

**Manitoba Conservation
and Water Stewardship**

**Conservation et
gestion des ressources
hydriques Manitoba**

**Annual Report
2011-2012**

**Rapport annuel
2011-2012**



**MINISTER OF
CONSERVATION AND WATER STEWARDSHIP**

Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

The Honourable Philip S. Lee, C.M., O.M.
Lieutenant Governor of Manitoba
Government House
Winnipeg MB R3C 1S4

Your Honour:

I am pleased to present you with the Annual Report of the Manitoba Department of Conservation and Water Stewardship for the fiscal year ending March 31, 2012.

This fiscal year saw the reintegration of the Water Stewardship and Conservation Departments and the annual report details the combined Department's many activities and accomplishments as we fulfill our mandate of protecting the environment while sustaining and conserving Manitoba's diverse ecosystems and abundant natural resources.

The Department serves Manitobans and our visitors throughout the province and we strive to work in partnership with the public to meet the challenges and opportunities of sustainable development in our parks, communities, and rural and northern areas.

I hope that the information in this report sheds light on the positive results of our programming and the many important and ongoing activities that take place around our beautiful Province.

Respectfully submitted,

"Original
signed by"

Gord Mackintosh
Minister of Conservation and Water Stewardship



The Honourable Gord Mackintosh
Minister of Conservation and Water Stewardship
330 Legislative Building
Winnipeg MB R3C 0V8

Dear Minister:

I am pleased to present you with the Annual Report of the newly combined department of Manitoba Conservation and Water Stewardship for the fiscal year ending March 31, 2012.

The Department remains committed to delivering quality programs and services to protect our environment and sustainably manage natural resources, while balancing diverse community interests. The Annual Report provides an overview of some of the programs and activities carried out in the 2011/12 fiscal year by the combined Department. Key results and accomplishments include:

- *The Save Lake Winnipeg Act* S.M.2011. c. 36 received royal assent on June 16, 2011.
- Two additional CL-415 water-bomber aircraft were acquired.
- The City of Brandon was brought into the Assiniboine Hills Conservation District - the largest urban expansion initiative in the 35 year history of the Conservation Districts Program.
- Together with the Canadian Space Agency, GeoManitoba mapped many areas flooded in the spring of 2011 using remote sensing technology and Radarsat 2 imagery. Key areas were Lake Manitoba, the Shoal Lakes, Lake St Martin, Spruce Woods, Lake Winnipeg and Whitewater Lake.
- The Department provided technical and engineering input, advice, planning assistance, assessments, and information for integrated watershed management plans and surface water management plans being developed by watershed planning authorities. Similar technical and engineering services were provided to conservation districts for a variety of water management problems and water infrastructure proposals.
- Repairs and improvements are underway to ten parks that suffered significant damage during the 2011 flood event. At Spruce Woods Provincial Park significant repairs have been completed on roads, campsites, the beach, the day use area, and other park infrastructure. Planning work is underway for a major repair and redevelopment program for this park.

- To date, the Cottage Lot Program is estimated to have produced around \$100 million in economic activity, through lot sales, construction, purchasing of goods and services and recreational spending. These developments create opportunities for local employment and new business start-ups to grow the local economy.
- The Wildlife Lands Unit participated in the southwest critical wildlife habitat on Crown Land review to identify potential protected areas and in the identification of provincially significant wetlands to better protect them from adverse impacts.
- The Department advanced work towards the development of a provincial peatlands stewardship strategy with interest groups and organizations. The Department also worked intra-departmentally to better understand the carbon values and ecological goods and services provided by boreal forests, wetlands and peatlands.
- Regulated programs under *The Waste Reduction and Prevention (WRAP) Act* recycled 102,352 tonnes of material in 2011/12 including 12,838 tonnes of rubber from scrap tires, 73,592 tonnes of packaging and printed paper through municipal recycling programs and 15,618 tonnes of used oil products. The amount of material collected through these programs increased by 1,750 tonnes from the previous year.

I am pleased to provide this report on the Department's stewardship of Manitoba's resources for the benefit of current and future generations. More highlights and details of the Department's operations and results for 2011/12 are contained in the attached report.

Respectfully submitted,

“Original signed by”

Fred Meier
Deputy Minister



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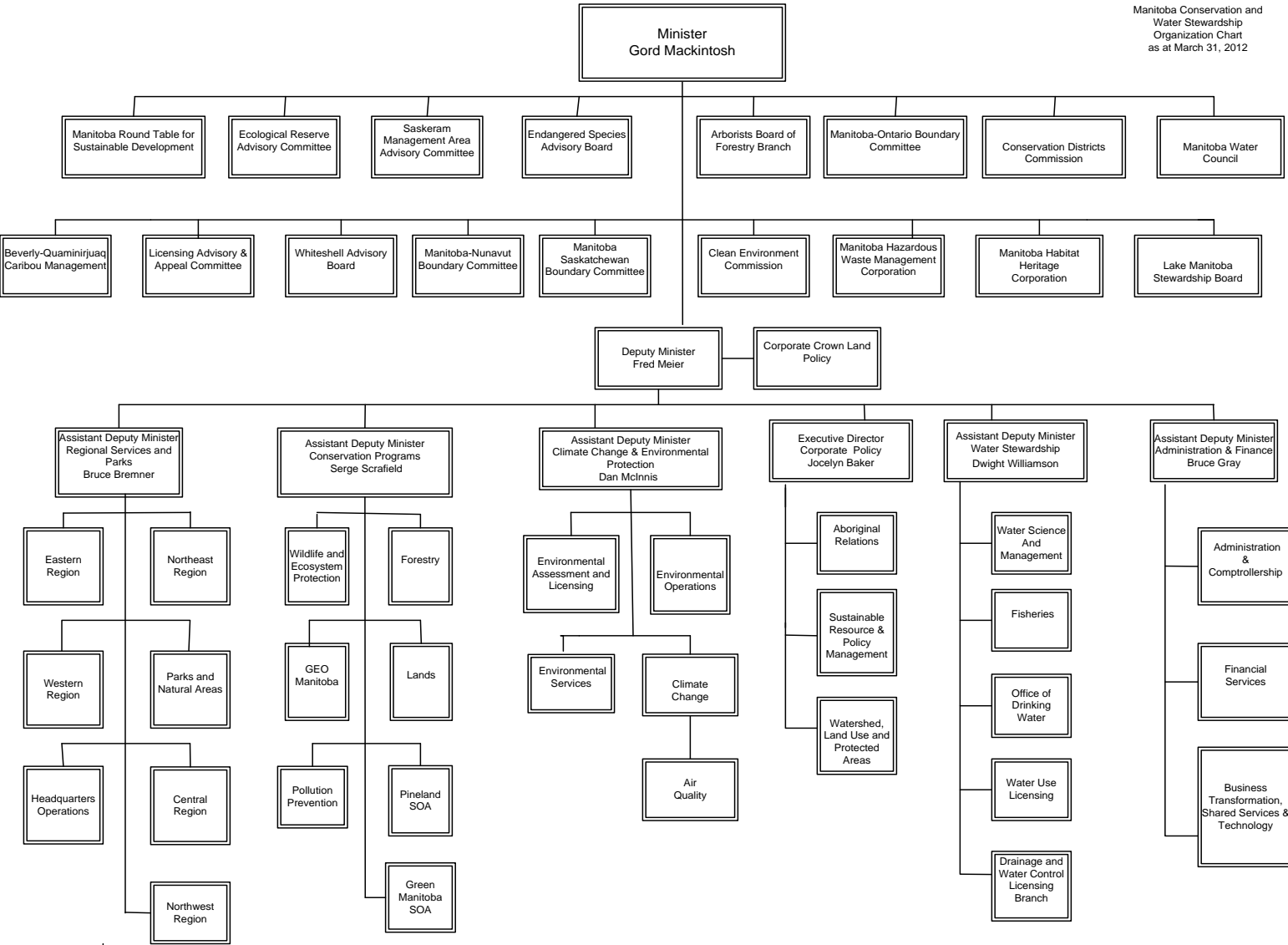
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HIGHLIGHTS

Sustainable Resource and Policy (SRPM)

The Save Lake Winnipeg Act S.M.2011. c. 36 was assented to on June 16, 2011.

The Manitoba Round Table for Sustainable Development (MRT) awarded seven 2011 Manitoba Excellence in Sustainability Awards, including one to the Marquis Project, a community-based, non-profit organization. The Marquis Project received the Outstanding Achievement in Sustainability Award for educating Manitobans on economic, political and social issues at local and global levels and participating in projects and partnerships aimed at improving the quality of life in small, rural communities in developing countries.

The Branch advanced work towards the development of a provincial peatlands stewardship strategy with interest groups and organizations. The Branch also worked intra-departmentally to better understand the carbon values and ecological goods and services provided by boreal forests, wetlands and peatlands.

Watershed, Land Use and Protected Areas

The City of Brandon was brought into the Assiniboine Hills Conservation District - the largest urban expansion initiative in the 35 year history of the Conservation Districts Program.

Expanded Manitoba's protected areas network by permanently protecting almost one million hectares of land.

Aboriginal Relations

Ten Community Traditional Area Land Use Plan (TALUP) Coordinators completed their training with Environmental Systems Research Institute Canada. The training took three years to complete and the individuals who have completed the course are now GIS certified. This certification will allow the coordinators to transfer the skills and knowledge they have gained as community coordinators. This training will complement the previous training that was provided to assist with documenting and mapping First Nation traditional knowledge (TK) at the community level, through interviews with elders, trappers and other community land users.

Parks and Natural Areas

Grand Beach became a candidate beach under the "Blue Flag" program. The international designation recognizes that Grand Beach upholds high standards related to environmental management, water quality, environmental education and safety.

\$13.8 million was spent on an aggressive capital works program to renovate and modernize aging infrastructure, expand facilities to accommodate more visitors, and offer a broader range of recreational opportunities within the provincial park system. This included the completion of a new 120 site fully serviced campground at Winnipeg Beach Provincial Park and the completion of a new boardwalk at Grand Beach Provincial Park.

Repairs and improvements are underway to ten parks that suffered significant damage during the 2011 flood event. At Spruce Woods Provincial Park significant repairs have been completed on roads, campsites, the beach, the day use area, and other park infrastructure. Planning work is underway for a major repair and redevelopment program for this park.

A program was initiated to accelerate the preparation of management plans for all provincial parks. Three contracts were let to private consultants for the preparation of 41 management plans for small parks in the Eastern, Northwestern, and Central Regions.

Little Limestone Lake and Fisher Bay were both designated as provincial parks.

A process was implemented to ensure the seamless posting of French content to the Web, particularly for the Parks and Natural Areas section. And the translation of documents, such as the Junior Naturalist workbooks that are available to all young campers, occurred, as well as translation of various fact sheets, newspaper print ads, signage, advisories, posters and public consultations.

Fire and Emergency Response Program

On October 5th, there was a lightning-caused fire near two cottage subdivisions close to Bissett and several human caused fires in the southeast corner of the province. The temperatures reached 27 degrees with 90 kilometre winds, conditions that worsened the situation. The historic event carried on through Thanksgiving weekend with the largest mutual aid effort occurring with 40 fire departments, municipalities and the Office of the Fire Commissioner.

Two additional CL-415 water-bomber aircraft were acquired.

Regional Support Services

The Canine Unit had the addition of a new handler for Fauna to bring the complement back to 2 full time Canine Teams. The new Canine Team was trained in the fall to meet provincial standards and became operational in November. The teams were used throughout the province on a variety of compliance checks and investigations of illegal fishing and hunting activities, including; 14 roadside check stations, 1 decoy operation, 19 occurrences of searching for evidence in a non-confined area, 88 occurrences of searching vehicles, 2 occurrences of searching for suspects and providing assistance on the execution of a search warrant.

The 24-hour toll free telephone service (1-800-782-0076), aimed at reducing the illegal harvest of fish and wildlife' received 311 calls, resulting in 20 prosecutions and 9 warnings. In addition, the toll free line received 185 calls reporting forest fires.

Wildlife

The Manitoba Conservation Data Centre (MBCDC) was named the outstanding natural heritage program in the Americas receiving the 2011 Conservation Impact Award from the Nature Serve network. The award was given to the MBCDC for partnerships with Manitoba Hydro and the Manitoba Habitat Heritage Corporation who used MBCDC data to guide their efforts to secure, protect, and manage habitat for at-risk species. The Manitoba Conservation Data Centre maintains information on 5,272 elements. Of these 881 are known to be rare or uncommon elements.

The Wildlife Lands Unit participated in the southwest critical wildlife habitat on Crown Land review to identify potential protected areas and in the identification of provincially significant wetlands to better protect them from adverse impacts.

Wildlife Enhancement Initiative

Big game populations were evaluated to assist in setting hunting seasons and to determine other management needs. Methods used included winter aerial surveys of populations to estimate abundance, sex and age composition, recruitment and distribution; hunter questionnaires to estimate harvests, hunter effort and hunter distribution; and collection of biological specimens to assess age and reproductive status.

No hunting-related accidents, injuries or deaths were reported and the hunter education program successfully graduated 3,812 students.

Forestry

In June 2011 the provincial government provided an additional \$1.23 million to plant an extra one million trees for The Trees for Tomorrow program to acknowledge Canadian Environment week. The new goal is to plant six million trees by 2013. In addition to distributing no-cost trees, the program seeks to provide forestry conservation education and learning opportunities, as well as assistance to non-government groups, Conservation Districts, youth groups and schools. Manitoba Conservation and its delivery partner, the Manitoba Forestry Association, will deliver much of the planting effort through contracts with First Nations and other tree planting contractors.

A steady increase in biomass opportunities has taken place as industry and private individuals looked for greener, cleaner alternative heat and energy sources. Forestry has participated in numerous discussions and workshops to assess biomass opportunities throughout the province. A new emissions tax on coal has also prompted coal users to look for sustainable options such as using woody biomass as a biofuel.

Lands

Four management boards have been established through plan implementation agreements between Manitoba and each of the Poplar River, Bloodvein, Little Grand Rapids and Pauingassi First Nations. The purpose of these boards is to guide implementation of approved management plans through the provision of advice and recommendations to the Minister on land use and resource management issues in designated areas of Crown land that First Nations and aboriginal communities have traditionally used.

To date, the Cottage Lot Program is estimated to have produced around \$100 million in economic activity, through lot sales, construction, purchasing of goods and services and recreational spending. These developments create opportunities for local employment and new business start-ups which helps to grow the local economy. In addition, the First Come, First Served Cottage Lot Program has resulted in the sale or lease of approximately 100 lots not previously selected in a cottage lot draw.

Pollution Prevention

Regulated programs under *The Waste Reduction and Prevention (WRAP) Act* recycled 102,352 tonnes of material in 2011/12 including 12,838 tonnes of rubber from scrap tires, 73,592 tonnes of packaging and printed paper through municipal recycling programs and 15,618 tonnes of used oil products. The amount of material collected through these programs increased by 1,750 tonnes from the previous year.

New programs to collect and properly manage automotive antifreeze, household and vehicle batteries, cell phones, mercury-containing thermostats, and expired medications were approved in April and launched in June.

Grand Beach Provincial Park received funding and staff support for its recycling, waste management and minimization efforts with the installation of bear proof waste containers, waste transfer station enhancements, and creation of a metal recycling, wood chipping and composting area.

Through the annual appointment agreement with the Manitoba Ozone Protection Industry Association (MOPIA), 5,155 refrigeration and air conditioning service technicians' received certification, and 421 secondary distributor permits were issued. MOPIA hosted a series of industry information sessions and held ten environmental awareness sessions for technicians.

GeoManitoba

Together with the Canadian Space Agency, GeoManitoba mapped many areas flooded in the spring of 2011 using remote sensing technology and Radarsat 2 imagery. Key areas were Lake Manitoba, the Shoal Lakes, Lake St Martin, Spruce Woods, Lake Winnipeg and Whitewater Lake.

Daily and weekly composites of changes in the Canadian landscape for the Global Climate Change Program were created. This activity uses the Earth Observation Data Management (EODM) system, a satellite image processing system. The product was provided to the Canada Centre for Remote Sensing (CCRS) and is also used by Parks Canada and others.

Climate Change and Environmental Protection Division

In accordance with the Climate Change and Emissions Reduction Act, Manitoba's report on climate change progress was released. The report highlighted the progress to date on the many transportation, agricultural and energy climate change mitigation and adaptation programs. In particular the report noted that Manitoba has been successful in reaching its' 2010 emissions target.

The work of the Prairie Regional Adaptation Collaborative has been completed and a pathway for future adaptation activities has been established. The success of the Collaborative has also been marked by the Combined Water/Drought/Excessive Moisture Forum and the provincial Planning on Adaptation for Excessive Moisture in the Manitoba Interlake Region.

The Emissions Tax on Coal Act came into effect on January 1, 2012. This tax provides the incentive for users of coal to switch to less carbon intensive fuels and is expected to lay the foundation for the further development of the biomass processing sector in Manitoba.

In order to provide clarification on the requirements for the upgrading of the City of Winnipeg North End Water Wastewater Treatment facility, as well as advancements in hog manure management practices, the Division participated in the development of The Save Lake Winnipeg Act. The Act was assented to on June 16, 2011.

The Environment Act provides for a comprehensive assessment of developments that may impact the quality of the environment. The Division was successful in issuing 45 Environment Act licenses including one for the upgrading of the City of Winnipeg South End Wastewater Treatment Facility.

Air Quality Management

Played a key role in overseeing the completion and implementation of the company led Flin Flon Soils Study - Integrated Risk Management Plan - Exposure Reduction Strategy and Actions, jointly with the Government of Saskatchewan.

Environmental Assessment and Licensing

The environmental assessment process was initiated for two substantial, large-scale hydro transmission and generation projects, i.e., Bipole III and Keeyask.

Environmental Services and Environmental Operations

The Emergency Response Team assisted the Emergency Measures Organization (EMO) with the identification and clean-up of household hazardous waste resulting from the extensive flooding and property damage on Lake Manitoba.

Environmental Services prepared Manitoba for a changing environment by developing standards and processes that define the expectations for future development.

Fisheries

Fisheries Branch implemented the Dauphin River Flood Assistance program as part of the Flood 2011: Building and Recovery Action Plan.

Participated in the Nelson River Sturgeon Board and managed its field program. The tagging program continues to show a steady increase in the number of Lake Sturgeon in their main fishing area. The Board also operates an ongoing program to raise sturgeon fingerlings for school aquarium programs and release. New techniques resulted in a dramatic increase in Lake Sturgeon spawn collection success.

Lake Waterhen continued to deliver more than 20,000 kg of Walleye from its commercial winter fishery marking its eighth year of good post-collapse production. Waterhen was index netted for the third year in a row and the data utilized to develop harvest control rules for eco-certification. The harvest control rules were accepted by the fishers for advancement in Marine Stewardship Certification.

Fisheries began collaborating with researchers from the University of Nebraska in 2011 on a series of projects to understand and improve management of the valuable Red River Channel Catfish fishery.

Water Science and Management

The State of Lake Winnipeg report was released by Province of Manitoba and the Government of Canada in July 2011. The report, led by the Water Quality Management Section and Environment Canada, is a collaborative effort by many researchers from other areas of the Department, other government agencies, universities, and non-governmental organizations and is the first comprehensive assessment of the physical, chemical, and biological characteristics of Lake Winnipeg since intensive lake monitoring began in late 1990s. The State of Lake Winnipeg report serves as a reference to measure progress towards reducing nutrient loading, will help in the assessment of the overall health of the lake, and also provides key information to support current and future research on Lake Winnipeg.

The Branch provided technical and engineering input, advice, planning assistance, assessments, and information for integrated watershed management plans and surface water management plans being developed by watershed planning authorities. Similar technical and engineering services were provided to conservation districts for a variety of water management problems and water infrastructure proposals, as well as for the capital works program planning process in conservation districts that manage large, trunk drainage waterway infrastructure.

Office of Drinking Water

Work focused on expansion of the provincial regulatory oversight program for semi-public water systems, including hospitals, schools, daycare facilities and personal care homes; implementation of chemical standards for public water systems; and ongoing monitoring of the operation and construction activities associated with the 421 public water systems that comprise the primary drinking water supplies for over 85% of Manitobans.

The Office participated in the development of integrated watershed management plans as they relate to drinking water source protection, including review and input into two new watershed management plans.

Drainage and Water Control Licensing

A new policy on authorizing of municipal minor works was announced in 2011. Highlights include, expanding the definition of minor works to include more low-impact works typically constructed by municipalities, and allowing for quicker approval of proposed minor works by those applicants that have a history of compliance with *The Water Rights Act*. This policy has been adopted and is being implemented across the province. Many municipalities are taking advantage of the new policy which has resulted in a streamlined licensing process for minor works.

