overfished in many watercourses across Canada a century ago and has been slow to naturally recover. An updated management plan for sturgeon developed in partnership with Aboriginal peoples will focus research and recovery efforts on ways to enhance sturgeon populations and maintain the compatibility of economic development opportunities in and near waters that are home to sturgeon populations.

HERITAGE TREE PROTECTION

Heritage trees, or other trees that have unique history and a significant story to tell, hold a special place in the hearts and minds of Manitobans. The province introduced first-in-Canada legislation that would create a provincial heritage tree program in partnership with the Manitoba Forestry Association. Manitobans will be able to nominate a tree or group of trees on Crown lands that have environmental, cultural, social and historic importance so that they can continue to be enjoyed and appreciated by future generations.

THE WORLD'S POLAR BEAR PLACE

From Churchill, “The Polar Bear Capital of the World” to the International Polar Bear Conservation Centre Journey to Churchill at Assiniboine Park, and the world-renowned Polar Bear Alert Program, Manitoba is a leader and world destination when it comes to the polar bear, and has been for many years. By building on Manitoba’s work and expertise, the province can become the world’s “go-to” place for “everything polar bear” with a comprehensive and strategic polar bear action plan.

THE WORLD'S STRONGEST POLAR BEAR PROTECTION

To help ensure both polar bears and their habitats are better protected, the province will bring in new laws with stronger penalties, launch a comprehensive management plan, seek federal protection of polar coastal waters and undertake new co-operative efforts with other polar bear jurisdictions.

RESEARCH EXCELLENCE ON POLAR BEARS

The province will undertake a world-class effort to learn more about the biology of the polar bear, including feeding and denning, distribution, reproduction and population trends, to inform decision-making about polar bear conservation.

SHARE THE SUCCESSES OF “POLAR BEAR ALERT” AND TELL THE POLAR BEAR’S CLIMATE CHANGE STORY

Manitoba’s expertise in running the Polar Bear Alert Program will be shared by growing our training capacity, sharing our best practises with other communities facing human-bear conflicts and promoting its success with the public through education and outreach. To help ensure greater global awareness of the polar bear population’s state of health and the link to climate change, new partnerships will be developed to send a strong message from Manitoba.

ENHANCED ECO-TOURISM

Based on enhanced human conflict management and safe viewing policies, new eco-tourism guidelines and strategies will be developed with stakeholders to better promote Manitoba’s unique destination opportunities as the “World’s Polar Bear Place” and to safeguard animals and people. These efforts will also promote and integrate the many other eco-tourism draws of northern Manitoba including beluga whales, world-class birding and the northern lights.



2011

Industry operated, Extended Producer Responsibility programs established to collect, properly manage and recycle antifreeze, batteries, pharmaceuticals, thermostats and agricultural chemical containers



2011

Province launches 5-year, \$100 million plan to upgrade facilities in provincial parks



Polar Bears near Churchill

CARING FOR THE BOREAL FOREST

A large portion of Manitoba includes boreal forests, wetlands, lakes and rivers. The sustainable management of the land, watershed and everything living on it has never been more critical. These natural areas support the province's prosperity and well-being, and are vital to the natural resource economy and the environment.



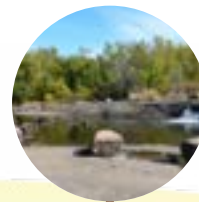
Photo credit: Hidehiro Otake

NEW MANITOBA BOREAL PLAN

Aboriginal communities will be engaged as partners from planning through to implementation of the new Manitoba Boreal Plan, bringing attention to the importance of the boreal forest. The plan will aim to provide a co-ordinated approach to ensure the protection and sustainable development of the boreal. Building upon Manitoba's leadership, the plan will bring together efforts on scientific research, traditional ecological knowledge, planning, data gathering, endangered species, monitoring, and ecological goods and services to help prepare for climate impacts to Manitoba's boreal. By working in partnership with aboriginal and northern communities and taking a forward thinking approach that balances sustainable development with conservation, Manitoba is protecting our province's rich natural heritage and, at the same time, helping to ensure long-term economic security for the province.

NOMINATING A UNESCO WORLD HERITAGE SITE

Pimachiowin Aki, also known as "the land that gives life", is a 33,400 km² cultural landscape and the largest conserved area of the North American boreal shield. A nomination will be submitted for a UNESCO World Heritage Site and the Pimachiowin Aki World Heritage Fund has been established to ensure the long-term sustainability of a world heritage site.