Water Use and Water Power Licensing

A review was completed of Statements and Severance Line Plans received in support of Manitoba Hydro's request for the issuance of a Final Licence for the Churchill River Diversion Project in early 2012.

POINTS SAILLANTS

Direction de la politique et de la gestion durable des ressources

La *Loi sur la protection du lac Winnipeg*, L.M. 2011 c. 36 a reçu la sanction royale le 16 juin 2011.

La Table ronde manitobaine sur le développement durable a décerné en 2011 sept Prix d'excellence en durabilité, dont un au projet Marquis, un organisme communautaire à but non lucratif. Le projet Marquis a reçu le prix des réalisations exceptionnelles pour son travail de sensibilisation des Manitobains et des Manitobaines aux enjeux économiques, politiques et sociaux à l'échelle locale et mondiale et pour sa participation à des projets et des partenariats axés sur l'amélioration de la qualité de vie dans les petites localités rurales de pays en développement.

La Direction a poursuivi son travail de développement d'une stratégie de gestion des tourbières provinciales avec des groupes et organismes d'intérêts. Elle a également œuvré au sein du Ministère à une meilleure compréhension des valeurs du carbone et des biens et services écologiques fournis par les forêts, les milieux humides et les tourbières boréales.

Bassins hydrographiques, occupation des sols et zones protégées

La ville de Brandon a été intégrée au district de conservation d'Assiniboine Hills – cela représente la plus importante initiative d'expansion urbaine depuis 35 ans que le Programme des districts de conservation existe.

La Direction a étendu le réseau manitobain des aires protégées en assurant la protection permanente de près d'un million d'hectares de terres.

Relations avec la communauté autochtone

Dix coordonnateurs de plans d'aménagement du territoire des zones traditionnelles des collectivités ont terminé leur formation à l'institut canadien de recherche en systèmes environnementaux (Environmental Systems Research Institute Canada). La formation, qui dure trois ans, conduit à l'agrément en systèmes d'information géographique. Cet agrément permet aux coordonnateurs de transmettre les compétences et connaissances acquises en tant que coordonnateurs communautaires. Ce programme vient compléter la formation antérieure qui a été fournie pour documenter et cartographier les connaissances traditionnelles des Premières nations au niveau de la communauté, par des entretiens avec les anciens, les trappeurs et les autres utilisateurs des terres communautaires.

Parcs et réserves naturelles

Grand Beach est devenue une plage candidate au programme Pavillon Bleu. La désignation internationale reconnaît que Grand Beach respecte des normes élevées en gestion de l'environnement, qualité de l'eau, sensibilisation à l'environnement et sécurité.

Une somme de 13,8 millions de dollars a été consacrée à un programme dynamique de travaux d'immobilisations pour rénover et moderniser les infrastructures vieillissantes, agrandir les installations permettant d'accueillir des visiteurs et offrir un plus large éventail d'activités de loisirs au sein du réseau des parcs provinciaux. Ces travaux ont permis l'achèvement d'un nouveau terrain de camping entièrement aménagé de 120 emplacements au parc provincial de Winnipeg Beach et l'achèvement d'une nouvelle promenade au parc provincial de Grand Beach.

Des réparations et des améliorations sont en cours dans dix parcs qui ont été lourdement endommagés lors des inondations de 2011. Au parc provincial de Spruce Woods, des réparations importantes ont été apportées aux routes, aux campings, à la plage, à l'aire de fréquentation diurne et à d'autres

infrastructures. Du travail de planification est en cours en prévision d'un programme important de réparation et de réaménagement du parc.

Un programme destiné à donner un coup d'accélérateur à la préparation de plans de gestion pour tous les parcs provinciaux a été mis en œuvre. Trois contrats ont été accordés à des consultants du secteur privé pour la préparation de 41 plans de gestion destinés à des petits parcs des régions de l'Est, du Nord-Ouest et du Centre.

Les secteurs de Little Limestone Lake et de Fisher Bay ont été classés parcs provinciaux.

Un processus a été mis en œuvre pour assurer l'affichage adéquat du contenu en français sur le Web, en particulier dans le cas de la Direction des parcs et des réserves naturelles. Enfin, la traduction de documents, tels que les cahiers du jeune naturaliste (*Junior Naturalist workbooks*) qui sont mis à la disposition des jeunes campeurs, a été effectuée, ainsi que celle de divers feuillets d'information, de publicités dans les journaux, de panneaux, de bulletins, d'affiches et de documents destinés à des consultations publiques.

Programme de lutte contre les incendies et d'intervention d'urgence

Le 5 octobre, la foudre a causé un incendie près de deux lotissements de chalets dans les environs de Bissett. Plusieurs incendies d'origine humaine ont éclaté dans le sud-est de la province. Facteur aggravant, les températures ont atteint 27 degrés avec des vents de 90 km/h. Cet événement exceptionnel s'est prolongé pendant la fin de semaine de l'Action de grâce et a motivé à son point culminant la collaboration de 40 services d'incendie, des municipalités et du Bureau du commissaire aux incendies.

Le gouvernement a fait l'acquisition de deux avions CL-415 supplémentaires pour la lutte contre les incendies.

Services de soutien régionaux

Un nouveau maître de chien a été affecté à l'Unité canine pour le Service de la faune, afin de rétablir l'effectif de 2 brigades à temps plein. La nouvelle brigade a été formée durant l'automne conformément aux normes provinciales et est devenue opérationnelle en novembre. Les escouades ont été affectées dans toute la province à un éventail de contrôles de conformité et d'enquêtes en matière de pêche illégale et d'activités de chasse, dont 14 stations de contrôle routier, 1 opération leurre, 19 opérations de recherche de preuves en zone non confinée, 88 opérations de recherche de véhicules, 2 opérations de recherche de suspects, et la fourniture d'aide à l'exécution d'un mandat de perquisition.

Le service téléphonique sans frais ouvert 24 heures sur 24 (1 800 782-0076), qui vise la réduction des activités illégales de pêche et de chasse de la faune a reçu 311 appels, qui ont entraîné 20 poursuites et 9 avertissements. La ligne sans frais a aussi reçu 185 appels signalant des incendies de forêt.

Faune

Le Centre de données sur la conservation du Manitoba a été nommé programme du patrimoine naturel exceptionnel dans les Amériques et a reçu le prix 2011 de l'impact sur la conservation, du réseau NatureServe. Le prix a été remis au Centre en reconnaissance de partenariats avec Hydro-Manitoba et la Société protectrice du patrimoine écologique du Manitoba, qui ont utilisé ses données pour orienter leurs efforts en vue de sauvegarder, protéger et gérer l'habitat d'espèces en péril. Le Centre de données sur la conservation du Manitoba tient des données sur 5 272 éléments, dont 881 sont réputés rares ou peu communs.

L'Unité des territoires fauniques a participé à l'examen de l'habitat faunique essentiel du sud-ouest sur les terres de la Couronne dans le but d'identifier des aires protégées potentielles et des zones humides importantes pour la province et afin de mieux les protéger contre les effets néfastes.

Initiative de mise en valeur de la faune (Wildlife Enhancement Initiative)

Les populations de gros gibier ont été évaluées afin de contribuer à la définition des saisons de chasse et à la détermination des besoins de gestion. La Direction a utilisé diverses méthodes, notamment les relevés aériens hivernaux des populations pour en estimer l'abondance, la composition sur les plans du sexe et de l'âge, ainsi que le recrutement et la répartition; les questionnaires pour les chasseurs afin d'estimer les prises, l'effort de chasse et la répartition des chasseurs, et la collecte d'échantillons biologiques pour évaluer l'âge et l'état reproducteur.

Aucun accident de chasse, avec ou sans blessures ou décès, n'a été signalé et, au total, 3 812 personnes ont suivi le programme de formation des chasseurs.

Direction des forêts

En juin 2011, le gouvernement provincial a versé un montant additionnel de 1,23 million pour la plantation de un million d'arbres supplémentaires au titre du programme *Trees for Tomorrow* (des arbres pour l'avenir) destiné à souligner la Semaine canadienne de l'environnement. Le nouvel objectif est de planter six millions d'arbres d'ici 2013. En plus de la distribution d'arbres gratuits, le programme vise à fournir de l'éducation et des possibilités d'apprentissage en conservation des forêts, ainsi que de l'assistance aux groupes non gouvernementaux, aux districts de conservation, aux groupes de jeunes et aux écoles. Conservation Manitoba et son partenaire pour la distribution, la Manitoba Forestry Association, fourniront une grande partie de l'effort de plantation par l'intermédiaire de contrats avec les Premières nations et d'autres entrepreneurs en plantation d'arbres.

Une augmentation constante des possibilités de production de biomasse s'est produite au fur et à mesure que les industries et les particuliers se sont intéressés à de nouvelles sources d'énergie et de chauffage plus écologiques et plus propres. La Direction des forêts a participé à un grand nombre de discussions et d'ateliers pour évaluer les possibilités de produire de la biomasse dans toute la province. Une nouvelle taxe sur les émissions provenant du charbon a incité les utilisateurs de cette ressource à chercher des solutions durables telles que l'utilisation de la biomasse ligneuse ou forestière comme biocarburant.

Direction des terres domaniales

Quatre conseils de gestion ont vu le jour grâce à des accords d'application de plans entre le Manitoba et chacune des Premières nations de la rivière Poplar, de Bloodvein, de Little Grand Rapids et de Pauingassi. Ces conseils ont pour but de guider la mise en œuvre de plans de gestion approuvés grâce à la fourniture d'avis et de recommandations au ministre sur les questions d'aménagement du territoire et de gestion des ressources dans les zones désignées de terres domaniales que les Premières nations et les collectivités autochtones utilisent traditionnellement.

On estime à ce jour que le Programme de lots pour chalets a produit environ 100 millions de dollars d'activité économique, sous forme de ventes de terrains, de constructions, d'achat de biens et services et de dépenses de loisirs. Ces activités créent des débouchés pour la main-d'œuvre locale et pour de nouvelles entreprises et le tout contribue au développement de l'économie locale. En outre, le Programme de lots pour chalet (« premier arrivé, premier servi ») s'est traduit par la vente ou la location d'environ 100 lots non sélectionnés précédemment lors d'un tirage de lots pour chalet.

Prévention de la pollution

Les programmes réglementés en vertu de la *Loi sur la réduction du volume et de la production des déchets* ont permis le recyclage de 102 352 tonnes de matières en 2011-2012, dont 12 838 tonnes de caoutchouc de vieux pneus, 73 592 tonnes de papier d'emballage et imprimé grâce à des programmes de recyclage municipaux, et 15 618 tonnes de produits pétroliers de rebut. La quantité de matières collectées au titre de ces programmes a augmenté de 1 750 tonnes par rapport à l'année précédente.

De nouveaux programmes visant à collecter et à gérer correctement l'antigel, les batteries des véhicules et les piles domestiques, les téléphones cellulaires, les thermostats contenant du mercure et les médicaments périmés ont été approuvés en avril et lancés en juin.

Le parc provincial de Grand Beach a reçu du soutien en financement et en personnel pour ses efforts de recyclage et de gestion et de réduction des déchets grâce à l'installation de conteneurs de déchets à l'épreuve des ours, à des améliorations aux postes de transfert des déchets, et à la création d'une zone de recyclage des métaux, de déchiquetage de bois et de compostage.

En vertu de l'accord annuel avec la Manitoba Ozone Protection Industry Association (association manitobaine pour la protection de la couche d'ozone), 5 155 techniciens en réfrigération et en climatisation ont obtenu leur agrément, et 421 permis de distributeur secondaire ont été délivrés. L'Association a organisé une série de séances d'information sur l'industrie et tenu dix séances de sensibilisation à l'environnement pour les techniciens.

GéoManitoba

En collaboration avec l'Agence spatiale canadienne, GéoManitoba a cartographié de nombreuses zones inondées au printemps de 2011 en utilisant les techniques de télédétection et d'imagerie de Radarsat-2. Les principales zones ont été celles du lac Manitoba, des lacs Shoal, du lac Saint-Martin, de Spruce Woods, du lac Winnipeg et du lac Whitewater.

Des images composites quotidiennes et hebdomadaires des changements dans le paysage canadien pour le programme du changement climatique mondial ont été créées. Cette activité fait appel au système d'étude des données d'observation de la Terre (Earth Observation Data Management), un système de traitement des images satellitaires. Le produit a été fourni au Centre canadien de télédétection et il est également utilisé par Parcs Canada et d'autres.

Division du changement climatique et de la protection de l'environnement

Conformément à la *Loi sur les changements climatiques et la réduction des émissions de gaz à effet de serre*, le Manitoba a publié son rapport sur les progrès réalisés dans le domaine des changements climatiques. Ce document souligne les progrès réalisés à ce jour dans les nombreux programmes consacrés à la réduction des émissions de gaz à effet de serre et à l'adaptation aux conséquences des changements climatiques, dans les transports, l'agriculture et l'énergie. En particulier, le rapport mentionne que le Manitoba a respecté son objectif de réduction des émissions en 2010.

Le travail du Collectif des Prairies pour la recherche en adaptation régionale a été achevé et une voie pour les activités futures d'adaptation a été mise en place. Le succès du Collectif a également été marqué par le forum conjoint sur l'eau, la sécheresse et l'humidité excessive (Combined Water/Drought/Excessive Moisture Forum) et par le plan provincial sur l'adaptation à l'humidité excessive dans la région d'Entre-les-lacs.

La *Loi de la taxe sur les émissions provenant du charbon* est entrée en vigueur le 1^{er} janvier 2012. Cette taxe incite les utilisateurs de charbon à passer à des combustibles à plus faible intensité carbonique et devrait permettre de jeter les bases de la poursuite du développement du secteur de la transformation de la biomasse au Manitoba.

Afin de fournir des précisions sur les exigences relatives à la modernisation des installations de traitement des eaux usées du nord de Winnipeg, et aux progrès dans les pratiques de gestion du lisier de porc, la Division a participé à l'élaboration de la *Loi sur la protection du lac Winnipeg*. Cette loi a reçu la sanction royale le 16 juin 2011.

La *Loi sur l'environnement* prévoit une évaluation complète des projets susceptibles d'avoir des effets importants sur la qualité de l'environnement. La Division a délivré 45 licences en vertu de la *Loi sur*

l'environnement, dont une pour la modernisation des installations de traitement des eaux usées du sud de Winnipeg.

Gestion de la qualité de l'air

La Section de la gestion de la qualité de l'air a joué un rôle clé dans la supervision de l'achèvement et la mise en œuvre par des sociétés du projet étude des sols de Flin Flon et plan de gestion intégrée des risques - stratégie de réduction de l'exposition et actions (*Flin Flon Soils Study - Integrated Risk Management Plan - Exposure Reduction Strategy and Actions*) mené conjointement avec le gouvernement de la Saskatchewan.

Direction des évaluations environnementales et des licences

Le processus d'évaluation environnementale a été lancé pour deux grands projets de production et de transport d'électricité, c'est-à-dire Bipole III et Keeyask.

Services environnementaux et opérations environnementales

L'équipe d'intervention d'urgence a aidé Organisation des mesures d'urgence à effectuer l'identification et la dépollution des déchets ménagers dangereux résultant des dommages importants causés par la crue du lac Manitoba.

Services environnementaux a contribué à la préparation du Manitoba au changement de l'environnement en élaborant des normes et des méthodes définissant les attentes pour l'avenir.

Direction de la pêche

La Direction a mis en œuvre le programme d'aide contre les inondations de la rivière Dauphin dans le cadre de l'initiative inondation de 2011 : plan d'indemnisation et de construction.

La Direction a participé au conseil sur l'esturgeon du fleuve Nelson et géré son programme sur le terrain. Le programme de marquage continue de montrer une augmentation régulière des prises d'esturgeons jaunes dans la zone de pêche principale. Le Conseil gère également un programme permanent visant à élever des alevins d'esturgeon pour les programmes scolaires d'aquarium et l'empoisonnement. De nouvelles techniques ont permis une augmentation spectaculaire de la collecte de pontes d'esturgeon jaune.

Le lac Waterhen a continué d'offrir plus de 20 000 kilogrammes de doré jaune pour sa saison de pêche d'hiver commerciale, marquant sa huitième année de bonne production après l'effondrement des prises. Le lac Waterhen a été échantillonné au moyen de prises au filet (*index netted*) pour la troisième année consécutive et les données ont servi à établir les règles de contrôle des prises pour l'éco-certification. Les règles de contrôle des prises ont été acceptées par les pêcheurs en vue de l'obtention de l'écolabel MSC (Marine Stewardship Certification).

La Direction a commencé à collaborer avec des chercheurs de l'Université du Nebraska en 2011 sur une série de projets afin d'améliorer la compréhension et la gestion de la précieuse zone de pêche au poisson-chat dans le chenal de la rivière Rouge.

Direction de la gestion et des sciences de l'eau

Le gouvernement du Manitoba et celui du Canada ont publié en juillet 2011 le rapport sur l'état du lac Winnipeg. Ce document, établi sous l'impulsion de Gestion de la qualité de l'eau et d'Environnement Canada, est le fruit de la collaboration entre de nombreux chercheurs provenant d'autres secteurs du Ministère, d'autres organismes gouvernementaux, d'universités et d'organismes non gouvernementaux; il marque la première évaluation complète des caractéristiques physiques, chimiques et biologiques du lac Winnipeg depuis le début de la surveillance intensive du lac à la fin des années 1990. Le rapport sur l'état

du lac Winnipeg sert de référence pour mesurer les progrès vers la réduction de la charge de nutriments; il contribuera à l'évaluation de l'état de santé général du lac et fournira des renseignements importants pour appuyer la recherche actuelle et future sur le lac Winnipeg.

La Direction a offert l'ingénierie et le soutien technique, des conseils, l'aide à la planification, les évaluations et l'information pour l'intégration des plans de gestion des bassins hydrographiques et des plans de gestion des eaux de ruissellement en cours d'élaboration par les autorités de planification hydrographique. Des services techniques et d'ingénierie similaires ont été dispensés aux districts de conservation à propos de problèmes de gestion de l'eau et de propositions d'infrastructures hydriques, et au sujet du processus de planification des programmes d'immobilisations dans les districts de conservation qui gèrent l'infrastructure des grandes voies de drainage.

Service de l'eau potable

Les travaux ont porté sur l'expansion du programme provincial de surveillance réglementaire pour les réseaux semi-publics d'eau, dont ceux des hôpitaux, des écoles, des garderies et des foyers de soins personnels; sur la mise en œuvre de normes chimiques pour les systèmes d'eau publics; et sur la surveillance continue de l'exploitation et des activités de construction liées aux 421 systèmes d'eau publics qui composent les réseaux principaux d'approvisionnements en eau potable de plus de 85 % des Manitobains.

Le Service a participé à l'élaboration de plans de gestion intégrée des bassins hydrographiques, car ils ont trait à la protection des sources d'eau potable, et notamment au suivi et à l'élaboration de deux nouveaux plans de gestion des bassins hydrographiques.

Section des licences relatives au drainage et aux ouvrages de régularisation des eaux

Une nouvelle politique sur l'autorisation des travaux mineurs dans les municipalités a été annoncée en 2011. Les faits saillants sont notamment : l'élargissement de la définition de « travaux mineurs » pour y inclure les réalisations à faible impact que construisent généralement les municipalités; et l'accélération de l'approbation des projets de travaux mineurs présentés par des demandeurs respectant la *Loi sur les droits d'utilisation de l'eau*. Cette politique a été adoptée puis mise en œuvre dans toute la province. De nombreuses municipalités profitent de la nouvelle politique qui a permis de rationaliser le processus simplifié d'autorisation pour les petits travaux.

Licences relatives à l'utilisation de l'eau et à l'énergie hydraulique

Les sections concernées ont procédé à un examen des relevés et des plans des lignes de division reçus à l'appui de la demande formulée par Hydro-Manitoba de délivrance d'une autorisation finale pour le projet de la rivière Churchill au début de 2012.

ADMINISTRATION AND FINANCE

The Administration and Finance Division provides executive management of programs and management services, including financial, information services, administrative support, planning and policy development, liaison with Aboriginal communities and development of programs to manage and ensure the sustainability of Manitoba's resources and environment..

Minister's Salary

The Minister's salary provides the Minister with additional compensation to which an individual appointed to Executive Council is entitled.

Table AF.1
12.1(a) Minister's Salary

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	33	1.00	37	(4)	
Total 12.1(a)	33	1.00	37	(4)	

Executive Support

This area comprises support staff in the offices of the Minister and Deputy Minister of Conservation.