2011

The first land use plans developed under *The East Side Traditional Lands Planning and Special Protected Areas Act* are approved, permanently protecting over 800,000 hectares of boreal forest and wetlands on the east side of Lake Winnipeg

CANADA'S FIRST COMPREHENSIVE PEATLANDS STEWARDSHIP STRATEGY

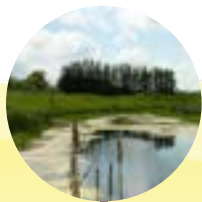
Peatlands are the most efficient terrestrial ecosystem for storing carbon, and cover three per cent of the world's landmass but contain twice as much carbon as the world's forest biomass. The Manitoba government will develop Canada's first peatlands stewardship strategy, with input from Aboriginal peoples, environmental groups, the public and industry stakeholders.

MORE PROTECTION FOR THE "LUNGS OF THE EARTH"

Sustainable management of Manitoba's forests promotes healthy forest ecosystems and maintains the carbon storage capacity of these landscapes. The Manitoba government will ensure that forest management activities enhance carbon storage. This includes salvaging forests that are diseased or destroyed by natural disturbances, revising renewal standards, increasing forested areas, implementing tree improvement programs, and adapting sustainable harvest levels. Building on traditional area planning legislation, the province will continue to work with Aboriginal communities on resource and land management, and identify sustainable economic development opportunities.

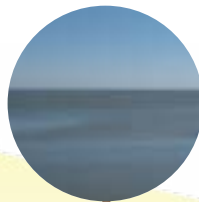
CERTIFICATION OF FORESTRY OPERATIONS

The Manitoba government will ensure that all forest harvesting on public lands in the province meets or exceeds recognized third party sustainable forest management certification systems. Manitoba will move to requiring long term Forest Management Plans for all forestry operations. In addition, all new Forest Management License Agreements in Manitoba will require a certification regime as a condition of licensing.



2011

Manitoba surpasses 10% of the landbase set aside in protected areas



2011

The Save Lake Winnipeg Act receives unanimous consent in the Manitoba legislature



2011

Manitoba bans the use of provincial funds for the purchase of plastic water bottles smaller than one litre from government offices

CONSERVING & PROTECTING A CRITICAL BALANCE OF MANITOBA'S LAND AND WATER

There is a need to manage Manitoba's land and water sustainably to balance long-term economic prosperity, social equity and environmental well-being. Manitoba is positioned to develop new protection goals through a series of related activities that are underway or in early planning stages, including:

A NEW PROTECTED AREAS STRATEGY - Targeting protection of priority threatened habitat important to federally and provincially listed Threatened and Endangered species – including the designation of wildlife management areas, ecological reserves, provincially significant wetlands and other protected areas by 2030.

A NEW PARKS STRATEGY - Expanding the provincial parks system – this will include creating new parks and expanding existing parks, as well as exploring opportunities to increase protection through changes in park land use categories within some existing parks (for example, removal of peat leases in Hecla/Grindstone Provincial Park).

EXPANDING TRADITIONAL LAND USE PLANNING INITIATIVES - Working with Aboriginal people to create protected areas through the continuing development of traditional land use area plans - protected areas preserve land which Aboriginal people may use to maintain traditional activities. Existing Aboriginal and Treaty rights are respected in protected areas, which remain open to hunting, trapping, fishing and other traditional uses.

A NEW BOREAL PLAN - Incorporating traditional and stakeholder knowledge, the plan will co-ordinate efforts related to the boreal forest and promote research collaboration to ensure protection and sustainable development to find the right balance. A critical component of the Boreal Plan will be the conservation and protection of the region's air, water and land, within a network of representative protected areas.

OTHER EFFORTS - Including designating areas of Crown land as "endangered ecosystems" under a new "Endangered Species and Ecosystems Act", strengthening wetland protection through a new provincial Wetlands Strategy, protection of peatlands as part of the forthcoming Peatlands Stewardship Strategy and exploring ways to recognize Critical Habitat for the Boreal Woodland Caribou.

Protected areas conserve habitat that is home to Manitoba's iconic wildlife species, maintain key ecological functions that contribute to a clean and healthy environment, provide benchmarks with which to assess the sustainability of our resource use, and offer the public opportunities to be active and to connect with nature.

Manitoba's new protection goals will be developed with the guidance and feedback of all Manitobans.

THE PARKS PROVINCE

Prioritizing the “park experience” is more important than ever to better appreciate our outdoor environment. This compels a modern re-thinking and a new effort to make Manitoba “The Parks Province,” where park proximity, the number and hectares of park, ecological reserves, wildlife management areas and protected areas per capita, ecological diversity, and visitor services are unmatched in Canada. This will be ensured with fresh and modern park and protected areas strategies.

15 NEW PROVINCIAL PARKS, ECOLOGICAL RESERVES AND WILDLIFE MANAGEMENT AREAS

Manitoba will add up to 15 more parks, ecological reserves, wildlife management areas or other protected areas over the next eight years, open Upper Fort Garry Provincial Heritage Park and expand some provincial park boundaries. Consultations will be held on a proposed new park that will protect known and newly found polar bear dens along the Hudson Bay coast. Protected areas are important because they are the surest and most economical way to protect species and natural landscapes. Manitoba will complete protection in priority areas.

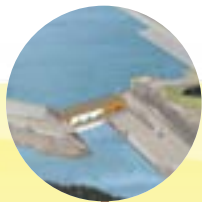
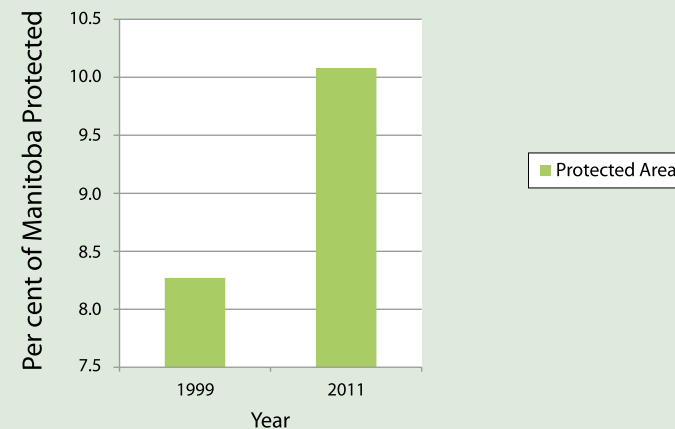
REVIEW OF MINING IN PARKS

The province is reviewing mining in parks with the goal of developing a sustainable ‘mining in parks’ strategy to protect significant recreational or ecological values.

HISTORIC LEVEL OF PARK INVESTMENT

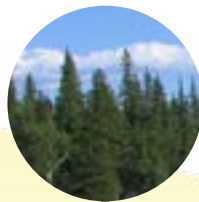
Significant investments will be made to refresh Memorial Park, build a Birds Hill Park visitor “supercentre,” recast the West Hawk Lake townsite, rejuvenate Spruce Woods and enhance the Grand Beach area experience. In addition, capital investments in selected parks that result in new and improved campsites and modernized amenities will ensure Manitobans have even more opportunities to hear the late night distant wolf howl or marvel at the stars.

Growth of Manitoba's Network of Protected Areas Over Time



2012

Wuskwatim Generating station began operation on the Burntwood River, producing 200 MW of hydroelectricity



2012

Parks Canada Agency, on behalf of Manitoba, Ontario and five First Nations, submits Pimachiowin Aki World Heritage Site nomination bid to UNESCO

BUILDING THE PARKS PROVINCE – A Fresh and Sustainable Strategy for Manitoba's Provincial Parks

A strategic review and public consultation document was released on March 8, 2013, outlining changes designed to strengthen the province's parks system. This fresh and sustainable strategy for provincial parks focuses on key priority areas for investments and action to 2020. The priority areas include:

DEVELOPING FUNDING BALANCE AND NEW PARTNERSHIPS – New partnerships will be considered and new ways to sustain investments in provincial parks will be introduced to ensure visitors continue to have positive experiences in parks.

ENHANCING THE PARK EXPERIENCE – Services and programs will shift to ensure high-use areas receive the investments needed to increase the number of electrical service sites, expand facilities to accommodate more visitors and offer a broader range of recreational opportunities.

NEW ENTICEMENTS FOR ACTIVE FAMILIES – Sustainable investments in programs and services that provide opportunities for physical activity in the great outdoors will encourage Manitobans to get out, and stay out!

ENVIRONMENTAL LEADERSHIP – The creation of parks conserves and legally protects large areas of healthy ecosystems but also remnants of habitats and ecosystems at risk of being lost.

The strategy includes many new exciting initiatives and upgrades to existing facilities in Manitoba's provincial parks. Funding of \$100 million will be targeted for investment in park infrastructure to 2020. This will further sustain park infrastructure while allowing for new, active recreational experiences and educational opportunities while remaining sensitive to the fundamental priority of preserving natural, cultural and heritage resources.