The purpose of Executive Support is to develop, implement and oversee policies and programs that are designed to attain, over the long term, the goals set in the Department's vision and mission statements; advise the Minister on matters relating to the Department; provide policy direction for departmental programs; coordinate departmental communications, activities, and initiatives; and provide administrative support for the offices of the Minister and Deputy Minister.

Table AF.2
12.1(b) Executive Support

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	655	10.00	675	(20)	
Other Expenditures	166		232	(66)	
Total 12.1(b)	821	10.00	907	(86)	

Administration and Financial Services

Administrative and Financial Services is comprised of three sections:

- Administration and Comptrollership
- Financial Services
- Business Transformation, Shared Services and Technology.

Administration and Comptrollership includes executive, financial and administrative direction, fleet vehicle coordination, office accommodation, parking administration, environmental impact file searches, coordination of departmental French language services, advice, guidance and administration related to procurement, contracts and grants and overall comptrollership support.

Financial Services develops, communicates, monitors and evaluates departmental financial policies, systems, and procedures to ensure the effective, efficient and economical operation of departmental financial functions in compliance with requirements of the Department, Treasury Board, the Department of Finance and the Office of the Auditor General. Financial Services' scope of activities includes processing payments and revenue receipts, accounting, financial planning and review, capital planning, and licencing.

Business Transformation, Shared Services and Technology section is responsible for business transformation support, information services including public information, library services and access to information under *The Freedom of Information and Protection of Privacy Act*, records management, the delivery of the Safety, Health and Risk Management program as well as information technology services. This section also oversees the warehouse which is the equipment/supply storage and mobilization point for branches and the Fire Operations Centre. In emergencies, such as fire and flood, the warehouse becomes the logistical support base for all equipment.

Key Results Achieved:

- In the 2011 calendar year, 215 requests for information were received and 194 were completed under *The Freedom of Information and Protection of Privacy Act*.
- A province-wide network of 687 private and 140 departmental licence vendors providing convenient access to the public for angling, hunting, migratory waterfowl, trapping, fur dealer, camping, arborist and various other licences, permits and related information (eg., Anglers' Guide, Hunting Guide, Trapper's Guide) was managed by the Licencing section. A total of 632 private vendors are located in rural areas.
- The Licensing section oversees the Big Game Draw program through a multi-level draw system to ensure a transparent program providing equal opportunity to all Manitoba hunters to hunt elk and moose where these animals are limited in numbers. For the 2011 draw 6,609 individuals applied and 3,109 were drawn for the available 59 hunting season choices. Development and communication of various financial, procurement, and contracting policies and procedures continued, focusing on awareness, availability and education.
- The Safety, Health and Risk Management section revised and updated the program manual as well as implemented an incident/accident investigation process for the Department.
- The Department continued its support of the French language services policy and its investment in the delivery of French language services by having two bilingual environment officers move into the newly built Ste. Anne Bilingual Service Centre.
- A process was implemented to ensure the seamless posting of French content to the Web, particularly for the Parks and Natural Areas section.

- The Department expanded on opportunities for departmental collaboration, productivity and distributed decision-making through SharePoint and by continued support to the departmental web sites.

Table AF.3
12.1(c) Administration and Financial Services

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	3,783	65.58	3,928	(145)	
Other Expenditures	1,478		1,625	(147)	
Total 12.1(c)	5,261	65.58	5,553	(292)	

Sustainable Resource and Policy Management

The Sustainable Resource and Policy Management Branch is responsible for the administration of *The Sustainable Development Act*, *The Resource Tourism Operators Act* and *The Water Protection Act*. The Branch coordinates and integrates departmental policy, natural resource allocation, and legislative development and interpretation, in accordance with the provincial Principles and Guidelines of Sustainable Development and water quality guidelines and management principles. The Branch manages environmental and natural resource issues that are strategic departmental or governmental priorities and assists in the development of effective departmental policies and programming. The Branch provides planning and policy assistance to local planning authorities, First Nations and other Aboriginal communities; and administers licensing of resource-based tourism facilities and coordinates and develops departmental legislation. The Branch also represents the department on issues related to national and international environment and trade agreements, as well as representing Manitoba on national forums for inter-governmental cooperation.

Key Results Achieved:

- Provided a strategic and systematic approach for the Department to cooperate with other governments on environment and natural resource issues, and contributed to a strong role and voice in national discussions on environmental protection in Canada. The Branch represents the department on interdepartmental, provincial, national, and international agencies, boards and committees including for the themes of wetlands, water conservation and efficiency, water security and sustainability, and conservation agreements.
- Developed and coordinated natural resource policy issues associated with First Nations, Metis and other Aboriginal communities and continued to coordinate Crown-Aboriginal Consultation processes related to Manitoba Hydro's Bipole III Transmission Project and the provincial Moose Management Strategy.
- Provided secretariat support to the Manitoba Round Table for Sustainable Development, its task groups and committees. Chaired by the Minister of Conservation and Water Stewardship, the Round Table is an advisory body to the provincial government, which provides advice and support to decision makers. The Branch provides logistical support to the Manitoba Excellence in Sustainability Awards program and administers the Sustainable Development Scholarship Program for post-secondary students.
- Advanced work towards the development of a provincial peatlands stewardship strategy with interest groups and organizations. The Branch also worked intra-departmentally to better understand the carbon values and ecological goods and services provided by boreal forests, wetlands and peatlands.
- Chaired a Canadian Council of Ministers of the Environment (CCME) national committee responsible for developing possible approaches to reduce packaging on store shelves in Canada. Following direction from Ministers, Manitoba then co-chaired a joint CCME-Industry task group, developing a set of proposed industry commitments to reduce packaging, which will be presented to Ministers in fall 2012.
- Coordinated matters relating to the regulation and licensing of Manitoba's resource based tourism industry (lodges and outfitters) and provides secretariat support to the Licensing Advisory Committee (LAC), the Administrator of Resource Tourism and the Resource Tourism Appeals Committee under *The Resource Tourism Operators Act*. The Committee, comprised of Manitoba Conservation and Water Stewardship, Manitoba Culture, Heritage and Tourism, and Manitoba Aboriginal and Northern Affairs, makes recommendations to the Administrator of Resource

Tourism on the licensing of outfitters and the permitting of their facilities for the purposes of hunting, fishing and ecotourism activities.

- Coordinated the development of a response to the federal government's proposed national recovery strategy for boreal woodland caribou, for submission to Environment Canada in spring 2012. This work was in collaboration with Wildlife Branch and incorporated comments from other provincial departments and agencies into a single response.
- Provided secretariat and advisory services for the Manitoba Water Council, a statutory body under *The Water Protection Act* that provides advice to the Minister on water policies, programs, plans, and legislation needed to achieve the department's vision, mission and priorities. Following public consultations on wetlands, the Water Council put forward its advice, which outlines a framework for developing a Manitoba Wetland Strategy, to the Minister. The proposed framework outlines three key priority areas: Protection, Collaboration, and Education.
- Began work on a multi-year strategic green plan for the province.
- Responded to concerns regarding Off-Road Vehicle (ORV) management in the Province and has worked interdepartmentally and with interest groups and organizations, in the development of an ORV strategy for Manitoba.
- Coordinated the delivery of the Wetland Restoration Incentive Program with Manitoba Habitat Heritage Corporation and Ducks Unlimited Canada. To date, this program has achieved the restoration of 1,200 acres of wetlands which function to sequester 4,668 tonnes of carbon dioxide equivalents per year, a function which will continue for the next 40 years.

Key Program Outputs

Legislation

Manitoba Conservation and Water Stewardship has administrative responsibility for 43 statutes and 116 regulations.

The following legislative and regulatory activity within the Department's administrative mandate occurred during the reporting period:

- **The Asatiwisipe Aki Traditional Use Planning Area Regulation (77/2011)** under *The East Side Traditional Lands Planning and Special Protected Areas Act* was registered on June 16, 2011.
- **The Moose Conservation Closure Regulation (122/2011)** under *The Wildlife Act* was registered on July 25, 2011.
- **The Lake St. Martin Outlet Channel Authorization Regulation (124/2011)** under *The Environment Act* was registered on August 5, 2011.
- **The Save Lake Winnipeg Act** S.M.2011. c. 36 was assented to on June 16, 2011.

Twenty two amending regulations were registered during the reporting period, amending twenty one existing regulations, including:

- An amendment to the Joint Environmental Assessment Regulation (207/2011) under *The Environment Act*.
- Three amendments to the Provincial Parks Designation Regulation (73/2011, 110/2011, and 112/2011), three amendments to the Park Reserves Designation Regulation (206/2011, 111/2011,

and 23/2012), and two amendments to the Park Fees Regulation (43/2011 and 227/2011) under **The Provincial Parks Act**.

- An amendment to the Moose Conservation Closure Regulation (13/2012), an amendment to the Wildlife Damage Compensation Regulation (36/2012), an amendment to the Vehicle Use in Hunting Regulation (94/2011), an amendment to the Trapping of Wild Animals Regulation (136/2011), an amendment to the General Hunting Regulation (115/2011), an amendment to the Hunter Education Regulation (7/2012), two amendments to the Use of Wildlife Lands Regulation (85/2011 and 95/2011), two amendments to the Hunting Seasons and Bag Limits Regulation (93/2011 and 175/2011) and three amendments to the Designation of Wildlife Lands Regulation (75,2011, 128/2011 and 27/2012) under **The Wildlife Act**.

One regulation was repealed during the reporting period:

- **The Little Limestone Lake Park Reserve Regulation** under **The Provincial Parks Act** was repealed on June 7, 2011.

More detail regarding the contents of the legislative and regulatory initiatives identified above may be found in those sections of this report that provide program-specific descriptions of activities undertaken during the reporting period.

Licensing Advisory Committee

- The Licensing Advisory Committee held six regularly scheduled and four additional meetings. A total of 212 applications were reviewed and recommendations developed for consideration of the Administrator of Resource Tourism.
- Approximately 1,400 annual licenses and/or permits were issued to lodge operators and outfitters.
- The Branch served as secretariat to the Resource Tourism Appeals Committee, which provides an appeal mechanism for operators wishing to appeal a decision of the Administrator of Resource Tourism. Two appeal hearings were conducted by the Resource Tourism Appeals Committee.
- Client services continued to provide advice and information on the application process and outfitter requirements.
- Policy advice and support was provided to the Advisory Committee and the Resource Tourism Appeals Committee on a number of non-compliance and enforcement issues.

Policy, Legislation and Intergovernmental Affairs

- Manitoba participated in the ongoing work of the National Water Stewardship Council, comprised of Deputy Ministers from all provinces and territories, which functions as the formal body to facilitate collaborative approaches to water. Initiatives include: a national water information sharing initiative, negotiating a partnership to bring the WaterSense water efficiency labeling program to Canadian jurisdictions, and improving drinking water safety for small communities (a project which Manitoba is a co-lead on)
- The WaterSmart initiative was supported through continued partnerships with Green Manitoba, Manitoba Hydro and the International Institute for Sustainable Development (IISD). Activities included continued education and public outreach about water conservation.
- On behalf of the department and government, the Branch led the development of the annual work plan and the renewal of a long-term agreement with the International Institute for Sustainable Development (IISD).

- The Branch continues in its role of coordinating the Department's participation in the Association of Manitoba Municipalities' Annual Convention.
- The Branch monitored trade developments with respect to environment and natural resource issues and liaised with other departments and jurisdictions on trade matters involving NAFTA, the Agreement on Internal Trade (AIT), the GATT/WTO agreements and the ongoing Canada-European Comprehensive Economic and Trade Agreement (CETA) negotiations.
- Support was provided to the Minister and Deputy Minister in their official activities representing Manitoba in the Canadian Council of Ministers of the Environment forum (CCME). The Branch worked cooperatively with other Canadian jurisdictions and the CCME Secretariat to coordinate and advance environmental management issues across Canada. The Branch participated in a range of CCME activities, including the Water Management Committee, the Environmental Protection and Planning Committee, co-chairing the nutrient sub-committee, and chairing the packaging reduction committee.
- The Branch represented Manitoba on the intergovernmental committee for the North American Agreement on Environmental Cooperation and the Agreement on Internal Trade (AIT).

Sustainable Development Implementation

- Manitoba Round Table for Sustainable Development (MRT) committees met several times during the year. The Branch, as Secretariat, organized meetings of the MRT, its task groups and committees. The MRT's Cosmetic Pesticides Review Committee developed a report on cosmetic pesticide use in Manitoba.
- The MRT awarded Sustainable Development Scholarships to two Manitoba students for efforts to establish a community shared agriculture project on the Canadian Mennonite University campus and for volunteer efforts to increase sustainability, and the various ways to incorporate sustainability into daily living.
- The MRT awarded seven 2011 Manitoba Excellence in Sustainability Awards, including one to the Marquis Project, a community-based, non-profit organization. The Marquis Project received the Outstanding Achievement in Sustainability Award for educating Manitobans on economic, political and social issues at local and global levels and participating in projects and partnerships aimed at improving the quality of life in small, rural communities in developing countries.

Table AF.4
12.1(d) Sustainable Resource and Policy Management

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	1,807	26.00	1,860	(53)	
Other Expenditures	991		597	394	
Grant Assistance	139		145	(6)	
Total 12.1(d)	2,937	26.00	2,602	335	

Watershed, Land Use and Protected Areas Planning

The Watershed, Land Use and Protected Areas Branch is comprised of the Strategic Initiatives section, the Watershed Planning and Programs section, and the Protected Areas Initiative. The Branch:

- Coordinates the development of planning initiatives and programs to manage and ensure the sustainability of Manitoba's resources and environment.
- Builds a network of legally designated protected areas that conserve ecosystems and maintain biodiversity in all 18 natural regions across the province.
- Provides advisory and planning services to the Conservation Districts Program and Implements Integrated Watershed Management Planning as per the provisions of *The Water Protection Act*.
- Develops and implements a province-wide surface water management strategy involving all stakeholders.
- Contributes significant climate change adaptation through management and protection of watersheds and protected areas for ecosystem resilience.
- Builds capacity in water stakeholder groups to improve their participation in water management and decision making.
- Ensures that development activities within Manitoba avoid, minimize or mitigate negative impacts to land and water ecosystems.
- Maintains effective relationships with other governments, non-government organizations, producer organizations and Aboriginal organizations.

Healthy, well-managed watersheds, holistic water strategies, and the network of protected areas provide a natural legacy for future generations and promote human physical, mental and spiritual well-being. They help conserve land and water where Aboriginal people can continue traditional activities such as trapping, hunting, fishing and medicinal plant collection. They also provide a range of ecological services which have economic benefits to communities and businesses including natural regulation of water flow, water quality improvement, carbon storage and biodiversity conservation.

Key Results Achieved:

- Initiated the development of a province-wide Surface Water Management Strategy, which will include input from all levels of government, Aboriginal groups, non-governmental environmental organizations, agricultural, industry, and academia.
- Reviewed and commented on 106 Environment Act proposals, 206 development plan and zoning by-law proposals, 694 subdivision proposals, 270 Crown land proposals, 68 public enquiries and 76 other proposals in various categories.
- Coordinated expansion of the Assiniboine Hills Conservation District to include the City of Brandon – the largest urban expansion initiative in the history of the Conservation Districts Program.
- Provided professional planning support and leadership to 18 Conservation District Boards and staff including assistance with land and water based program delivery, watershed management planning, provincial grant administration, policy development and board governance.
- Continued work with 13 water planning authorities to develop integrated watershed management plans with consideration to land and water management, conservation, drinking water quality and aquatic ecosystem protection.
- Protected area planning work continued in priority areas across the province including southern Manitoba (agro-Manitoba), the Manitoba Lowlands in southeast Manitoba (Natural Region 5c), the Saskatchewan River Delta (Natural Region 5a), and the Arctic Tundra (Natural Region 2a).
- Expanded Manitoba's protected areas network by permanently protecting almost one million hectares of land including:
 - Two provincial parks which were formerly park reserves were permanently designated and an existing wildlife management area was expanded.
 - Two new traditional use planning areas were designated, protecting boreal forest and associated wetlands.

New Protected Areas	Area (hectares)	Protected Under
Little Limestone Lake Provincial Park	4,810	The Provincial Parks Act
Fisher Bay Provincial Park	23,150	
Asatiwisipe Aki Traditional Use Planning Area	787,665	The East Side Traditional Lands and Special Protected Areas Act
Pimitotah Traditional Use Planning Area	132,575	
Delta Marsh Wildlife Management Area Expansion	275	The Wildlife Act
Currently, 6.6 million hectares (or 10.2% per cent of Manitoba) are protected. This includes two national parks, 22 ecological reserves, all or parts of 44 provincial parks and interim protected park reserves, all or parts of 50 wildlife management areas, parts of two provincial forests, two traditional use planning areas and private lands owned by Ducks Unlimited of Canada, Nature Conservancy of Canada, and Nature Manitoba (formerly Manitoba Naturalists Society).		

Water Stewardship Fund

The Water Stewardship Fund (WSF) is an integral program for supporting initiatives that maintain or improve the stewardship of Manitoba's water. The WSF supports research, projects and activities that further the goals of *The Water Protection Act*, and encourages the development and implementation of watershed management plans, water conservation programs and water quality initiatives to stimulate economic development and protect the environment in Manitoba.

The Water Stewardship Fund addresses the following priority program areas: watershed management planning and implementation, water-related scientific research, education and capacity building, water conservation, water quality, and economic development. Funded projects contribute to maintaining the quality and quantity of water, wetlands, riparian areas and aquatic habitats in Manitoba. In addition, the Water Stewardship Fund continued to support a sub-allocation of \$33,644.09 for the Zebra Mussel and Other Aquatic Invasive Species Program, as Manitoba remains vulnerable to invasion by zebra mussels and other aquatic invasive species.

Total Allocation from SDIF for 2011/2012	\$302,193.40
Applications Processed	12
Applications Approved	8
Total Amount for Grants Approved	\$175,000.00
Total Amount for Grants Expended	\$175,000.00
Zebra Mussel and Other Aquatic Invasive Species Program	\$42,193.40
Recovery for Water Stewardship Programs	\$85,000.00
Total Expended	\$302,193.40

Table AF.5
12.1(e) Watershed, Land Use and Protected Areas Planning

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	1,251	19.00	1,421	(170)	
Other Expenditures	247		277	(30)	
Total 12.1(e)	1,498	19.00	1,698	(200)	

Aboriginal Relations

The Branch was established to build relationships between the Department and the Aboriginal people of Manitoba. These relationships are necessary to maintain an ever increasing level of program and services to benefit all Manitobans.

In providing leadership and direction for the Department, the Branch participates in strategic planning processes, such as development of policies, legislation, and programs to ensure that Aboriginal and Treaty rights are recognized and respected. The Branch is accountable for the research, analysis, development, implementation and evaluation of new and existing resource programs. The Branch is also engaged in development of integrated resource policies, legislation relating to land use, co-management, resource allocation, environmental impacts, and sustainable development initiatives. The Branch also facilitates communication between the various user interests and the Department.

The Branch continues to play an instrumental role in developing and implementing the Crown's Aboriginal Consultation policy. The foremost objective of consultation is to reconcile the relationship between the Crown and First Nations people/Métis/Aboriginal people. This can only be achieved by engaging with the aboriginal community. The Aboriginal Relations Branch provides advice to other areas of the Department on engagement and maintaining dialogue amongst the parties and as a relationship building strategy beyond the obligations of consultation.

Key Results Achieved:

- Hosted internal Speakers Bureau sessions to promote improved understanding and respect for the values and requirements of Aboriginal communities including:
 - Bob Joseph – Working Effectively With Aboriginal Peoples
 - Ovide Mercredi – reconciliation & Accommodation: A Manitoba First Nation Perspective.
 - Dr. Ryan Brook & Jennifer Keith – Building Effective Relationships with Aboriginal Peoples.
- Lead in the negotiations for development of formal initiatives such as co-management agreements and memorandums of understanding between Manitoba Conservation and Water Stewardship and Aboriginal communities.
- Participated in the development and review of legislation, regulations, policies and programs and actions involving Aboriginal communities.
- Participated in the review of existing legislation, policy and programs and recommended amendments as required in accordance with the Treaties, Natural Resources Transfer Agreement, the Constitution of Canada and Court decisions.
- Developed and maintained formal and informal communication mechanisms between Manitoba Conservation and Aboriginal communities, such as the Wabonong Nakaygum Okimawin Council on the East Side of Lake Winnipeg.
- Developed and participated on inter-departmental and intra-departmental working groups to integrate the interests of Aboriginal communities in the development of legislation, policies and programs.
- Evaluated new and existing resource programs, projects and policies, and where required, integrated the legal, cultural, social and economic requirements of the Aboriginal community.
- Responded to inquiries from the Department, resource users, public and educational institutions.
- Discussed with Aboriginal leaders, communities and individuals, the formation of dialogue forums and communication processes between the Department and Manitoba Aboriginal communities.
- Continued dialogue with Aboriginal resource users as requested by communities.