Investments will include \$20 million for improved wastewater treatment facilities that will protect Lake Winnipeg through phosphorous reduction and \$14 million for more drinking water facilities and improved roads. A further \$20 million will renew Spruce Woods and St. Ambrose Beach provincial parks following the devastation the parks endured during the 2011 flood.

Investments in keeping our parks clean and green will reduce the impact of our recreational footprint on our parks. These actions range from developing new signage and materials to encourage visitors to minimize their impact on the park environment to investments in water and energy saving fixtures and the use of green cleaning products to reduce phosphorus entering waterways.

The strategy will also explore new enticements for active family fun including private sector partnerships for more geo-caching, new adventure sport and biking opportunities, and free park access in February.

NEW OFF-SEASON OPPORTUNITIES

A camping pilot project will extend camping in spring and fall, and provide opportunities for school, boy scout and girl guide winter adventures. Manitoba will celebrate and promote the beauty and bounty of our winter. Existing winter recreation programs will be promoted to get more people out to ski, snowshoe, skate or toboggan in parks.

GREENING OUR PARKS INITIATIVE

Services provided in our green spaces should be sustainable and environmentally sound. A new, multi-year plan will ensure enhanced recycling, minimized service vehicle emissions, pesticide use, state of the art wastewater treatment, energy savings, and enhanced protection of endangered species and spaces in park boundaries.

BACKCOUNTRY CAMPING ADVENTURES

Manitoba has wonderful backcountry camping opportunities along many rivers and lakes in our provincial parks. The province will pilot an online backcountry camping site inventory for canoe routes in Nopiming Provincial Park to provide trip planning information for backcountry camping enthusiasts and to help attract new visitors.

SUSTAINABILITY EDUCATION IN OUR PARKS

The provincial parks interpretive program seeks to actively educate the public and help develop future stewards of our parks. School programming is offered and regular programs engage young people and families year round. This encourages respect for the natural environment so that these resources may be enjoyed by future generations. The parks branch will explore development of a mobile app for Manitoba's provincial parks. It has launched a 'borrow bag' program for select campgrounds that do not have on-site park interpreters. Each bag has a theme – from birds to mammals, to wetlands, with a variety of activities that families can do while visiting the park.



2012

The Emissions Tax on Coal Act comes into force



2012

International Polar Bear Conservation Centre opens – the first component of the Journey to Churchill at Assiniboine Park Zoo



2012

Province launches development of a Surface Water Management Strategy to guide consistent water planning and management

MOBILIZING MANITOBANS

All Manitobans have a role to play to reduce our consumption of water, energy and material resources to sustainable levels. Working together to create earth-friendly policies that encourage environmentally positive behaviour throughout society and the economy helps Manitobans lead by example.

LET'S ALL DO OUR PART

All Manitobans can learn more about green options and new steps to put green thinking and environmental stewardship into action, so we can change our ways for a better tomorrow, now.

Manitoba's Green Building Regulation

Manitoba's Green Building Regulation came into force on April 1, 2013 under *The Climate Change and Emissions Reductions Act*. This regulation requires that construction projects be designed to be at least 33% more energy efficient than the minimum requirements of the Model National Energy Code of Canada for Buildings (1997). The Green Building Regulation applies to construction projects (new building construction, or significant renovation or enlargement of existing buildings) that are leased, owned or operated by the government, a government agency, or Crown corporation; and for which the government provides capital funding. To demonstrate compliance, the owner of a building that is to be constructed, renovated or enlarged must have the building designated under the Manitoba Hydro Power Smart - Commercial New Building Program, administered by Manitoba Hydro. The Green Building Coordination Team will monitor the regulation and provide technical support to those obligated to meet the regulation's green building requirements.

DEMONSTRATING GREEN LEADERSHIP IN GOVERNMENT

The province is taking important steps toward greening its operations. Manitoba's climate change legislation sets an example by embedding green building and green fleet requirements into regulation, and builds on earlier initiatives such as requiring the use of hybrid electric/E85 vehicles by senior executives. The province will also:

- measure corporate greenhouse gas (GHG) emissions and report these through The Climate Registry to establish GHG reduction targets
- green the legislature to show how older buildings can be made greener, including energy and water efficiency, waste minimization, green transportation and the re-use of materials
- develop the green purchasing website to encourage green and sustainable procurement within Manitoba's public sector and provide practical tools to develop purchasing practices that are environmentally preferable and socially responsible. The green purchasing website will also be adapted for public access
- provide public education on internationally and nationally respected environmental certification, labels and codes of practice
- develop an office sustainability enhancement program for government departments that combines sustainability assessments of key environmental indicators such as energy, water and waste efficiencies, with staff awareness and actions to achieve improved financial and environmental footprints

GREEN TIPS and FAST FACTS to encourage earth-friendly lifestyles

Working co-operatively, with an attitude of care and stewardship, all Manitobans can make a difference in ensuring that the benefits of our environment are preserved for both present and future generations. Here are some practical “Green Tips” to start and guide us on our journey:

LIGHTING ACCOUNTS FOR FIVE TO TEN PER CENT OF YOUR HOME’S ENERGY USE. Turn off the lights when you leave a room to save energy and dollars.

DID YOU KNOW? You can save three to four per cent on your winter heating bill by lowering the thermostat for at least eight hours every day. You can replace old thermostats with programmable ones that allow you to lower the heat automatically. Visit www.switchthestat.ca for more information.

YOUR TELEVISION, DVD PLAYER, COMPUTER AND MONITOR STILL USE ENERGY WHEN THEY’RE IN STANDBY MODE. Save money by unplugging them when they’re not in use or connect them to a smart power unit that will turn off accessories when the main device is turned off.

SMALL APPLIANCES USE LESS ENERGY FOR SMALL JOBS. Using them instead of your stove during the hot days of summer will also keep your home cooler.

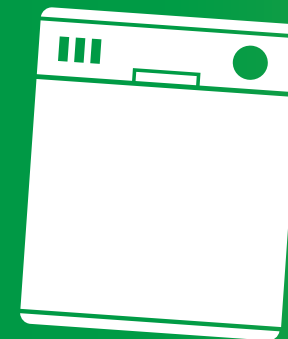
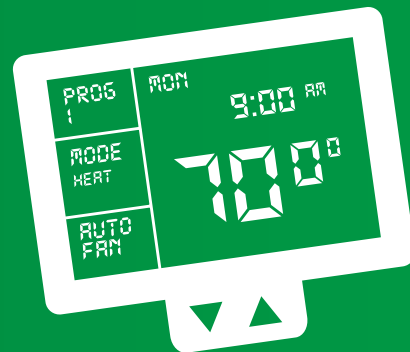
FILL ‘ER UP . . . Load your dishwasher and washing machine to the max. Today’s machines are designed to operate best at full capacity and fewer loads mean lower energy costs.

BE A WATER WATCHDOG. Reading your water meter regularly will help you spot unusual increases in the amount of water you use. A silent leak in your home’s plumbing can waste hundreds of litres of water a day, and possibly hundreds of dollars a year.

IF UNINSULATED, EVEN SMALL ROOMS CAN LOSE A LOT OF HEAT during the winter and send your energy saving right through the wall. When giving your home an insulation update, don’t forget the furnace and laundry room.

GIVE YOUR REUSABLE, UNWANTED ITEMS A NEW LEASE ON LIFE by giving them to charity instead of sending them to the landfill.

RECYCLING JUST GOT EASIER with the Manitoba Eco-Depot webpage and app (www.manitobaecodepot.ca) which allow you to conveniently locate recycling depots near your home. Help protect the environment by recycling electronic waste, paint, tires, batteries, compact fluorescent lamp bulbs and other materials.



TRY XERISCAPING, a style of gardening that helps plants survive dry periods on their own. Use mulch on your garden beds and water plants deeply, thoroughly and less frequently to encourage them to develop deep roots so they can survive drought. Native plant species are the best choices for xeriscapes because they are adapted to the local climate.

WATER AND ENERGY SAVINGS - Did you know that 12 per cent of a typical energy bill goes toward heating your water?

BE LAKE FRIENDLY...only use the right type of fertilizer on your lawn at the correct time, place and rate. This will help reduce algal blooms in lakes and protect both aquatic species and human health.

PLASTIC BAGS take hundreds of years to break down in a landfill. Help protect wildlife and the environment by remembering to carry and use a tote bag instead.