As a requirement of *The Sustainable Development Act*, the Aboriginal Relations Branch has undertaken strategic initiatives incorporating sustainable development into its activities. The section below provides just a few examples of the many activities the Branch has undertaken to apply the Principles and Guidelines of Sustainable Development into operations and activities.

- The Branch advocates for the engagement of the Aboriginal community in all aspects of Manitoba Conservations programs and services promoting the inclusion of the Aboriginal community through engagement with leadership, elders, youth & resource users in the planning and decision-making processes. The Aboriginal community brings the world-view and a holistic approach respecting natural law with special consideration to harmony and balance and the seven teachings for seven generations ahead.
- The Wabanong Nakaygum Okimawin (WNO) Planning Initiative on the east side of Lake Winnipeg is an example of which involves the participation of the Province of Manitoba and the First Nation communities of Berens River, Black River, Bloodvein, Bunibonibee, Garden Hill, God's Lake, Hollow Water, Little Grand Rapids, Manto Sipi, Pauingassi, Poplar River, Red Sucker Lake, St Theresa Point and Wasagamack.
- Ten Community Traditional Area Land Use Plan (TALUP) Coordinators completed their training with Environmental Systems Research Institute Canada. The training took three years to complete and the individuals who have completed the course are now GIS certified. This certification will allow the coordinators to transfer the skills and knowledge they have gained as community coordinators. This training will complement the previous training that was provided to assist with documenting and mapping First Nation traditional knowledge (TK) at the community level, through interviews with elders, trappers and other community land users.

Table AF.6
12.1(f) Aboriginal Relations

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	621	7.00	609	12	
Other Expenditures	267		250	17	
Total 12.1(f)	888	7.00	859	29	

Table AF.7
12.1(g) Wabanong Nakaygum Okimawin

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Other Expenditures					
	1,059		826	233	
Total 12.1(g)	1,059		826	233	

Corporate Crown Land Policy

Reporting to the Lands Committee of Deputy Ministers, Corporate Crown Land Policy provides consulting services to various departments regarding Government-wide Crown land policies and practices to ensure effective horizontal governance.

Key Results Achieved:

Working with various departments, Corporate Crown Land Policy has been leading a coordinated internal review of Crown land related policies and legislation, as well as updating the Policy and Procedures Manual for the Crown Lands Assistant Deputy Ministers Committee.

Continued work with legal counsel regarding information disclosure and privacy protection policies and practises when circulating Crown land applications among departments and government entities.

Participated in several inter-departmental committees and working groups to represent Government Crown land policy interests.

Key Program Outputs:

Reviewed and analyzed 68 proposed sales, transfers and exchanges of Crown land for consideration by the Lands Committee of Deputy Ministers prior to seeking Cabinet or Ministerial approvals.

As Chair of the Crown Lands Assistant Deputy Ministers Committee, responded to 36 requests for review of denied applications for Crown land and reviewed four proposed designated areas of Crown land.

Table AF.8
12.1(h) Corporate Crown Land Policy

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	197	3.00	224	(27)	
Other Expenditures	33		18	15	
Total 12.1(h)	230	3.00	242	(12)	

Clean Environment Commission

Under *The Environment Act*, The Clean Environment Commission (CEC) provides a mechanism through which the public can participate in environmental decision making. The Commission conducts public reviews and hearings into matters of environmental concern and provides advice and recommendations to the Minister. The Commission, while reporting directly to the Minister, is independent of the Department.

The Commission issues its own Annual Report with information on its mandate and operations. Copies can be obtained from the CEC at 305 – 155 Carlton Street, Winnipeg, MB R3C 3H8. The CEC can be contacted at 204-945-0594 or toll free at 1-800-597-3556 or by fax at 204-945-0090. The CEC's web site is www.cecmanitoba.ca

Table AF.9
12.1(i) Clean Environment Commission

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	329	3.00	311	18	
Other Expenditures	219		337	(118)	
Total 12.1(i)	548	3.00	648	(100)	

1. Under expenditure is due to decreased operating costs related to fewer expert consultations.

REGIONAL SERVICES AND PARKS

Regional Support Services

2011/12 Objectives and Key Results Achieved

Regional field staff are given the necessary knowledge, tools, and resources and are trained and certified in necessary skill sets which will result in safe, effective, and professional delivery of department programs.

- Firearm qualification for 132 seasonal and full-time Resource Officers was completed by Regional Training Officers and departmental peer Firearms Instructors. Re-certification in defensive tactics was also achieved for all Resource Officers.
- Nine new Natural Resource Officer Recruits attended the Western Conservation Law Enforcement Academy (WCLEA), jointly delivered by Alberta, British Columbia, Saskatchewan, and Manitoba in Victoria, BC. This was a cooperative training event to prepare new officers across western Canada for a career in conservation law enforcement. The 11 week academy curriculum included training in firearms, emergency driving, defensive tactics, chemical immobilization, investigations, and problem wildlife.
- Thirty seven new hire seasonal Park Patrol Officers were trained at the Gimli Training Centre to achieve enforcement certification for summer duty.
- Boat operator training (MED A3/SVOP) was delivered to 19 Natural Resource Officers by a Transport Canada approved contractor.
- All Terrain Vehicle certification training was delivered to 8 NROs.
- Training in Ice Rescue Survival was given to 24 Natural Resource Officers at Gimli during March, 2012.

Specialized enforcement needs such as detailed investigations, covert operations, forensic lab services, and canine detection are developed sufficiently to meet the needs of the department's field officers in addressing violations of resource law.

- Regional investigators assisted several districts with complex investigations primarily related to illegal harvest and use of fish and wildlife. In addition, the Special Investigations Unit assisted numerous districts with electronic surveillance equipment targeting illegal harvesting practices as well as implemented the use of specialized surveillance equipment allowing for remote activity monitoring to aid in detection of illegal harvest, movement, and commercialization of fish, wildlife, and resources.
- An investigation initiated in 2008 relating to the illegal export of wildlife from Manitoba that resulted in twenty-six charges against two individuals operating a Manitoba Business was concluded in the courts by way of guilty pleas and resulted in \$9,500.00 in fines and a one year prohibition of applying or possessing a CITIES federal export permit. This was a joint investigation involving the Department, Environment Canada and the United States Fish and Wildlife Service.
- A covert Investigation relating to the illegal sale and transportation of fish and the illegal sale of wildlife parts in the Winnipeg area conducted during 2010 and 2011 was concluded in the courts by way of a guilty plea and resulted in \$1,500.00 in fines and the forfeiture of the vehicle plus a \$500.00 restitution order.

- A covert Investigation relating to the illegal sale of fish and wildlife in the Winnipeg area conducted during 2009 and 2010 resulted in 3 charges against one individual. The case is currently before the courts.
- A covert Investigation relating to the illegal sale of fish in the Winnipeg area conducted during 2010 and 2011 resulted in 4 charges against one individual. The case is currently before the courts.
- A covert Investigation relating to the illegal sale of fish in the Winnipeg area conducted during 2010 and 2011 resulted in 2 charges against one individual. The case is currently before the courts.
- A covert Investigation initiated in 2010 relating to illegal guiding and outfitting for migratory game birds resulted in 46 provincial charges and 22 federal charges against 2 Manitoba residents and 4 United States residents. This was a joint investigation involving the Department, Environment Canada and the United States Fish and Wildlife Service. The case is currently before the courts.
- The Canine Unit had the addition of a new handler for Fauna to bring the complement back to 2 full time Canine Teams. The new Canine Team was trained in the fall to meet provincial standards and became operational in November.
- The Canine teams were used throughout the province on a variety of compliance checks and investigations of illegal fishing and hunting activities, including; 14 roadside check stations, 1 decoy operations, 19 occurrences of searching for evidence in non-confined area, 88 occurrences of searching vehicles, 2 occurrences of searching for suspects and providing assistance on the execution of a search warrant.
- The Canine Teams conducted seven public education programs in schools and at public meetings throughout the province.

The public has access to well-advertised 24-hour toll-free numbers to report forest fires and resource-law violations.

- The 24-hour toll free telephone service (1-800-782-0076), aimed at reducing the illegal harvest of fish and wildlife received 311 calls, resulting in 20 prosecutions and 9 warnings. In addition, the toll free line received 185 calls reporting forest fires.
- See Tables RO.11 and RO.12.

Recruitment and staffing of Resource Officers is conducted in such a way as to maintain high professional standards and meet the needs of the Department and the expectation of the public.

- Nine new Natural Resource Officer Recruits were hired to fill vacancies.
- Thirty-seven new Park Patrol Officers were hired from a Canada-wide competition to provide safety and security services in provincial parks for the summer months. Several positions remained vacant due to a lack of qualified applicants.
- Fourteen former Park Patrol Officers were promoted to seasonal Park Patrol Captains.

Field staff, managers and executive have access to accurate and timely inspection, compliance and occurrence data to enable decision-making and informed analysis of the effectiveness of legislation and program delivery.

- A replacement data management program for compliance and occurrence data is under development with the assistance of government information technology staff.
- See Tables RO.1 to RO.12.

Sufficient liaison is maintained with other government departments, federal/provincial agencies and non-governmental organizations to maintain up-to-date and continually improving service delivery models.

- Continued to work with Manitoba Justice to address issues such as authorities of Resource Officers and legislative changes.
- Continued to work with the Fisheries Branch of Manitoba Conservation and Water Stewardship on compliance issues relating to commercial fish quota management, conservation closures and monitoring of fish sales.
- Participated in Provincial Law Enforcement Consultation as a member of the Manitoba Association of Chiefs of Police and national consultation as a member of the Canadian Natural Resource Law Enforcement Chiefs Association.
- Participated in regular Criminal Intelligence Services Manitoba (CISM) meetings with other enforcement agencies in Manitoba.
- Continued to work with the Wildlife Enforcement Division of Environment Canada and the United States Fish & Wildlife Service on cross border investigations.
- Chaired the Western Canadian Law Enforcement Academy (WCLEA) for the delivery and training of 16 new recruits from the Yukon, Saskatchewan, British Columbia, and Manitoba.

Hunter-killed livestock claims are evaluated and processed promptly and livestock producers are fairly compensated for animals accidentally killed by hunters.

- Hunter-Killed Livestock Program compensates livestock owners for animals deemed accidentally shot by licensed hunters during an open big game season. Claims are investigated by Natural Resource Officers and occasionally by the RCMP. This year, two claims qualified for compensation totalling \$2100. Program activity for the past ten years is illustrated in Table RO.9.

The regions and department executive are kept updated on emerging changes and issues. Strategies are prepared to handle problems and introduce new initiatives.

- New policies and directives were issued relating to the wearing of soft body armour.
- A Provincial Enforcement Strategies document was developed and provided to staff to assist with long and short term enforcement planning within the Province.

Table RO.1				
Common Violations under <i>The Provincial Parks Act</i>				
Offence	Prosecutions	Warnings	Total Offences	Evictions
Cause Disturbance	43	75	118	738
Parking Violations	163	12	175	0
Disobey Officer/Sign/Permit	55	61	116	21
Camp w/o Permit/Prohibited	18	17	35	6
Unlawful Vehicle Operation	19	66	85	4
Possess Fireworks	16	14	30	0
Have Liquor Where Prohibited	27	6	33	76
Fail to Control Pet / On Beach	7	26	33	0
Fire w/o Permit/Unattended Fire	4	6	10	0
Fail to Maintain Campsite	13	13	26	0
Damage Pollute Park Property	5	7	12	0
Hunting/Firearm Violations	9	4	13	0
Other	2	2	4	0
Total	381	309	690	845

Table RO.2			
Common Violations under <i>The Wildlife Act</i>			
Offence	Prosecutions	Warnings	Total Offences
Hunt/Trap/Guide W/O Licence / Licence Infractions	40	23	63
Hunt From or Have Loaded Firearm in Vehicle	66	5	71
Tagging / Transportation Infractions	46	31	77
Hunt Prohibited Area/Private Land W/O Permission	45	10	55
Hunt or Discharge Firearm From Road	16	1	17
Equipment Infractions	18	21	39
Hunt for Remuneration / Illegal Sale of Wildlife	0	2	2
Night Hunting / Dangerous Hunting	23	1	24
Abandon/Waste Game	7	2	9
Bait Infractions	16	3	19
Possess Illegally Taken / Prohibited Wildlife	10	8	18
Hunt Out of Season	4	5	9
Other	17	5	22
Total	308	117	425

**Table RO.3
Common Violations under The *Fisheries Act (Canada)*, and The
*Fisheries Act (Manitoba)***

Offence	Prosecutions	Warnings	Total Offences
Equipment Infractions	422	40	462
Licence Infractions	184	144	328
Exceed Limits	154	26	180
Transportation Infractions	84	84	168
Illegal Sale / Possession of Fish	38	11	49
Wastage of Fish	10	3	13
Fish During Closed Time / Closed Area	6	5	11
Live Bait Infractions	3	1	4
Other	3	0	3
Total	904	314	1,218

**Table RO.4
Comparison of Wildlife, Fisheries, Parks and Migratory Birds
Prosecutions 2002/03 to 2011/12**

Fiscal Year	Wildlife	Fisheries	Parks	Migratory Birds
2002-03	213	537	195	9
2003-04	321	654	*1,523	15
2004-05	287	660	*1,219	9
2005-06	376	707	*1,634	15
2006-07	289	547	*1,559	18
2007-08	244	595	*1,537	23
2008-09	234	802	*1,636	13
2009-10	256	786	**448	9
2010-11	306	722	**455	11
2011-12	308	904	**381	24

*Includes Parking and No Park Vehicle Pass violations not reported before 2003/04

** Years where no Park Vehicle Passes were required

Table RO.5 Record of Violations Occurring 2011/12			
Acts	Prosecutions	Warnings	Total Offences
Criminal Code of Canada	3	0	3
Crown Lands Act	15	29	44
Environment Act	13	8	21
Forest Act	6	12	18
Fisheries Act (Canada)	686	143	829
Fisheries Act (Manitoba)	218	171	389
Freshwater Fish Marketing Act	3	0	3
Highway Traffic Act	30	9	39
Liquor Control Act	403	14	417
Migratory Birds Convention Act	24	9	33
Off Road Vehicle Act	27	11	38
Provincial Parks Act	*381	309	690
Resource Tourism Operators Act	32	2	34
Wild Animal & Plant Protection Act	1	1	2
Wildfires Act	72	78	150
Wildlife Act	308	117	425
Total	2,222	913	3,135

* No Park Vehicle Passes were required

Total Fines: \$445,422 for 2011/12

Table RO.6 Hunter and Firearm Safety Program 2002-2011			
Year	Students	Total to Date	Instructors Certified
2002	2,191	138,540	7
2003	2,059	140,599	14
2004	2,336	142,935	24
2005	2,611	145,546	14
2006	3,032	148,578	14
2007	2,936	151,514	13
2008	3,130	154,644	13
2009	3,217	157,861	9
2010	3,172	161,033	7
2011	3,812	164,845	0

Table RO.7 Firearm Accidents, 1964-2008, 5-Year Averages	
1964-68	44
1969-73	56
1974-78	54
1979-83	43
1984-88	26
1989-93	20
1994-98	9
1999-03	6
2004-08	4

Table RO.8 Firearm Accidents 2002-2011						
Year	Accidents			Fatalities		
	Hunting	Non-Hunting	Total	Hunting	Non-Hunting	Total
2002	2	0	2	1	0	1
2003	4	0	4	1	0	1
2004	5	1	6	1	0	1
2005	2	3	5	1	0	1
2006	3	0	3	0	0	0
2007	2	0	2	0	0	0
2008	4	0	4	3	0	3
2009	5	3	8	0	0	0
2010	4	1	5	1	0	1
2011	1	0	1	0	0	0

Table RO.9 Hunter-Killed Livestock Compensation 2002/03 to 2011/12				
Year Paid	Claims	Claims Paid	Total Paid	Average Paid
2002-03	9	5	\$5,716	\$1,143
2003-04	3	3	\$2,358	\$786
2004-05	4	1	\$600	\$600
2005-06	3	2	\$1,100	\$550
2006-07	2	1	\$2,600	\$2,600
2007-08	9	6	\$3,624	\$604
2008-09	4	2	\$1,087	\$543
2009-10	4	2	\$1,777	\$888
2010-11	4	0	\$0	N/A
2011-12	2	2	\$2,100	\$1,050

Table RO.10 Problem Wildlife Occurrences 2011/12							
Species	Region					Total	% of Total
	NE	NW	E	C	W		
Beaver	1	4	60	96	31	192	4%
Black Bear	104	194	797	543	261	1,899	41%
Polar Bear	348	0	0	0	0	348	8%
Big Game	1	0	23	50	41	115	2%
Wolf	28	7	74	28	66	203	4%
Migratory Birds	1	0	10	79	83	173	4%
Other*	11	14	219	698	776	1,718	37%
Total	494	219	1,183	1494	1,258	4,648	100%

*Other includes coyote, fox, racoon, skunk, etc.

Table RO.11 T.I.P. Calls by Region 2011/12									
Region	Number of Calls					Number of Prosecutions			
	Fish	Wildlife	Other	Fire	Total	Fish	Wildlife	Other	Total
Central	23	110	8	19	160	6	2	1	9
Western	11	61	2	12	86	1	1	0	2
Eastern	10	55	18	117	200	0	3	0	3
Northwest	7	1	2	17	27	0	0	0	0
Northeast	1	2	0	20	23	0	0	0	0
Total	52	229	30	185	496	7	6	1	14

Table RO.12 T.I.P. Calls by Year 2003/04 to 2011/12 (excluding Fire)									
	03/04	04/05	05/06	06/07	07/08	08/09	09/10	10/11	11/12
Total	406	358	330	364	312	300	319	317	311
Information	19	21	10	11	6	6	25	32	13
Actioned	235	226	217	261	192	153	156	129	161
Prosecutions	37	21	37	28	18	22	23	20	14
Warnings	2	5	8	15	1	5	6	6	9

Table RO.13 12.2(a) Regional Support Services					
Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	2,920	39.50	2,330	590	
Other Expenditures	1,893		1,421	472	
Total 12.2(a)	4,813	39.50	3,751	1,062	1.

1. Over expenditure in salaries and employee benefits is due to worker's compensation costs and in other expenditures is due to Snoman program transition costs.

Northwest Region

The Northwest Region encompasses a diverse landscape that includes parts of the Manitoba Lowlands and Canadian Shield natural regions. The Region is dominated by boreal forest, lakes, and rivers, largely in a natural state.

Mineral extraction, commercial timber harvesting and processing, agriculture, resource-based tourism and commercial fishing are the main industries providing economic and employment benefits in the Region. The harvesting of wild rice and trapping also provide for some local employment. Domestic and recreational use of the Region's wildlife, fish, and forest resources by the residents of the Region is also

significant. The region is home to world class angling, and attracts many visitors from North America pursuing several species including lake trout, stocked trout, northern pike, and walleye with many master anglers produced annually.

Due to the values-at-risk associated with towns and communities and with timber values, the Region's fire management and suppression program is the most significant and highest priority program delivered in the Northwest Region in terms of both employment and expenditures. It normally runs from May through September.

At the same time the Region delivers services, programs, and security in the Clearwater Lake, Bakers Narrows, Grass River, and Wekusko Provincial Parks. The management and allocation of Crown Land and resources to different, often competing users and compliance monitoring and enforcement of Crown Land and resource legislation is a year round activity in the Region. Participation on co-management boards and dealing with problem wildlife, mostly black bears are also important program activities in the Region.

The Northwest Region has a Regional Office located at The Pas and District Offices located at Cranberry Portage, Flin Flon, Snow Lake, and Grand Rapids.

Cost-effective and professional delivery of field services to the public.

- The Northwest Region experienced a below average fire season with a total of 25 fires, of which 14 were lightning caused and 11 were human caused. Total amount of burnt forest in the region was 353 hectares.

Angler and hunter compliance.

- Resource Officers checked 2,009 anglers and hunters for compliance and again noticed an increase in moose hunting activity in the Region.

New initiatives to effectively reduce illegal traffic in fish and wildlife.

- Resource Officers increased the number of roadside compliance checks on commercial fishers which resulted in an increase in load slip violations and a decrease in illegal trafficking.
- Resource Officers conducted one decoy operation, as the number of complaints of hunting from provincial highways was down. Chronic Wasting Disease check stops were conducted at the Saskatchewan Border.

Control of park rowdyism and reduced level of related public complaints; increase in the level of visitor satisfaction within Provincial Parks.