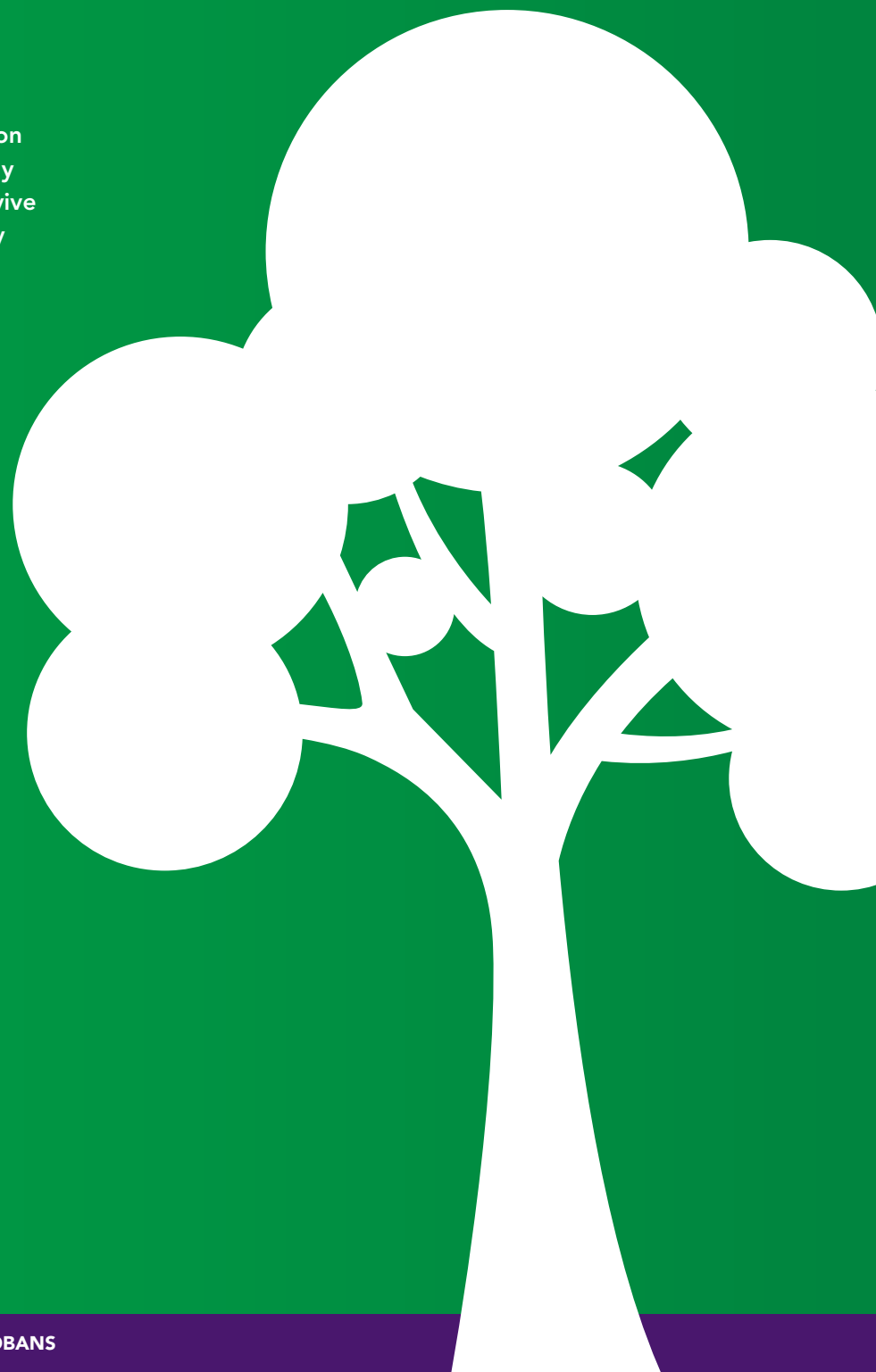
PLANTING TREES helps address climate change, increase wildlife habitat, improve both urban and rural environments and protect watersheds and water quality.

RESOURCES

Manitoba Sustainability Initiatives Directory (www.msids.ca) - highlights programs, resources, events and priorities related to sustainability in Manitoba.

A-Z Recycling Guide (www.greenmanitoba.ca/a-z-list/) - information on where to recycle everything from plastics bags to paint to tires.

Sustainable Development Innovations Fund (www.manitoba.ca/conservation/pollutionprevention/sdif/index.html) - support for innovative solutions to environmental issues.



Manitoba's Green Fleet Regulation

Manitoba's Greening of Government Vehicles Regulation came into force on April 1, 2013, as required by *The Climate Change and Emissions Reductions Act*. The regulation prescribes a fuel efficiency standard for new private vehicles used by the provincial government fleet. The fuel efficiency standard is designed to encourage government to reduce the fuel consumption and greenhouse gas (GHG) emissions from its provincial light-duty fleet vehicles. The structure of the regulation provides individual departments with flexibility to pursue a variety of measures to achieve the target and still address financial constraints and operational transportation needs.

Manitoba is the first jurisdiction in Canada to enact a regulation prescribing a fuel efficiency standard for new light-duty vehicles acquired for use by government. The regulation applies to new private vehicles in the government fleet that are acquired by the Vehicle and Equipment Management Agency and in use by a department, branch or office of the executive government of Manitoba.

The regulation establishes a fuel efficiency standard for new private vehicles in the government vehicle fleet which must not be exceeded in any fiscal year and requires monitoring of the government's progress towards achieving the fuel efficiency standard. The regulation also directs departments establish and implement distinct policies that are intended to minimize the unnecessary idling of the vehicles.

GREEN AWARENESS CAMPAIGN

A high-impact public education and engagement effort will be launched to ensure sustainability teaching and learning in schools is complemented by educational initiatives for the general public. This campaign, taking advantage of social media, will help nurture respect for the environment and provide tools to "lighten our footprint".

SUSTAINABLE URBAN COMMUNITIES

Our reputation as a hub for urban transit manufacturing, green technology innovation and clean green energy has placed Manitoba in a unique position to grow and promote more sustainable and livable urban communities. By restricting synthetic pesticides, building new walkable bridges and redeveloping our inner city we are helping make Manitoba a better place to live for urban residents. With the development of the Neighbourhoods of Bridgwater, which incorporate environmental innovation; pedestrian-friendly mixed use communities; and abundant green space, Manitoba is also showcasing leadership in innovative and sustainable communities. We will continue to build on this work to make all of Manitoba's urban places more sustainable.

SUSTAINABLE COMMUNITY AWARDS

A new category has been added to the existing Manitoba Excellence in Sustainability Awards to recognize communities that embrace the spirit and principles of sustainable development. Communities will be recognized for innovation and excellence in areas such as green buildings, energy efficiency, planning, transportation, waste reduction and water conservation.



2012

Manitoba Habitat Heritage Corporation signs a milestone 600th conservation agreement



2014

The use of coal for space and water heating will be banned in Manitoba



WATERSENSE

The province, as a *WaterSense* partner, supports testing and labelling of products so consumers can make informed decisions about an appliance's water consumption and their water cost savings. Manitoba will build on this momentum and launch a strong and proactive water conservation plan that includes conservation targets, public education, building code changes encouraging grey water systems, and best land use practices, as well as, the potential for further regulatory steps to support individual and local action on water efficiency.

GETTING CHILDREN OUTDOORS

People and communities that engage with nature are healthier, stronger and more sustainable economically, socially and environmentally. Research has shown that contact with nature and wilderness offers a range of health benefits, and Manitoba's outdoors and its many parks house nature's playground. Children especially benefit from access to outdoor activities. To support a child's right to the outdoors, the province will:

- promote every child's right to fundamental experiences in nature, which will include a range of opportunities such as exploring nature, camping under the stars, hiking along a trail or catching a fish

- enhance FortWhyte Alive initiatives with a focus on learning to live sustainably in an urban environment. Initiatives will assist educators and families to create habitat and urban gardens to increase biodiversity in school grounds and homes and also support learning in the outdoors
- develop a guide to learning in the outdoors to serve several audiences, including teachers, school administrators, non-governmental organizations, outdoor educators, daycare providers and more
- support the free Manitoba Youth Angling Card and youth fishing programs in both rural and urban settings. Fishing builds self esteem for children and enhances many life-long coping skills.
- build a checklist of interesting activities and locations where children can enjoy outdoor activities

SUPPORT FOR LOCAL FOOD PRODUCTION

Local food is a healthy and sustainable choice that supports Manitoba producers and food processors. The province will support local food production through continued promotion of Manitoba-produced foods, through exploring the potential of community garden allotments on Crown land, and through the development of a local food procurement policy for the provincial public sector and institutions such as schools and post-secondary educational institutions, Regional Health Authorities, and correctional facilities.

ECO-LEARNING CAPITAL OF CANADA

Manitoba is committed to being an eco-learning capital by developing province-wide partnerships.

CANADA'S "ECO-EXPO"

Manitoba has many world-class destinations that engage and educate visitors about the environment. The province will work with partners to develop a network of attractions to be branded and visibly marketed internationally as Canada's only permanent "eco-expo," with common entry pass options or a "passport."