- Park Patrol staff were at full complement for the region this season which assisted with controlling potential rowdyism and reduced public complaints.
- Iskwasum Campground in Grass River Provincial Park was awarded "Campground of the Year" for the 2011 camping season.
- Construction continuing on an additional cell at the Cuprus Sewage Lagoon serving the Bakers Narrows area.

Maintenance of effective community relations particularly greater involvement, participation, and co-operation of Aboriginal people in resource management, and effective liaison with organized sportsmen's and park user groups.

- Regional and District staff participated as provincial representatives on the Cedar Lake, Cormorant, OCN, and Moose Lake Resource Management Boards.
- Staff continues to hold annual Cottage Association meetings, attend Chief and Council meetings when requested in the First Nation communities, and attend all meetings requested by the sportsmen's groups to provide assistance and information.

Development of short and long range regional resource management plans.

- Updates to the Business Continuity Plan for the Northwest Region were submitted, including short and long term goals and new initiatives developed to guide employees on resource management objectives in the Region.

Regional concerns are considered before land is allocated.

- The Northwest Regional Integrated Resource Management Team (IRMT) continues to review and provide consolidated comments on sales, leases, general permits, assignments, and lease renewal applications. In addition, the group reviews and comments on all regional Licence Advisory Committee requests.
- Mining exploration activity in the region remains high with approximately 20 various exploration companies involved in claim staking, diamond drilling, soil sampling, line cutting, mapping, and geological reconnaissance.

Table RO.14

12.2(b) Northwest Region

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	1,837	31.65	1,934	(97)	
Other Expenditures	759		753	6	
Total 12.2(b)	2,596	31.65	2,687	(91)	

Northeast Region

The Northeast Region encompasses 60% of the land area of Manitoba and is comprised primarily of vast uninterrupted tracts of boreal forest transitioning to taiga in the far north. The majority of the land base remains in its natural state, unaltered and undeveloped, and is largely inaccessible due to an extremely limited road network.

On a capita per area basis the Northeast Region is the most sparsely populated region in the Province. Mineral extraction, processing and exploration, hydro-electric generation and transmission, resource-based tourism (lodges and outfitting), and commercial fishing and trapping are the main industries generating economic and employment benefits for the Region and Province. Domestic and recreational use of the Region's wildlife, fish, and forest resources by the residents of the Region is also significant.

Undertaking the Crown's Duty to Consult (Section 35) with the 20 First Nation communities and 15 Aboriginal communities located in the Northeast Region on government decisions or actions that could

affect or infringe upon Treaty and Aboriginal rights is a year round priority in the Northeast Region. Due to the values-at-risk associated with towns and communities and with timber values, the Region's fire management and suppression program is also a priority program delivered in the Region in terms of both employment and expenditures. It normally runs from May through September. The delivery of services, programs and security at Paint Lake Provincial Park and several other provincial parks is a priority during this same time period. The management and allocation of Crown land and resources to different, often competing, users and compliance monitoring and the enforcement of Crown land and resource legislation are year round activities in the Region. Participation on co-management boards and handling problem wildlife complaints, including the high profile Polar Bear Alert Program at Churchill, are also important program activities in the Region.

The Northeast Region has a Regional office located at Thompson, District offices located at Churchill, Gillam, Thompson, Wabowden, Lynn Lake, Leaf Rapids, Norway House, Island Lake, and Gods Lake Narrows, and sub-District offices located at Split Lake, Nelson House, Pukatawagan, South Indian Lake, Cross Lake, and Oxford House.

Cost-effective and professional delivery of field services to the public.

The 2011 fire season saw a lower than average number of fires and area burned within the Region due to above average and timely rainfall. There were a total of 121 fires, with the first fire starting on May 15th in God's Lake Narrows District and the last one on October 7th in the Norway House District. A total of 106,702 hectares were burned, mostly in the observation zone. Of the 121 fires, 63 were lightning caused and 58 were human caused. 102 fires were actioned and extinguished, 4 fires received limited action, and 15 fires were not actioned.

Staff from Oxford House and Island Lake participated in the Bunibonibee Cree Nation Treaty Days held in the community of Oxford House. Smokey Bear made an appearance while Conservation staff made a presentation on fire prevention.

Fires by District	
Island Lake	17
Gods Lake	21
Gillam	25
Leaf Rapids	5
Lynn Lake	11
Norway House	21
Wabowden	7
Thompson	78
Churchill	2

Angler and hunter compliance.

- Natural Resource Officers checked 2,143 anglers, 653 hunters and 26 commercial fishermen for compliance.

Maintenance of effective community relations particularly greater involvement, participation, and co-operation of Aboriginal people in resource management, and effective liaison with organized sportsmen's and park user groups.

- Regional and District staff participated as provincial representatives on the Nelson House, Split Lake, York Factory, Norway House and Fox Lake Resource Management Boards, the Wapisiu Caribou Committee, the Northeast Woodland Caribou Advisory Committee and the Churchill Northern Studies Centre Board.

- Regional staff consulted with First Nations and Aboriginal communities on Manitoba Hydro's Work Permit applications for investigative activities related to the Keeyask, Conawapa, and Bipole III projects and on Licensing Advisory Committee applications. Regional and District staff participated in consultations with First Nations on several advanced exploration mining developments.

Minimize the number of complaints related to problem wildlife.

- Staff conducted problem wildlife prevention presentations at several communities in the region.
- The Polar Bear Alert Program was successful with no polar bear inflicted human injuries or fatalities occurring. 341 occurrences were actioned, the second highest number since the inception of the program. 61 polar bears were handled by staff of which 41 were translocated away from Churchill by helicopter and the remaining bears were released onto Hudson Bay at freeze-up.

Regional concerns are considered before land is allocated.

- The Region reviewed and provided comments on 29 Crown Land applications, 17 Crown Land assignments, 3 Crown Land Lease sales, 66 Casual Quarry Permit applications, 1 Environment Licence pre-screening application, 3 Environment Act Licence applications, 56 Work Permit applications (mostly for mineral exploration), 6 Licence Advisory Committee (LAC) applications, 6 LAC Renewal applications and 5 LAC Transfer of Operating authority applications.
- 177 Timber Permits, 79 Work Permits, and 135 Burning Permits were issued through District Offices and the Regional Office.

Other Notable Highlights

- Regional and District staff assisted the Manitoba Trappers Association at the annual Thompson Fur Table. 179 trappers from throughout the region attended for a total of \$345,843.50 in fur sales for the two day event.
- Non-resident hunters continue to enjoy high harvest success rates for black bear, moose, and barren-ground caribou.
- Barren-ground caribou remains an important big game animal, with all resident licenses sold out for the 2011 season.
- The spruce budworm killed tree removal program continued in Paint Lake Provincial Park. Staff continued to plant many young trees throughout the campground to replace trees removed due to spruce budworm kill.
- The campground shower facilities at Paint Lake Provincial Park were converted to coin operated as a water and energy conservation measure.
- The failed culvert at Liz Creek in Paint Lake Provincial Park was replaced in February 2012, with assistance from Manitoba Infrastructure and Transportation. The work required closure of the road for one week and involved construction of a 2 kilometre ice road on Paint Lake to enable services and for cottagers to access their residences
- A new fish cleaning shed was built and installed at Zed Lake Provincial Park.

**Table RO.15
12.2(c) Northeast Region**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12	Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE		
Salaries and Employee Benefits	2,394	38.38	225	
Other Expenditures	1,286		49	
Total 12.2(c)	3,680	38.38	274	

Central Region

The Central Region delivers programs and services associated with the Regional Service and Parks Division of Manitoba Conservation and Water Stewardship, including field activities for resource management; compliance and enforcement activities related to natural resources and parks safety and security; wildfire protection and suppression; protection of people, livestock, crops and property from problem wildlife and the operations and maintenance of provincial parks. This includes development, delivery, and evaluation of programs and services, inspection, compliance monitoring, and enforcement of natural resource legislation. This is done by multi-disciplined full-time and seasonal staff working from a Regional office in Gimli and District offices in Ashern, Grand Beach, Gypsumville, Hodgson, Lundar, Manitou, Portage la Prairie, Riverton, Selkirk, Winnipeg Beach, Birds Hill, and Winnipeg.

Compliance levels in excess of 95% for Public Related Complaints.

- Regional staff responded to 2,913 district occurrence reports from the public related to parks operation and safety, problem wildlife and resources related complaints. In addition, staff provided representation on behalf of the department and professional advice to a large number of public, industry, and interest groups on forestry, wildlife, Crown lands and other resource concerns and issues.
- Staff undertook 1,305 enforcement actions resulting in 676 charges, 240 warnings, and 389 evictions from provincial parks. These actions were primarily in response to public complaints on regulatory and non-regulatory resource issues as well as maintaining park safety and security for the public.

New initiatives to effectively reduce illegal traffic in fish and wildlife.

- In response to the 2011/12 Central Region Enforcement Strategy, enforcement efforts were directed to the priorities of park safety and security, wildfire investigations and commercial and illegal use of fish and wildlife resources. Fisheries inspections of commercial businesses in Winnipeg continue and are expected to be completed in 2012.

Control of park rowdyism and reduced level of related public complaints; increase in the level of visitor satisfaction within Provincial Parks.

- Park rowdyism, public safety, and security remain priority issues requiring the primary attention of the region's resources. Reallocation of additional staff from out of district and out of region is required to provide adequate enforcement staff to control situations and respond to public complaints.

Maintenance of effective community relations particularly greater involvement, participation, and co-operation of Aboriginal people in resource management, and effective liaison with organized sportsmen's and park user groups.

- Regional Wildlife and Gypsumville District staff worked with representatives of Skownan First Nation to initiate planning process focussed on the development of a Management Plan for the Chitek Lake Wild Bison Herd.
- Regional Services and Parks staff were involved in the planning process and consultations with regional First Nations and stakeholders, leading to the designation of Fisher Bay Provincial Park in June, 2011. Fisher Bay is Manitoba's 86th Provincial Park.

Minimize the number of complaints related to problem wildlife.

- The number of problem wildlife complaints (1,494) in the region was down approximately 10% from the previous year. Winnipeg and Selkirk District continue to receive the highest number of complaints due to urban expansion into rural areas. Racoons and coyotes make up most of the complaints. The Region emphasizes educating the public on ways to prevent occurrences as the most effective way to co-exist with wildlife.
- The number of black bear complaints in the Region increased by approximately 30% (543) from the previous year due to a high black bear population combined with a very poor berry crop and dry conditions. Grand Beach and Selkirk District received the majority of complaints (64%). The Bear Smart Program continues to be an effective tool in educating the public on ways to reduce and remove attractants that create human-black bear conflicts.

Development of short and long range regional resource management plans.

- The region's Integrated Resource Management Team (IRMT) identified a number of complex resource management issues in the review of three Environment Act Application Proposals for proposed peat quarrying operations in the central part of the region. Additional consultation with affected First Nations was required and a provincial review of peat development was also initiated.
- Interdepartmental regional BLOC planning Committee continues to review operational Crown land use codes to improve long term land and resource use and reduce land use conflicts.

Regional concerns are considered before land is allocated.

- Land use allocations are reviewed by the region's Integrated Resource Management Team (IRMT) to ensure regional natural resource issues and operational considerations are included.
- Operational land use codes are reviewed to ensure potential allocations and land use activities are consistent with long term land use objectives.
- A First Nation Assessment, including reviews in accordance with existing Treaty Land Entitlement Agreements, is completed for all Crown Land disposition applications within the Region.

Other Notable Highlights

Parks

- Projects that were funded under the Federal Infrastructure Stimulus Program projects were completed including the 120 site full service campground at Winnipeg Beach Provincial Park and the water treatment and distribution systems at Watchorn and Hnaua Provincial Parks.
- As part of the Department's green plan, Central Region Parks are now utilizing 90% green cleaning products with the goal of reaching 100% in the near future.
- As part of a comprehensive revitalization strategy for heritage structures lighting improvements were completed and landscaping started at Trappist Monastery Provincial Heritage Park. An asbestos remediation project was also completed at Bohemier House in St. Norbert Provincial Heritage Park.
- In an effort to ensure the highest standard of solid waste management, a new solid waste transfer station was built near the Grindstone Point cottage development in Hecla/Grindstone Provincial Park.

Duff Roblin Provincial Park, a project being done in cooperation with the Winnipeg Floodway Authority, has seen the major earth work completed and visitor centre blue prints finalized.

- A major windstorm impacted central Manitoba in October of 2010, severely damaging the boardwalk and Wild Wings Trail at Grand Beach Provincial Park. Efforts by Regional, District and Branch staff resulted in the Grand Beach Boardwalk an important landmark being rebuilt for the 2011 summer operating season. Other repairs to storm damages were finished through the summer and fall with the Wild Wings Trail the only remaining windstorm project not yet completed.
- Severe flooding in the spring and summer of 2011 resulted in the closure of Watchorn, Lundar Beach, and St. Ambroise Provincial Parks. Watchorn and Lundar infrastructure suffered moderate damage and much of it can be repaired to operational standards. St. Ambroise was devastated by the October 2010 windstorm and 2011 flooding and will require significant financial investment and reconstruction in order to become operational in future. Efforts to secure and clean up damaged sites were initiated in 2011.
- Department staff continues to work with the Friends of Upper Fort Garry in the establishment of Upper Fort Garry as a Provincial Park.

Table RO.16
12.2(d) Central Region

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	3,477	61.03	3,490	(13)	
Other Expenditures	1,330		1,352	(22)	
Total 12.2(d)	4,807	61.03	4,842	(35)	

Eastern Region

The Eastern Region is comprised of rural towns, First Nation communities, Canadian Shield boreal forest, and agricultural lands. The region contains extensive tracts of natural undisturbed areas with the majority of the land not developed for human occupation. As a result, significant economic benefits are derived from natural resource based industries, such as forestry, and from diverse recreational opportunities. Major programs administered by the region include Parks Operations, Maintenance, Safety and Security, Resource Compliance/Enforcement and Wild Fire Protection and Suppression.

The Eastern Region programs and public services are provided by multi-disciplined full time and seasonal staff working with the Regional Office in Lac du Bonnet and the sub-regional office in Steinbach, District offices in Lac du Bonnet, Lake Winnipeg East, Pine Falls, Rennie, Seven Sisters, Sprague, Falcon Lake, Hadashville, Steinbach, and Beausejour. There are Sub-District offices in Berens River, Little Grand Rapids, and Bissett. Public lands in addition to undesignated Crown land administered through these offices include 14 provincial parks, eight provincial forests, nine wildlife management areas, and seven ecological reserves.

Hunter and Angler Compliance Levels

- Natural Resource Officers conducted 1,366 big game, 133 upland game bird, 43 migratory bird, 3,953 angler, 284 Snopass, 4 domestic fishing compliance checks, and 43 work permit inspections in the region. In addition there were 9 decoy wildlife operations, 286 park evictions, and 543 cottage inspections conducted within parks.

Fire Management

- A total of 151 wildfires burnt 65,439 hectares within the region. Seventy-two of the fires were deemed to be human caused while the remaining were started by lightning.
- As a result of continuing hot dry conditions on August 2nd through to Sept 1st travel restrictions and a burning ban were implemented to reduce the likelihood of human caused fires in the region.
- The two largest fires in the region occurred in early October. Both were caused by tinder dry conditions and driven by exceptionally strong winds. The largest occurred in the Pine Falls district and consumed 18,869 hectares of forest, the other originated in the R.M of Stuartburn and consumed 15,111 hectares of agricultural and forest lands and an old farm house.

Park Operations

- The multi-year reconstruction of the West Hawk Lake sewage lagoon continued.
- Nutimik campground office was completed and opened to the public.
- Otter Falls campground drainage redesign and campsite remediation was completed.
- Amisk and Forrester's Footsteps Hiking trails were re-vamped and reopened to public.
- Boat Launch improvements at Otter Falls, White Lake, Opapiskaw, Betula Lake, and Pinawa Provincial Park were completed.
- Brereton Lake and Mc Dougall's landing docks completed and reopened.
- Toniata Water facility was upgraded and reopened for public use.
- West Hawk Office roof was re-shaked and repaired to maintain its historical value.
- West Hawk Lake campground sewer and water upgrades were completed adding 18 full service sites.
- New playground structures were constructed at St. Malo.

Cost-effective and professional delivery of field services to the public.

- Travel restrictions and a fire ban implemented due to extreme dry wildfire conditions were effective in reducing human caused wildfires and freed up manpower and resources to suppress new fire starts.
- Natural Resource Officers conducted roadside check stations for fish, wildlife, and forest products. This manner of enforcement is well received by the law abiding public, is cost effective, and provides a controlled safe work environment for officers.

Maintenance of effective community relations particularly greater involvement, participation, and co-operation of Aboriginal people in resource management, and effective liaison with organized sportsmen's and park user groups.

- Regional and District staff regularly participated as provincial representatives at meetings with First Nations communities. Some of the regular meetings are:
 - Traditional Area advisory Committees (TAAC) with Hollow Water and Black River FNs.
 - Meetings with Sagkeeng First Nation Chief and Council to discuss resource concerns.
 - Resource Stewardship Boards with Poplar River, Bloodvein, Little Grand Rapids, and Pauingassi FNs.
 - Model Forest Eastern Region Committee for Moose Management which involves First Nations from the area, industry, and various other stakeholders.
- Regional staff participated in aboriginal consultation with Wildlife Branch staff regarding management of the moose population in GHA 26. Staff also assisted the respective Branches

with consultation efforts regarding Forestry Cutting Plans and the Parks Tim Horton's Youth Camp initiative.

- Staff regularly met with the Manitoba Trappers Association locals and Manitoba Wildlife Association groups.
- Park and NRO staff met annually with most Cottage Association groups and more often if required.

Minimize the number of complaints related to problem wildlife.

- Staff educated the public in regards to Bear Smart practices.

Regional concerns are considered before land is allocated.

- The Eastern Region vets all Crown land, Licensing Advisory Committee (LAC), and mineral exploration applications by the appropriate district and the regional IRMT for review and consolidation of comments/recommendations.

Other Notable Highlights

- The region cleared the site of the proposed Lac du Bonnet Initial attack Wildfire Base adjacent to the Lac du Bonnet airport.
- Trained senior fire staff as trainers to provide Air Transportation of Dangerous Goods (Air TDG) and Initial Attack Physical Fitness training.
- Regional staff assisted in flood work.
- Developed a Wild Fire Value Protection Trailer for regional and provincial use.
- Fire staff provided the following fire training provincially: Fire pump training for CN Railway, Crew Leader Certification, Type 1 and Type 2 training, and inventory training for Thompson and the Pas.

**Table RO.17
12.2(e) Eastern Region**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	3,179	61.30	3,343	(164)	
Other Expenditures	1,007		949	58	
Total 12.2(e)	4,186	61.30	4,292	(106)	

Western Region

The Western Region is an extremely diverse area which encompasses a range of land based development and activities from urban centres to extensive agricultural and industrial development to remote undeveloped natural habitat. The region reaches from the United States border on the south to the northern end of Lake Winnipegosis and is geographically divided in half by Riding Mountain National Park. It was formerly two regions, South West Region and Western Region, and while functioning as one region much of the administration and management is completed by two distinct sub-regions.

The region contains 58% of the Rural Municipalities in the province and is the second most populated area of the province. Agricultural land use is predominant in the region while the northern sub-region supports a significant portion of the province's forestry industry. As a result of this agricultural land use there are significant problem wildlife issues (beaver, coyote, and elk depredation). It is also home to 6 of the 7 known elk populations in the Province and attracts significant numbers of resident and aboriginal (First Nation and Métis) hunters. The region contains well known natural topographic features in the form of the Spruce Woods sand dunes, Turtle, Riding Duck, and Porcupine mountains, as well as Lake Winnipegosis. In addition, Lake of the Prairies is one of the premier walleye fishing areas in the province. Recreational and Commercial use of natural resources within the area are a major economic stimulus in the region. There are 21 provincial parks in the region. The region contains the majority of outfitters in the province. Virtually all the oil and gas activities in Manitoba occur in the southwest part of the region where the majority of the listed Species at Risk occur in Manitoba. It is also the only region with a major military base, CFB Shilo. Conservation staff are members of the Shilo Environmental Advisory Committee.

All of the above uses and activities require extensive administration and monitoring under the Wildlife, Fisheries, Forestry, Parks, and Crown Lands Acts and Regulations and associated programs.

2011/12 Key Results Achieved:

Cost-effective and professional delivery of field services to the public.

- Forestry and Wildlife staff completed a biomass utilization/measurement trial with Riehl Lumber and Logging of the Durban Area. This trial involves utilization of hardwood logging waste (mill residue, undersized tops, crooks, sweeps, shattered and short pieces) which is often left in bush following harvest. Riehls are marketing this biomass as hog fuel and color landscape mulch. A final report will identify recommendations for going forward operationally.
- Several NRO's were deployed to other Regions to assist with wildfire operations, including wildfire investigations.

Angler and hunter compliance.

- Consulted with West Regional Tribal Council and other Aboriginal and Metis communities concerning proposed conservation measurements for the walleye stocks of Dauphin Lake and its tributaries in the spring. Natural Resource Officers continued enhanced enforcement efforts on Lake Dauphin and its respective tributaries during the spring walleye spawn ensuring compliance with the tributary closures.
- Concerted effort by Natural Resource Officers to ensure compliance of commercial fisheries on Lake Dauphin, Lake Manitoba, and Lake Winnipegosis.
- Natural Resource Officers and Wildlife staff continued to assist in the field delivery of the Bovine Tuberculosis (TB) implementation plan developed by the TB Task Group. This program continued with the baiting surveillance and sample compliance program.

- Natural Resource Officers conducted roadside check stations during the summer months when anglers were transporting sport fish from northern regions and also from local lakes within the Western Region. Swan River Natural Resource Officers and Wildlife staff conducted several roadside checks to identify and ensure compliance with Big Game disease import concerns.

New initiatives to effectively reduce illegal traffic in fish and wildlife.

- Natural Resource Officers, with assistance from the Special Investigations Unit (SIU), continue to test and use new intelligence methods to assist in combating the illegal trafficking of fish and wildlife.
- Significant effort to combat illegal night hunting resulted in Natural Resource Officers (NROs) seizing 2 vehicles.

Control of park rowdiness and reduced level of related public complaints; increase in the level of visitor satisfaction within provincial parks.

- The May long weekend liquor-free camping program was again in-place, resulting in high level of visitor satisfaction throughout all campgrounds in the Region.
- A new water treatment system was completed at Wellman Lake.
- Handicapped-accessible campsites were added to seasonal camping allocation at Asessippi and Rainbow Beach Provincial Parks.
- New winter warming shelters were constructed at Spruce Woods Provincial Park winter recreation area.
- Three new yurts were added to the yurt inventory at Spruce Woods Provincial Park, bringing the total up to 13 yurts.

Maintenance of effective community relations particularly greater involvement, participation, and co-operation of Aboriginal people in resource management, and effective liaison with organized sportsmen's and park user groups.

- A Moose Conservation Closure was implemented in GHA's 18, 18A, 18B, 18C, 13, 13A, 14, 14A in August 2011 in response to declining moose populations throughout the North half of the Region.
- Extensive consultation was undertaken with First Nations, Metis communities, West Region Tribal Council, and local user groups. As a result, the Swan Valley Moose Management Committee was formed representing 12 different stakeholders from the north half of the region. Development of a Moose Recovery Strategy is underway.
- A wolf incentive program was developed to assist in the Moose Recovery project. This program achieved its goals in the first year of its operation. In total, 108 wolves were harvested - 73 from GHA 18, 28 from GHA 13, and 7 from GHA's 14, 14A.
- Forestry and Wildlife staff delivered outreach programs to many schools is designed to educate our youth about wildlife and environmental conservation. Regional Natural Resource Officers (NROs) and Wildlife Staff delivered presentations on declining moose populations.

- Swan River Natural Resource Officers (NROs) and Wildlife staff spent a significant amount of time monitoring hunting and associated camps in the Duck Mountains in order to assess impacts on declining moose populations.
- Natural Resource Officers (NROs) and Wildlife staff attended youth hunts, Emergency Preparedness displays, attended resource user functions (trappers' meetings, commercial fisher meetings, seasonal campground draws, etc), and participated in local Envirothons. Swan River NROs assisted with the Swan Valley Sport Fishing Enhancement Association's annual fundraising banquet and fish fry.

Minimize the number of complaints related to problem wildlife.

- The "Bears and Bees" project in the Ethelbert area concluded this year. It has demonstrated that electric fencing is an effective deterrent to bear depredation on beehives.
- Coyote populations remained high with a significant number of complaints received. In cooperation with Manitoba Agricultural Services Corporation and the Manitoba Trappers Association, a Problem Predator Control Program has been extended to assist cattle producers with depredation issues.
- Staff continued to meet with the Killarney Town Council to address deer damage complaints in the community. A special deer management season was conducted around Killarney in January 2012 to help reduce deer densities.

Other Key Results Achieved

- As Forestry officers, Regional Forestry Staff assisted District staff with delivery of Forestry Compliance objectives and provided feedback regarding forestry practices, operating plans and permit conditions and technical assessments on compliance issues.
- Reviewed and filed 144 timber inspections supplied by District Officers in 5 districts in the Mountain Forest Section.
- Flooding occurred in 7 Provincial Parks in 2011. Regional and District Park staff were able to provide flood protection to save most of the park infrastructure. Efforts were made in the fall of 2011 to start the restoration process in an attempt to open the majority of the flood affected parks for the 2012 season.
- Monitoring continued on Peregrine falcons, a nationally endangered raptor, that nested and raised young at the former McKenzie Seeds building in Brandon for the 17th consecutive year.
- Working with user groups and Crown Lands staff, NROs were successful in monitoring several ATV derbies and ensuring compliance and environmental restrictions were adhered to.

**Table RO.18
12.2(f) Western Region**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	3,469	60.01	3,209	260	
Other Expenditures	1,285		1,287	(2)	
Total 12.2(f)	4,754	60.01	4,496	258	

Parks & Natural Areas

Parks and Natural Areas Branch is responsible for managing Provincial Parks, Ecological Reserves and Canadian Heritage Rivers, for the long-term benefit of Manitobans and the environment. These lands protect unique, representative or outstanding natural, cultural, and heritage features and resources, conserve ecosystems, and provide recreational and educational opportunities to approximately five million visitors each year.

Key Results Achieved:

- Generated \$10.1 million in revenue by persons using the parks for personal enjoyment, commercial and general use.
- Park visitation exceeded five million visitors with campsite reservations of 64,268, an increase of 1,523 reservations over 2010.
- There was a continued focus on environmental infrastructure including water and wastewater systems and the “greening” of park facilities.
- Enhancements under the Provincial Camping Initiative continued. Most notable was the completion of a 120 unit campground at Winnipeg Beach Provincial Park which opened in July 2011.
- Planning processes and public consultations were initiated and conducted for 12 park reserves proposed for designation as provincial parks or ecological reserves. Little Limestone Provincial Park Provincial Park was designated in June 2011, and Fisher Bay Provincial Park in July 2011. Goose Islands, Grand Island, Kinnow Bay, Pelican Islands, Pemmican Island, and Sturgeon Bay park reserves were renewed in December 2011 for another 5 year term as was Walter Cook Caves Park Reserve in March 2012.
- The Beach Safety program made almost 24,000 contacts with beach visitors at three provincial parks during the summer of 2011. Over half of these contacts related to public education of parental or group supervision responsibilities. Public inquiries and injury prevention activities comprised a majority of remaining contacts. Three water rescues were performed.
- Translation of documents, such as the Junior Naturalist workbooks that are available to all young campers, occurred, as well as translation of various fact sheets, newspaper print ads, signage, advisories, posters and public consultations.

Administration Section

The Administration Section is responsible for establishing strategic direction and guidelines, ensuring conformity to Department policies and government goals and assessing the effectiveness of programs and services offered to the public. This section provides many functions including administrative and human resources support, capital budget coordination and the management of fees collected from Park users, commercial concessions, and the leased properties. Work programs are reviewed to ensure that goals are met and that expenditures conform to estimates, legislation, and policies. The Branch participates on the Canadian Heritage Rivers Board and the Canadian Parks Council. Grants were provided to the International Peace Garden, Manitoba Wildlife Foundation (upkeep and public programs at Fort Whyte Alive), Manitoba Coalition for Safer Waters (water safety public education and programming) and Canadian Parks Council (for the promotion and management of parks).

Key Results Achieved:

- Managed park programs and facilities in accordance with policies, procedures and standards to meet branch, department and government goals. Developed park programs and facilities according to the branch current and capital spending estimates.
- Generated \$10.1 million in revenue by persons using the parks for personal enjoyment, commercial and general use.
- Conducted the activities of Parks and Natural Areas in a manner consistent with policy, the departmental mission, and government priorities.
- Provided grants to organizations who implemented activities in accordance with branch policy, departmental mission, and government priorities.

Planning and Development Section

The Planning and Development Section provides design and project management capacity, prepares land-use plans, development plans, policies, and regulations to guide establishment, management, and development of the Park System, to: Conserve ecosystems and maintain biodiversity, Preserve unique and representative natural, cultural and heritage resources, and provide outdoor recreational and educational opportunities and experiences in a natural setting.

The Section guides establishment and management of provincial parks and ecological reserves, and manages the Canadian Heritage Rivers Program in Manitoba. The Section undertakes environmental licensing and land use allocation reviews. The Section also provides landscape architectural and project management capacity, overseeing the design and implementation of capital works projects within provincial parks.

Over the 2011/12 year, staff from the section participated in additional programs both internal to the branch and programs of other agencies. Examples include:

- Support to the Protected Areas Initiative;
- Participation on the Canadian Heritage Rivers System Technical Planning Committee;
- Support to the Ecological Reserves Advisory Committee;
- Support and advice in the development of facilities and infrastructure across the park system;
- Review of *Environment Act* Licence proposals, Crown land circulars and related items for proposed developments to assess possible implications on lands of interest to or administered by the Branch (provincial parks, park reserves, ecological reserves);
- Co-ordination of provincial input to national park establishment initiatives; and
- Consultation with stakeholders and the public to advance park system planning, management planning, and park development.

Park System Planning

This program is responsible for the strategic direction of the Manitoba Provincial Park System, as well as establishing both new and revised park boundaries, classifications, primary park goals and objectives, and Land Use Categories. This is done via consultation involving the public, stakeholders, First Nations and government agencies. A major function at present is undertaking the review process required to confirm permanent designations for existing Park Reserves. The program is also responsible for

Manitoba's Ecological Reserves Program, including the designation and management ecological reserves.

Key Results Achieved:

- Consultations with First Nations and stakeholders were completed on Little Limestone Lake and Fisher Bay Park Reserves, leading to the areas being designated as provincial parks.
- Public consultations were completed on Goose Islands, Grand Island, Kinwow Bay, Pelican Islands, Pemmican Island, Walter Cook Caves and Sturgeon Bay park reserves, leading to each being renewed for another 5 year term.
- Consultations with Skownan Cree Nation were initiated considering a process towards the permanent designation of Chitek Lake Park Reserve as a provincial park.
- Consultation processes with Tataskweyak, Nisichawayasihk and O-Pipon-Na-Piwin Cree Nations were initiated to work towards the permanent designation of Amisk Park Reserve as a provincial park.
- Consultations were completed to amend the boundaries of Atikaki Provincial Park to accommodate the construction of the East Side Road; 12ha were removed and 24ha were added.
- Poplar/Nanowin Rivers Park Reserve was repealed in March 2012 as the area was designated a protected area known as the Asatiwisipe Aki Traditional Use Planning Area.
- Proposed development activities within and adjacent to provincial parks were reviewed to determine if they were appropriate and advice was offered on how to mitigate impacts.
- Annual Operating Plans for all major logging companies and quota holder associations were reviewed to ensure that harvesting and renewal operations were consistent with regulations and licensing, and impacts on parks were reduced.

Ecological Reserves

Ecological Reserves are established under *The Ecological Reserves Act* to protect areas with unique and representative plants, animals, geologic features, natural landscapes, and ecological processes.

Key Results Achieved:

- Consultations with First Nations and stakeholders were conducted to review the proposed Brokenhead Wetland Ecological Reserve expansion, Pocock Lake Ecological Reserve boundary amendment, and the Moose Lake/Holmgren Pines and Partridge Crop Hill ecological reserve proposals.
- Consultations with Misipawistik Cree Nation were initiated considering a process towards the permanent designation of Walter Cook Caves Park Reserve as an ecological reserve and the establishment of a cooperative management approach for Walter Cook Caves and Long Point ecological reserves.
- Proposed development activities adjacent to ecological reserves were reviewed to determine if they were appropriate and advice was offered on how to mitigate impacts.
- Annual Operating Plans for all major logging companies and quota holder associations were reviewed to ensure that harvesting and renewal operations were consistent with regulations and licensing and that impacts on ecological reserves were reduced.
- The Ecological Reserves Advisory Committee undertook an intensive review of proposed ecological reserves in southeast Manitoba and various other locations throughout the province that are deemed to be priority sites for designation.

Management Planning

The Planning and Development Section is responsible for preparing park management plans, developing park policies and facilitating resource management projects. Development of management plans for individual provincial parks is a requirement of Section 11 of *The Provincial Parks Act*. Management plans address topics such as park use, landscape protection and recreational development, and ensure that the main purposes of the park are considered when land-use decisions are made. They provide details on what land uses are appropriate and ensure that new activities or developments are compatible with the long-term management of the park.

Key Results Achieved:

- The management planning process for Birds Hill Provincial Park, initiated in early 2010, continued with the preparation of a draft management plan.
- The joint program (joint with the Moose Lake Resource Management Board) to designate Little Limestone Lake Provincial Park and prepare its management plan continued. The park was officially designated in July 2011 and draft management plan was prepared over the winter for consultations in 2012.
- A program was initiated to accelerate the preparation of management plans for all provincial parks. Three contracts were let to private consultants for the preparation of 41 management plans for small parks in the Eastern, Northwestern and Central regions. This work will continue through 2012.
- A management plan for Spruce Woods Provincial Park was initiated in conjunction with planned redevelopment of the park resulting from the extensive flood damage in 2011. The management plan will direct the redevelopment of the flooded areas of the park as well as provide long term direction on other park related matters.
- The Manitoba Parks and Natural Areas Branch Directives Manual continued to be reviewed and updated. This included work on directives regarding commercial boat caches and portable camps, off-road vehicle use, ice roads, and discharge of firearms.
- Continued implementation of previously approved management plans including those for Duck Mountain, Grand Beach and Atikaki provincial parks.
- Development continued on the ATV Trails Plan for Duck Mountain Provincial Park in consultation with local stakeholders and the ATV Trail Planning Committee.
- Prairie management plans for Spruce Woods and Beaudry Provincial Parks continued to be implemented to ensure the sustainability of the native and restored grasslands in these parks.
- Work on a proposed national park in the Manitoba Lowlands natural region continued with Parks Canada and Misipawistik Cree Nation. The process for engaging community residents in the decision making on a proposed park continued with the preparation of a series of discussion papers, a community land use mapping project and a number of community meetings and camps.

Canadian Heritage Rivers System

The Canadian Heritage Rivers System (CHRS) is Canada's national river conservation program. It promotes, protects and enhances Canada's river heritage, and ensures that Canada's leading rivers are managed in a sustainable manner. The CHRS is built on river stewardship, co-operation and public support. Rivers in the CHRS possess outstanding natural and/or cultural values, offer quality recreational opportunities, and showcase the benefits of healthy river environments, now and in the future. The Bloodvein, Hayes, Red and Seal are Manitoba's Canadian Heritage Rivers.

Key Results Achieved:

- Implementation of the Hayes River management plan continued with refinements to a GIS inventory mapping project for natural and cultural features and recreational sites and features along the river.
- Implementation of the management plan for the Bloodvein River continued with a program of communicating access restrictions on the river which will enhance its role as Manitoba's premier wilderness canoeing route.
- The Department continued to support and work with Rivers West on projects to raise awareness of the natural and cultural values of the Red River.
- The section played a key role in revising the *Principles, Procedures and Operating Guidelines* for the CHRS and advancing the CHRS Strategic Plan 2008-2018.

Design and Development

This Section provides development direction, site planning, and public facility design and mapping. Staff participated on the Watchable Wildlife Working Group with Wildlife and Protection and Manitoba Tourism Secretariat. The Unit is also responsible for coordination of the Parks Capital budget and management of infrastructure projects throughout the park system, including the coordination of the Provincial Camping Initiative. This section also provides landscape architectural and project management capacity, overseeing the design and implementation of capital works projects within provincial parks. A major function of this team at present is the development of new and the improvement of existing facilities.

Key Results Achieved:

- Phase 1 of the redevelopment of the Grand Beach Boardwalk, destroyed by extreme weather in October 2010, was completed. The work included a new sheet pile wall with timber façade, extensive decorative paving, a new railing and a new accessible ramp to beach level.
- Construction of a new fully-serviced 120 site campground at Winnipeg Beach Provincial Park was completed. This development includes three washroom/shower buildings and a new campground office. The campground was designed with energy conservation measures in mind and includes solar heating for hot water, low-flush fixtures and coin-operated showers. The campground was opened to the public in July 2011.
- Design and construction of the Winnipeg Beach Sea Wall and Safety Railing was completed.
- Design work was completed on the redevelopment of the West Hawk Lake Town-site Road and construction is underway. Improvements include a new road surface, a pedestrian amenity zone, clearly organized parking and a new boat launch.
- Design of the Grindstone Waste Transfer Station was completed and construction is nearing completion.
- Improvements to the existing washrooms at the beach in Birds Hill were initiated.
- Assessment and planning for wastewater facility upgrades at Grand Beach Provincial Park and Spruce Woods Provincial Park were initiated. Design of a new wastewater truck haul lagoon at Dorothy Lake was completed and construction is now complete.
- New water treatment plant upgrades at Watchorn Provincial Park, Hnaua Provincial Park, and Winnipeg Beach Provincial Park were completed.
- Site improvements at Trappist Monastery Provincial Park were initiated with improvements to lighting and drainage. Boundary delineation work is also underway at this site..
- Repairs and improvements are underway to ten parks that suffered significant damage during the 2011 flood event. At Spruce Woods Provincial Park significant repairs have been completed on

roads, campsites, the beach, the day use area, and other park infrastructure. Planning work is now underway for a major repair and redevelopment program for this park.

- Further flood repairs are underway at Asessippi, Oak Lake, Rainbow Beach, and Manipogo Provincial Parks.
- Design of the Duff Roblin Park Centre Building with Observation Tower was completed with an anticipated construction start date of fall 2012.
- Green Roof Installation on the Grand Beach Washroom Building and the Birds Hill Shower Building was completed.
- Construction is underway on the relocation of a forty foot viewing tower from the north point on Hecla Island in Hecla Grindstone Provincial Park.
- Design and construction of a new campground office, road and landscape improvements, and a new trailer dump station in St. Malo Provincial Park were initiated and are nearing completion.

Recreation and Education Services

The Recreation and Education Services section sets the direction of the outdoor recreation, beach safety and the interpretation programs in Manitoba Provincial Parks and evaluates and implements new initiatives in campground, day-use, backcountry management and outdoor education, as well as customer-service training and volunteer activities. The Section guides and supports Regional Operations in ensuring high quality outdoor recreational experiences. This includes analysis of operating strategies and procedures, policy review, market research, marketing strategy development, promotion, and statistical compilation and trend evaluation.

Recreation Programming

The Recreation Programming Unit is responsible to provide recreational opportunities that are diverse in scope through camping, cabins and yurts, and group use facilities through fair and equitable access to provincial parks. The program must ensure that both field and head office staff provides quality customer service. The Parks Reservation Service is a major component of Recreation Programming.

Key Results Achieved:

- Delivery of the recreation programming in Manitoba's provincial parks including camping; cabins and yurts; group use; Parks Reservation Service; and Campground Host.
- Reservations were made available through a call centre, on-line and through 28 campground offices in 2011. Improvements to the system included the streamlining of processes that would improve customer services as well as reduce administrative efforts.
- New and enhanced campground facilities continued to be developed under the Provincial Camping Initiative. Winnipeg Beach Campground opened to the public in July of 2012 with 120 full service sites. It is the first brand new campground to open in a provincial park since the 1970s.
- Promoted park programs and initiatives through newspaper advertisements, news releases and handouts. Information included opening and closing dates, Free Park Entry, May long-weekend liquor-free camping, an anti-rowdyism campaign, and the Parks Reservation Service. Also included was the distribution of promotional items to community events, non-profit organizations and youth groups.
- Free Park Entry was extended in 2011, where park vehicle permits and the associated entry fee were not required in recognition of the economic times and the desire to increase recreational opportunities closer to home.

Beach Safety

The Beach Safety program in Manitoba Parks is primarily focused on public relations and water safety education, and is provided under contract at three provincial park beaches (Birds Hill, Grand Beach, and Winnipeg Beach). Beach Safety Officers provide onsite water safety education and emergency response as required. Provincial parks offer beach opportunities at 81 other non-staffed locations.