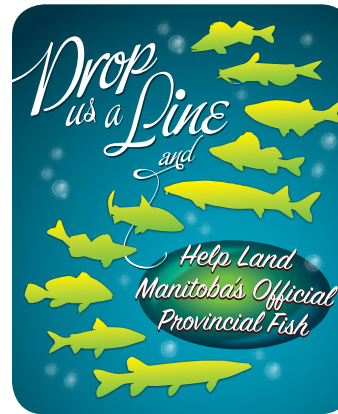
EXPANDING MANITOBA'S WILDLIFE WEBCAM NETWORK

Manitoba has numerous natural wonders and one exciting way to highlight these wonders, and their eco-tourism and education potential, is by expanding the existing web camera network in the province.

MANITOBA NATURE APP

An innovative App will be developed to help connect Manitobans to nature and encourage them to explore the outdoors. The App will use crowdsourcing to engage users as "citizen scientists", allowing them to collect and share observations of plants and wildlife and contribute to our knowledge of Manitoba's biodiversity. Users would also be able to learn more about the plants and animals that they encounter as they explore the Province.

LANDING MANITOBA'S PROVINCIAL FISH



Manitoba's fisheries play a significant role in the lives, cultures and traditions of all Manitobans. Manitobans have been invited to nominate a fish that best represents Manitoba's fisheries resources to the rest of the world. Naming a provincial fish will raise Manitoba's fishery profile and provide an opportunity for Manitobans to learn more about our native fish.

MAPS FOR ALL

GeoManitoba has been established to better support the delivery, acquisition and management of geospatial information for all Manitoba government departments. One of GeoManitoba's key initiatives is to modernize the Manitoba Land Initiative through the creation of a new Spatial Data Infrastructure (SDI). The new SDI will store, manage and disseminate numerous maps, aerial and satellite images and related information to Manitobans free of charge through a new on-line tool. This initiative will also improve the accuracy of this information and will facilitate its sharing across government departments.

FUTURE GOALS



2016

A decision by the UNESCO World Heritage Committee on inscription of a Pimachiowin Aki World Heritage Site. Pimachiowin Aki could be Manitoba's first world heritage site and Canada's first mixed (natural and cultural) site and associative cultural landscape.



2019

Target date for Keeyask Generating Station's first units to come online

GREEN SCHOOLS AND EDUCATION FOR SUSTAINABLE DEVELOPMENT

Manitoba is recognized internationally for leadership in education for sustainable development.

All Manitoba students need to be learning to live more sustainably. This includes, ensuring they grow up to be responsible global citizens in a fair, equitable and environmentally just society. To support this aim, the province will:

- develop an Education for Sustainability Leadership Council of educational leaders and stakeholders from post-secondary institutions, school boards and trustees associations, administrators, teachers societies, parent councils and Manitoba Education to advise on the development of a new three-year action plan on sustainability for formal education to guide a whole-system approach toward education for sustainability in Manitoba
- work with schools, school divisions, post-secondary institutions and other educational partners to support the integration of sustainability in their educational programming and daily operations
- expand the natural resource officers (NRO) in schools program where officers share experiences and knowledge about how natural resources are conserved and protected
- advance technical and vocational education and training to support the transition to a green economy including launching a Guide to Green Jobs and Sustainable Careers
- promote the introduction of education for sustainable development into teacher education



2023

Possible date by which Conawapa Generating Station could come on line, producing 1485 MW of hydroelectricity

- implement a new Grade 12 course on global issues: citizenship and sustainability
- support schools greening their school grounds through funding to create outdoor learning environments for new school builds and encourage outdoor learning through educator professional development opportunities and on-line learning resources
- encourage schools, universities and colleges to access any new funding programs from Manitoba Hydro that encourage energy and water efficiency
- ensure new school building projects are built to green building standards
- encourage a sustainability school plan in every school by 2015



YOUR INPUT IS IMPORTANT

THANK YOU FOR HELPING US MAKE MANITOBA'S GREEN PLAN BETTER NOW AND FOR TOMORROW!

As a “living document” Manitoba will move forward with the strategies outlined in TomorrowNow and strive to meet the needs of Manitoba as the process evolves. Manitobans can stay informed about the achievements under the plan at www.manitoba.ca/conservation/tomorrownowgreenplan.

For more information about Manitoba's Green Plan please contact:

Manitoba Conservation and Water Stewardship
Box 38, 200 Saulteaux Crescent Winnipeg, MB R3J 3W3
Website: www.manitoba.ca/conservation/tomorrownowgreenplan