Key Results Achieved:

- The Beach Safety program made almost 24,000 contacts with beach visitors at three provincial parks during the summer of 2011. Over half of these contacts related to public education of parental supervision responsibilities. Public inquiries and injury prevention activities comprised a majority of remaining contacts. Three water rescues were performed. Beach Safety services for 2011-2014 are managed by two Manitoba companies - Criti Care EMS Inc at Birds Hill and Emergency Rescue Response Services at Grand Beach and Winnipeg Beach.
- Grand Beach became a candidate beach under the "Blue Flag" program. The international designation recognizes that Grand Beach upholds high standards related to environmental management, water quality, environmental education and safety.
- Manitoba Conservation and Water Stewardship continued to work with the Manitoba Coalition for Safer Waters (MCSW) and provided an annual \$5.0 grant for public education initiatives, currently focusing on water safety for new Canadians. The MCSW is an interagency group that co-ordinates water and ice safety activities in the province.

Emergency Planning

- Under *The Emergency Measures Act*, Manitoba Provincial Parks are required to prepare and adopt an emergency preparedness program and emergency plans that meet the mandated requirements set out by the Emergency Measures Organization. Emergency plans for Eastern Region parks were approved by Emergency Measures Organization.

Interpretation

The Interpretation program offers visitors a deeper understanding and appreciation of natural and cultural resources in provincial parks. This in turn assists the public in understanding the goals and programs of the department. Live field programs complemented by publications, outdoor exhibits, and audio-visual materials bring visitors in direct contact with park resources and management. The program also undertakes research leading to trail and brochure development and delivery of live programs throughout the park system.

- Delivery of the field program included two full-time interpreters at Birds Hill and Whiteshell provincial parks, and 19 seasonal interpreters. Programs were presented at Birds Hill, Grand Beach, Hecla/Grindstone, Paint Lake, River Road, St. Malo, St. Norbert, Spruce Woods, Turtle Mountain and Whiteshell Provincial Parks. In addition, Green Team members provided assistance at these parks. Interpreters contacted about 90,000 visitors at interpreter-led events and in interpretive centres and museums.
- Revamped school programs in all ten locations and ensured that they correlate to the Manitoba School Curriculum. Introduced several new programs aimed at high school students at three key locations. Provided 300 school programs to approximately 10,000 Manitoba students.
- Hosted three workshops for science and social studies teachers as part of October in-service and development days, focusing on getting students in elementary and junior high school into provincial parks.

- Updated self-guiding trail publications for six locations.
- The Heritage Properties program was coordinated in Manitoba's Provincial Parks including building assessment and restoration work at Hecla/Grindstone, Whiteshell, Captain Kennedy House, and St. Norbert.
- Personal interpretive programs were provided in 10 major provincial parks and made contact with over 80,000 visitors.
- Celebrated the 80th Anniversary of Forest Reserves in Manitoba, as many Forest Reserves later became provincial parks. As part of this celebration re-opened Forrester's Footsteps Self-guiding Trail which had been damaged in the 2007 windstorm.
- Ensured that school programs correlate to the Manitoba School Curriculum and introduced several new programs aimed at High School students at all locations.
- The children's activity books continued to be a success with over 1,500 booklets being redeemed under the program. Booklets were available for distribution in every campground and at every interpretive event.
- The Park Passport program continued in popularity, 52 passports were returned by families with over 500 park visits prompted by the program.
- The Amisk Trail, in Whiteshell Provincial Park, re-opened to the public and highlights the benefits of parks and also the achievements of Walter Danyluk (first director of parks).
- Introduced Global Positioning System (GPS) programming in 5 provincial parks
- Redeveloped the onsite signs for the Quiet Voices Trail in Spruce Woods Provincial Park.
- Increased the offering of active programs including bike with an interpreter summer events at St. Norbert, St. Malo and Birds Hill. Also introduced active winter programming including snowshoe programs in Birds Hill and Whiteshell Provincial Parks and cross-country ski tours in Whiteshell Provincial Park.

Key Program Outputs:

Outdoor Recreation Programming	Amount
Number of visitors	5.0 million
Total Number of campsites	6,283
Transient Campsites	4,545 (4,059 available for reservation or 86.8%)
Transient Camping Nights	199,199
Seasonal Campsites (# does not include Permanent Trailer Village or Concessionaire campsites)	1,542
Seasonal Camping Nights	55,154
Campgrounds offering reservation	40*
Group Use Sites	101
Family Vacation Cabins	33 (at 2 locations)
Yurts	50 (at 7 locations)
Reservations	64,268
Reservation Rate, compared to 2010/11	1,523 more reservations or 1% increase
Reservations made through Web	72%
Reservations made opening day April 6, 2009	13,995

* 2 campgrounds offering reservations were closed due to flooding in 2011

Park Districts

The Park Districts Section administers the Vacation Home Lot development program, Commercial Operations and Special Consideration Organization (SCO) operations under the authority of *The Provincial Parks Act* and regulations including the Park Activities Regulation and the Permits and Leases Regulation. The section manages and controls land use activities and developments on vacation home, commercial business, and SCO lots through a site plan permitting process. The section takes a lead role in the resolution of development related disputes between neighbours. Management decisions are prescribed in various legislation, regulations and policy guideline documents such as *The Cottager's Handbook for Manitoba Provincial Parks*. The costs of road maintenance, garbage handling, provision of water and sewer and other municipal type services provided to lessees, permittees and private landowners are recovered from those users through an annual invoicing program. Permits were also issued for commercial fish camps, wild rice cultivation, trapline cabin construction, hay and grazing, scientific research, and mineral claim-staking and exploration.

Key Results Achieved:

- Work continued on a project to revise the methodology for charging park district service fees respecting the provision of municipal type services (roads, garbage, sewer, water, etc.).
- The first extensive revisions to *The Cottager's Handbook* in a decade have been prepared for review by department staff prior to planned consultation with cottage associations throughout the province.

Vacation Home Lot Development Program

The Program, in co-operation with the Crown Land and Property Agency, administers about 6,300 vacation homes on leased, permitted and private lands in Parks.

Key Results Achieved:

- 370 permits were issued for cottage construction or structural modification.
- 106 leasehold inspections were carried out.
- \$4.9 million revenue generated in land rent, service fees, permits, and lot development fees.

Commercial Operations

This unit manages relations with private-sector business operators to ensure high-quality services for visitors.

Key Results Achieved:

- Approximately 134 commercial operations provide such services as restaurants, stores, accommodation, golf courses, marinas, and beach concessions throughout Manitoba's provincial parks.
- There are 43 Special Consideration Organizations offering various educational, religious, and outdoor recreation programs.

Table RO.19

12.2(g) Parks and Natural Areas

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	15,588	258.43	16,305	(717)	
Other Expenditures	11,975		10,571	1,404	
Grant Assistance	471		472	(1)	
Less: Recoverable from Rural Economic Development Initiatives	(472)		(472)	0	
Total 12.2(g)	27,562	258.43	26,876	686	

Fire and Emergency Response Program

Objectives

To coordinate the Provincial Wildfire Program to ensure maximum utilization, efficiency and cost-effectiveness of fire suppression resources to minimize human, property and resource losses.

- The fire season of 2011 was below average in terms of numbers with 315 fires burning a total of 126,844 hectares. Fire staff assisted flood operations in 16 different locations for the majority of the year.
- The Eastern half of the province was very dry the entire season with travel restrictions and bans imposed for most of August until September long weekend. On October 5th, there was a lightning caused fire near two cottage subdivisions by Bissett and several human caused fires in the southeast corner of the province. The temperatures reached 27 degrees with 90 kilometre winds, conditions that worsened the situation. The historic event carried on through Thanksgiving weekend with the largest mutual aid effort occurring with 40 fire departments, municipalities and the Office of the Fire Commissioner.

To minimize the number of human caused fire starts through prevention and education.

As reported by the regions in weekly reports, the following statistics apply to human caused wildfires:

- 99 human caused wildfires were investigated. 36 of these fires were determined to have been intentionally started of which thirteen were suspected to have been arson related. Evidence was gathered to support cost recovery for eight of these fires.

To provide the capability to detect, report and safely initial attack all fires throughout the province with minimal costs and loss in accordance with the Initial Attack Preparedness System and Fire Program Policy and Operational Guidelines.

Air Operations

The 2011 fire season was busy for Manitoba aviation resources. Manitoba's CL 215/CL 415 fleet and bird dog aircraft flew 1436.0 hrs (1,968.8 hrs in 2010). Out-of-province water bombers and bird dog aircraft from Ontario, and Saskatchewan were used at various times to supplement Manitoba's fleet for a total 33.0 flight hours (514.6 hrs in 2010). Single Engine Air Tanker aircraft provided by Manitoba's agricultural aviation industry flew 161.0 hrs (212.0 hrs in 2010). These aircraft were used to supplement Manitoba's CL-215 fleet for community protection, new fire starts, and sustained fire action.

Manitoba helicopter operations were also busy. The long-term helicopter contracts were supplemented by casual hire helicopters as required. This year Manitoba had 6 helicopters on long term contracts. The estimated total for all aircraft expenditures was approximately \$12.0 million compared to \$27.0 million in 2010. This represents 5785.0 flight hours (9,991.2 0 hrs in 2010) with minimal reported incidents.

Science and Technology

- The fire management system (OPSFMS) was successfully migrated to the Windows 7 operating system and used operationally for the 2011 fire season. Work continues with weather data and forecast automation to create additional value added weather products for regional and district staff (charts, graphs, Google earth displays). Aircraft tracking in Google Earth of all government and seasonal contract helicopters became operational and was being tested as an augmentation of radio flight following a complete rollout to all regions and districts is expected for the 2012 fire season.
- Improvements continue with crews GPS mapping the fires they suppress, with increasing numbers of fires mapped province wide. In 2011 crews actively mapped 126,090 of 126,596.2 hectares (99.6%) that were burned. The success of this achievement can be attributed to the dedicated staff and focused training of initial attack firefighters at the pre-season crew leader training course. These fire maps are available on line at the Fire Program website mapping page (<http://www.gov.mb.ca/conservation/fire/Fire-Maps/index.html>) for researchers and the general public in both a Google earth, and ESRI shapefile format.

To assist in the prevention of forest fires through public education.

- A FireSmart and Prevention Program Coordinator position was created and filled to oversee the provincial wildfire prevention and FireSmart program. This role will focus on the aid in preventing human caused wildfire. It also further develops and implements the FireSmart initiative in the province and coordinates appropriate programming in the regions. The position will also be responsible for representing the province on several national and international wildfire prevention and FireSmart committees.
- Advertising began in mid-April in the south and progressed north with the fire season. Advertising consisted of newspaper and radio ads, placement within publications such as the Manitoba Angling Guide and other select publications. Radio ads are aired on radio stations throughout the province. Some advertising geared to the fall resource users was placed in the outdoor features of select newspapers. Advertising specifically for fire safety and all terrain vehicle users were publicized in community newspapers and radio ads.
- FireSmart continues to receive growing attention in the province in the form of material distribution and joint projects with the Office of the Fire Commissioner (OFC) and Manitoba Conservation and Water Stewardship. STEP students completed 2800+ values-at-risk assessments in the Whiteshell Provincial Park. Data gathered will be used to create Community Wildfire Protection Plans, response plans and sprinkler deployment plans for the Whiteshell area. FireSmart demonstration sites have been developed at Falcon Lake Riding Stables, Falcon Lake District Office, Manitoba Forestry Association's Hadashville site and the RM of Victoria Beach.
- Several committees met to discuss fire mitigation strategies and initiatives with cottage owners and municipalities, and the ongoing development of a FireSmart public education program in the Whiteshell and in the RM of Victoria Beach. Smokey Bear fire prevention materials were ordered through the USDA national symbols cache and distributed throughout the Manitoba fire regions.

To provide a trained complement of fire-line staff to successfully meet policy objectives.

Fire line training in the past year included:

- 35 new Initial Attack Crew Members (Type I) were trained and certified to the Canadian Interagency Forest Fire Centre (CIFFC) Exchange Standards. Including, I-100, Hover Exit, WHMIS, TDG, and Chainsaw Safety and Certification.

- 36 individuals were trained and certified to the Type I Crew Leader level.
- Seven new Type II Emergency Fire Fighter Crew Leaders were trained and certified.
- 90 new Type II Emergency Fire Fighters were trained to Canadian Interagency Forest Fire Centre (CIFFC) exchange standards.
- 342 new Type III Emergency Fire Fighters were trained and certified.
- One individual attended and successfully completed the Wildfire Prevention course and four individuals attended and completed the Advanced Wildland Fire Behaviour course in Hinton, Alberta.
- Three individuals completed a Train the Trainer course for the delivery of Transportation of Dangerous Goods by Air.
- 13 individuals completed the national CIFFC WFX-FIT Appraiser Training course.
- Numerous First Aid/CPR courses, Transportation of Dangerous Goods, WHMIS, and Chainsaw training courses were held as well.

To coordinate the Provincial Wildfire Program to ensure adequate manpower, aircraft and equipment resources are available to achieve efficient and cost effective fire suppression activities required to minimize human, property and resource losses.

- The Provincial Fire Equipment Working Group continues in research and development of fire suppression equipment.
- Plans and proposals completed in 2011/12:
 - Pump and hose trailer (1,000 hose/30 pumps) developed.
 - Subdivision Values Protection developed.
 - Acquired two additional CL-415 water-bomber aircrafts. The fourth CL-415 is scheduled to arrive in the fall of 2012.

Imports and Exports:

- 13 imports and exports took place through the **Canadian Interagency Forest Fire Centre** and Great Lakes Compact during the season.
- 13 wildfires were actioned along border areas with Ontario, Saskatchewan and Minnesota with aircraft to control wildfires burning in these areas.
- Manitoba assisted Ontario with equipment and Alberta with Ignition Specialist staff.
- Saskatchewan and Alberta assisted Manitoba with CL-215 and Convair Air Tanker groups.
- Ontario and British Columbia provided assistance with Type 1 Initial Attack personnel.

Table R0.20
2011 - Number of Fires and Area Burned by Region and Cause

CAUSE	Northeast		Northwest		Western		Central		Eastern		Province	
	# fires	area burned (hectares)	# fires	area burned (hectares)	# fires	area burned (hectares)	# fires	area burned (hectares)	# fires	area burned (hectares)	# fires	area burned (hectares)
recreation	5	500.4	1	0.1	2	1.7	2	0.6	13	6.1	23	508.9
settlement	20	95.0							13	123.7	33	218.7
woods operations									1	0.2	1	0.2
other industry	3	41.7			1	1.2			17	10.4	21	53.3
railroads			3	1.4					3	2.2	6	3.6
public projects			1	0.1			1	0.8	2	1.1	4	2.0
incendiary	14	6.5	5	52.6	2	5.4	3	6,550.7	11	15,407.6	35	22,022.8
miscellaneous	17	61.4	1	0.2			1	0.7	10	17.1	29	79.4
agricultural							2	1,444.6	2	1,895.6	4	3,340.2
lightning	62	52,077.1	14	298.6	1	0.3	3	14.3	79	47,976.8	159	100,367.1
all causes	121	52,782.1	25	353.0	6	8.6	12	8,011.7	151	65,440.8	315	126,596.2

**Table R0.21
2011- Number of Fires and Area Burned by Priority Zone and
Action Status**

2011	Actioned Fires				No Action Fires				Limited Action Fires				All Fires			
ZONE	# fires	% fires	area burned (hectares)	% of area burned	# fires	% fires	area burned (hectares)	% of area burned	# fires	% fires	area burned (hectares)	% of area burned	# fires	% fires	area burned (hectares)	% of area burned
RED	176	62.86%	16,814.0	25.15%	3	25.00%	319.0	1.48%	5	21.74%	25,590.6	67.00%	184	58.41%	42,723.6	33.75%
YELLOW	6	2.14%	10.7	0.02%									6	1.90%	10.7	0.01%
GREEN	64	22.86%	1,867.4	2.79%	5	41.67%	21,149.0	98.16%	3	13.04%	8,390.5	21.97%	72	22.86%	31,406.9	24.81%
WHITE	34	12.14%	48,162.7	72.04%	4	33.33%	77.4	0.36%	15	65.22%	4,214.9	11.03%	53	16.83%	52,455.0	41.43%
ALL ZONES	280	100.0%	66,854.8	100.0%	12	100.0%	21,545.4	100.0%	23	100.0%	38,196.0	100.0%	315	100.0%	126,536.2	100.0%

Red Zone High Priority - Full fire suppression
 Yellow Zone Medium Priority - Suppression if resources available
 Green Zone Low Priority - Suppression if resources available
 White Zone No suppression unless values are at risk

**Table R0.22
2011 - Area burned by Priority Zone**

2011	Zone Area (ha.)	Hectares Burned	% of zone burned
Red	11,415,633.5	42,723.6	0.374%
Yellow	685,691.0	10.7	0.002%
Green	9,770,018.8	31,406.9	0.321%
White	23,081,244.9	52,455.0	0.227%
All Zones	44,952,588.2	126,596.2	0.282%

Figure 2

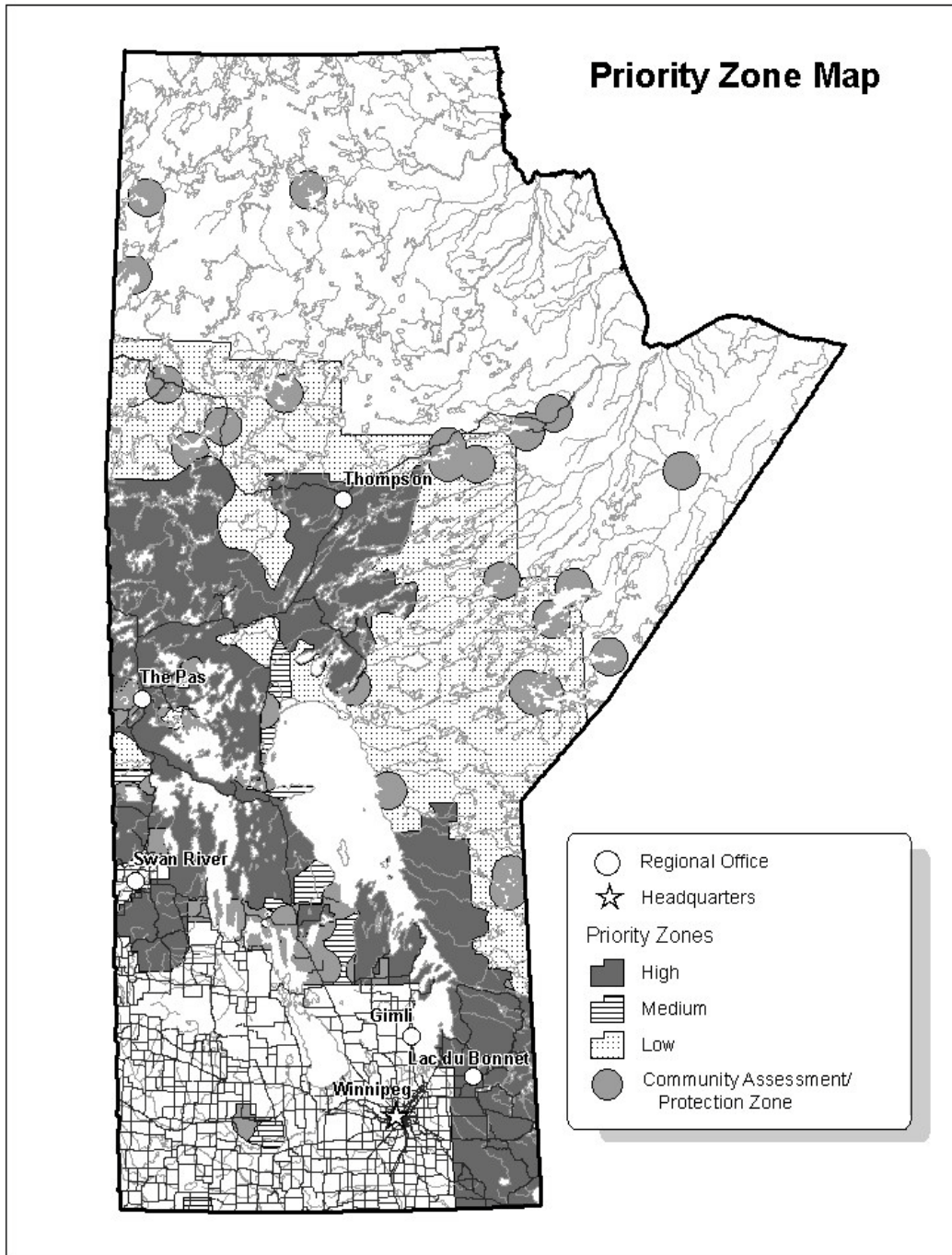


Figure 3

Number of Fires, 2001 - 2011

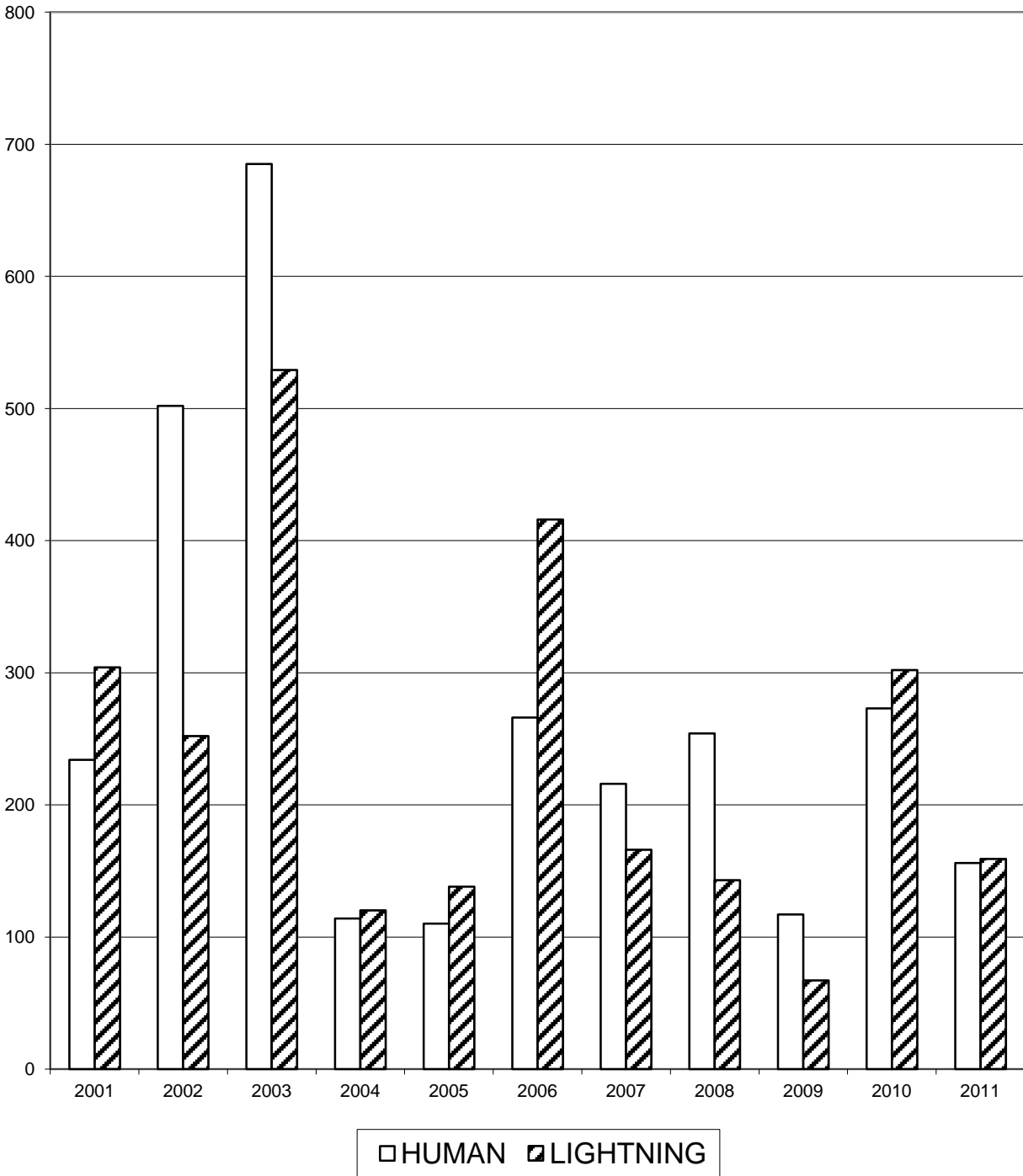
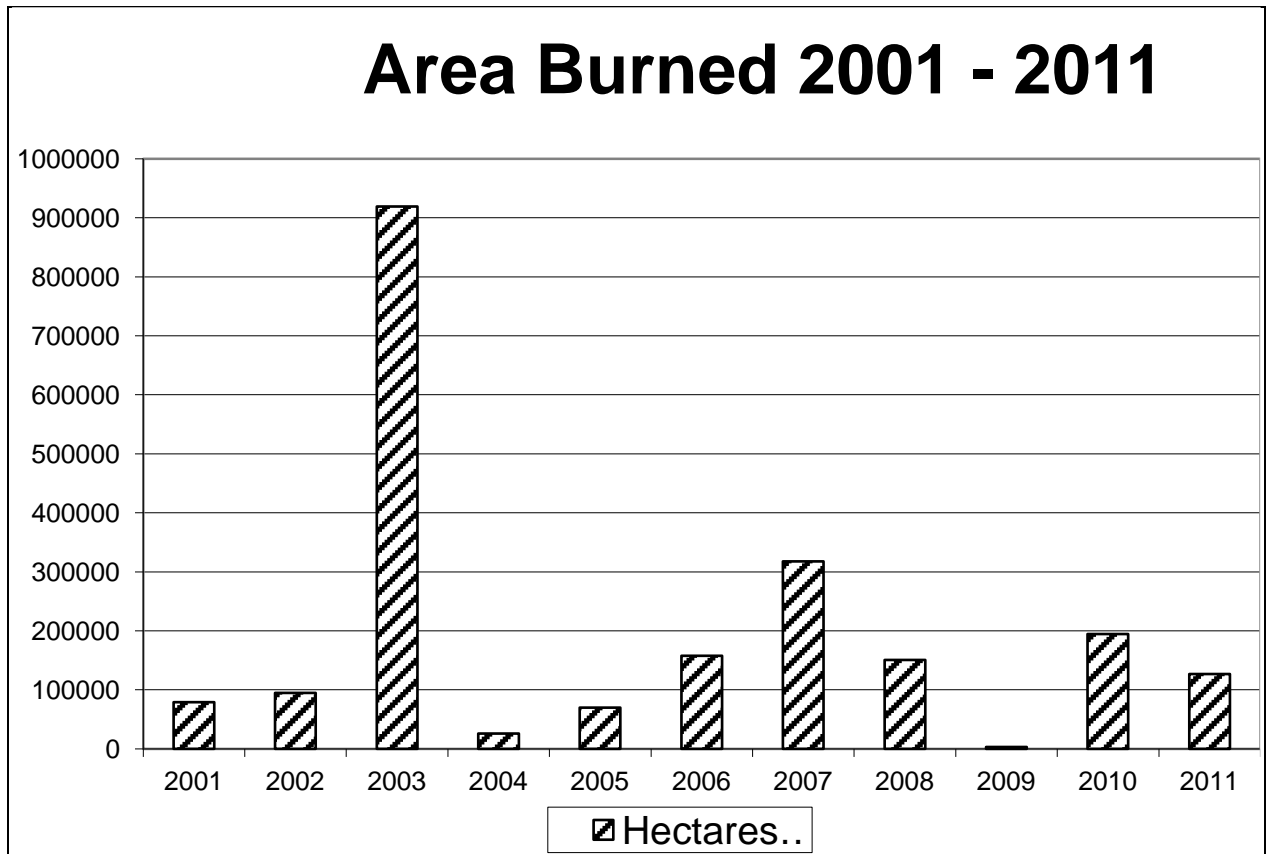


Figure 4



**Table RO.23
12.2(h) Fire and Emergency Response Program**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	6,464	69.28	6,702	(238)	
Other Expenditures	10,162		11,341	(1,179)	
Less: Recoverable from Emergency Expenditures	(488)		(500)	12	
Total 12.2(h)	16,138	69.28	17,543	(1,405)	

CONSERVATION PROGRAMS

Divisional Administration

Divisional administration provides strategic and sustainable management of Manitoba's crown lands, forests, wildlife, geographical information and recyclables.

Table CP.1
12.3(a) Divisional Administration

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	189	2.00	148	41	
Other Expenditures	378		331	47	
Total 12.3(a)	567	2.00	479	88	

Forestry

The Forestry Branch plans, manages and allocates forest resources for the long-term social, economic and environmental benefit of Manitobans. Crown forests are managed sustainably for all users, and forest management activities are implemented in a manner that conserves ecosystem diversity.

To achieve these results the Branch, supported by a skilled Administration section, is organized into three key areas:

- Forest Inventory and Resource Analysis
- Forest Management and Development
- Forest Health and Renewal

The Branch works from one central and several regional offices, and is comprised of approximately 68 professional, technical and support staff. The central office in Winnipeg sets the policy and planning framework for forest management, develops and administers timber management, forest health, forest renewal, growth & yield and forest inventory programs on a provincial basis. Throughout the forest zone, regional forestry staff implement forest management programs on behalf of the department. Regional forestry offices are located in Lac du Bonnet, Gimli, Swan River, The Pas, and Thompson.

Administration

Branch administration establishes guidelines and ensures practices conform to department policies and government goals. It provides administrative support and personnel duties, prepares annual estimates, ensures expenditures conform to estimates and department policy, controls funds, monitors efficiency and effectiveness of expenditures and coordinates development of the annual work plan.

Key Results Achieved:

- The Manitoba Model Forest was supported by in-kind contributions, including two representatives who sit as directors as well as staff and equipment assistance with the Junior Ranger and Caribou Management programs.
- The branch managed and administered a grant of \$170,000 to the Manitoba Forestry Association's woodlot program, which is provided through the Sustainable Development Innovations Fund. This program includes the development of woodlot management plans and technology transfer in the south-eastern, Interlake and western portions of the province.
- The branch also provided a grant of \$23,400 and staff involvement to support educational programs delivered by the Manitoba Forestry Association, including an environmental education competition, Envirothon.

Forestry Branch Website

- The Forestry Branch website is maintained by the Forest Management and Development section (<http://www.gov.mb.ca/conservation/forestry/index.html>). In 2010 the site was migrated to a new template, which included revising the file structure, side menu navigation, quick links and adding new photos, which updated the look of the site.
- Website activities in 2011 included regular Forest Management and Development updates: timber pricing, timber sale auction announcements, quota holder information, and a forest practices guideline public review. Website updates done on behalf of the Branch include tree planting contractor information, a new Emerald Ash Borer page and revised Gypsy Moth pages.

Trees For Tomorrow Program

The Trees for Tomorrow program, started in 2008, is delivered in partnership with The Manitoba Forestry Association. The Trees for Tomorrow program is part of Manitoba's Climate Change Initiative.

Objectives

- To acknowledge Canadian Environment week in June 2011, the provincial government provided an additional \$1.23 million to plant an extra one million trees for The Trees for Tomorrow program.
- The new program goal is to plant six million trees by 2013.
- Provide trees at no cost to private property owners, conservation districts, municipalities, First Nations, schools and non-government groups for planting

Key Results Achieved:

- In addition to distributing trees at no cost to clients, the program seeks to provide forestry conservation education and learning opportunities, as well as assistance to non-government groups, Conservation Districts, youth groups and schools. Manitoba Conservation and Water Stewardship and its delivery partner, the Manitoba Forestry Association, will deliver much of the planting effort through contracts with First Nations and other tree planting contractors.
- From the spring of 2008 to the fall of 2011, The Trees for Tomorrow program has planted or provided 4,081,217 conifer seedlings or hybrid poplar cuttings. See Figure 5 – Trees For Tomorrow – seedlings planted. Pineland Forest Nursery grows the seedlings for this program in Hadashville, Manitoba.
- Sufficient planting stock has been ordered for planting in 2012 to meet the target of six millions trees.

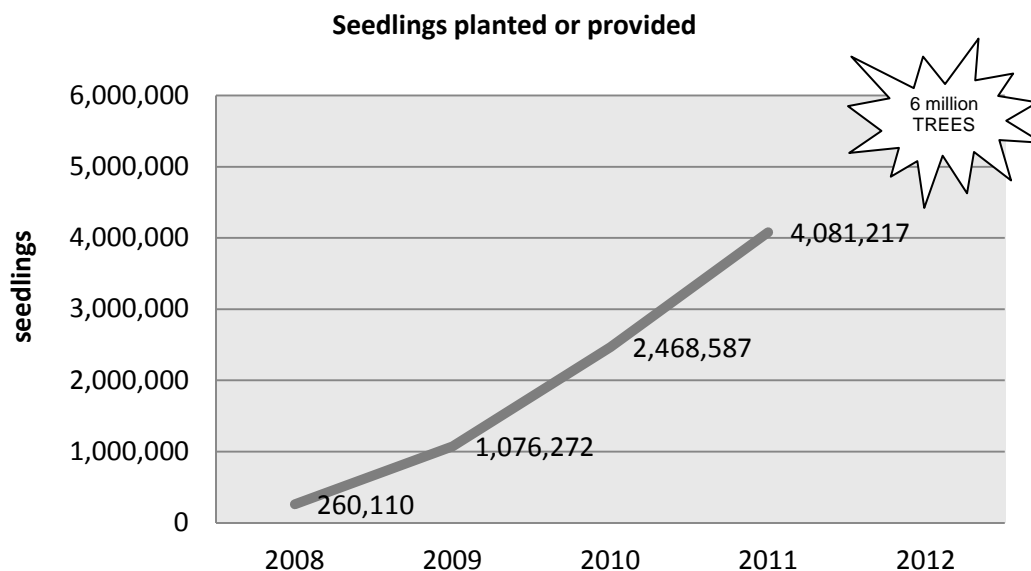


Figure 5 –Trees For Tomorrow – seedlings planted

Forest Inventory and Resource Analysis

The Forest Inventory and Resource Analysis (FIRA) section utilizes the latest technology and scientific knowledge to support the Forestry Branch in managing Manitoba's forest resources sustainably. FIRA manages three key program areas: Forest Inventory, Forest Productivity and Resource Analysis.

The Forest Inventory Program

The Forest Inventory program creates and maintains a current, comprehensive, and accurate ecologically-based inventory of Manitoba's forest resources. This section is responsible for developing and maintaining a sophisticated Geographic Information System (GIS) to manage and utilize forest inventory data.

Objectives

- Establishes standards for forest inventory data collection and monitor data collection processes and procedures
- Manages aerial photography acquisition, photo-interpretation and database maintenance
- Develops and maintains forest inventory databases and spatial data within a sophisticated GIS
- Provides mapping support to the Branch and Department
- Provides forest information to industry, other government users and the public

Key Results Achieved:

- Successfully tendered an image acquisition contract for a portion (2.5 million ha) of the Nelson River Forest Section. Approximately 60% of the photos were flown, the remaining to be acquired in 2012.
- Interpretation of the Highrock Forest Section was completed and delivered by the contractor. Quality assessment and corrections are in the final stages of completion.
- Working with the Canadian Forest Service, staff re-measured 37 National Forest Inventory (NFI) photo plots. Ground plots were not re-measured due to access restrictions and reduction in funding. All data collected was delivered to the NFI project office for national compilation.
- Quality assessment and updating of forest inventories and associated datasets continue to be ongoing. Significant efforts by staff have resulted in individual forest inventory map tiles compiled into large seamless composites.
- Several historical paper-based inventories (FMUs 45, 82 and 86) were digitized and added to the provincial database. The spatial comparison and evaluation of past and present forest inventories will provide important information to measure forest succession changes through time.
- FIRA staff continues to provide technical GIS and mapping support to other branches and program areas.

The Forest Productivity Program

The Forest Productivity Program develops and implements field sampling programs and manages associated growth and yield databases. The program applies statistical techniques to create models for consistently predicting growth, decay, yield and quality of Manitoba's forests. The program also provides the base information to assist in timber supply sustained yield projections, assessments of forest carbon storage and dynamics, development of provincial forest management plans and evaluation of silviculture activities.

Objectives

- Establishing and maintaining permanent sample plots to measure growth rates and the long-term response to silvicultural treatments
- Evaluating and quantifying the productivity of forests and forest lands
- Quantifying the risks and losses in forest stands due to decay
- Developing, evaluating and recommending forest growth projection systems that simulate the growth, yield and quality of commercial tree species in Manitoba
- Developing cooperative systems of data collection, analysis and transfer with industry and other jurisdictions and the development of related standards

Key Results Achieved:

- A community-based timber volume sampling survey, jointly funded by the province, federal government, and Mathias Colomb Cree Nation, was completed within a portion of the Highrock forest section. The program provided training to participating individuals and enhanced the community's capacity to become engaged in sustainable resource planning and development discussions. The field survey was conducted between September and December 2011. A total of 750 plots were established in 250 forest stands across the sampled area.
- The stem analysis database was expanded as an additional five trees were sampled within FMU 24. Information collected through the stem analysis surveys is used to construct models that describe stem form and tree growth.
- The Permanent Sample Plot (PSP) program re-measured 91 existing plots and established 16 new plots. The PSP program is a long term monitoring survey of established plots across the province. Information collected through this program will support the development of growth and yield models for the province.
- Yield curves were constructed using a variety of utilization standards for Forest Management Units (FMUs) 67 and 68 within the Highrock forest section. These curves will be used to support the calculation of sustainable harvest levels within these areas.
- Mortality curves were developed for major commercial tree species in Manitoba. The mortality models will improve provincial forecasts of stand development and will support forest growth projections used in wood supply analyses.

The Resource Analysis Program

Resource Analysis program determines sustainable harvest levels (referred to as Annual Allowable Cuts or AAC) ensuring ecological processes, timber and non-timber resources and values associated with forest ecosystems are accounted for. This program also leads Climate Change initiatives such as forest carbon sequestration, biomass estimation and integrates new principles of forest ecology and landscape design, natural disturbance and forest succession, and wildlife habitat forecasting into forest ecosystem modeling.

Objectives

- Determining sustainable timber harvest levels and establishing provincial AAC levels
- Developing state of the art computer models and techniques for completing wood supply analysis
- Establishing wood supply standards and procedures
- Evaluating and validating wood supply analyses prepared by industry
- Completing resource analysis needed to supporting sustainable forest management including climate change assessments, wildlife habitual modeling and landscape design techniques

Key Results Achieved:

- Additional wood supply analyses were completed for:
 - Forest Management Licence #1 to account for landbase changes as a result of the removal of harvesting within provincial parks. An addendum to the existing wood supply report was completed and is expected to be released after an internal review.
 - The Pineland Forest Section to reflect the latest provincial utilization standard and to update it to the start of 2010 Timber Quota period. The wood supply report will be updated and released after an internal review has been completed.
- The Saskatchewan River forest section wood supply analyses progressed with draft aspatial Base Case scenarios approaching completion. Development began on the spatial modeling phase.
- Preliminary preparations for the Highrock forest section wood supply analysis began.
- Technical assessments were conducted to evaluate forest resources impacted by proposed developments and potential landbase withdrawals including Bipole III.
- The provincial AAC table, which identifies regional sustainable harvest levels, was updated to reflect new utilization standards and changes in available landbase.
- The initial phase of a Climate Change Vulnerability Assessment was completed on the Sandilands Provincial Forest.
- FIRA staff collaborated with Wildlife Branch staff developing the Naosap Caribou Habitat Modelling Project.

Forest Management and Development

The Forest Management and Development (FMD) section provides cutting authorities, establishes conditions for all forestry operations, tracks and monitors timber harvesting, and collects associated timber dues and charges. The section also fosters economic development by supporting new and existing industry and by facilitating increased aboriginal participation in the forest sector. FMD provides direction in six program areas: Timber Administration, Forest Management Planning and Forest Practices, Wood Measurement, Legislation and Policy, Forest Development and Consultation, and Regional Operations.

Timber Administration

Objectives

- Administer timber harvesting effectively and efficiently
- Provide cutting authorities, monitor harvest volumes and inspect timber operations
- Establish commodity timber prices and collect timber dues along with other fees and charges
- Track the movement of Crown timber from forests to mill destinations

Key Results Achieved:

- Since 2008, timber dues charged on all Crown timber harvested in Manitoba have been calculated monthly on a commodity based timber pricing system. Under this system, timber dues increase and decrease with fluctuating commodity prices with pre-established minimum rates (base rate). Reduced global demand for forest products continued to result in generally low commodity prices throughout 2011-12. As a result the timber dues charged for OSB, softwood lumber and newsprint all remained at base rates throughout the year. Kraft was the only commodity that showed strength with commodity prices within the mid to high range through 2011/12.
- In total, 1,057,471 m³ of Crown timber was harvested and/or delivered in Manitoba and \$5,511,301 in revenue was collected from timber dues, charges and fees in 2011/12. The total revenue includes over \$2 million of dues and charges that were prepaid for right of way clearing by the East Side Road Authority. Both the volume of timber harvested and revenue collected continued to be severely affected by depressed markets as well as the closure of Tembec’s newsprint mill in Pine Falls in 2009.

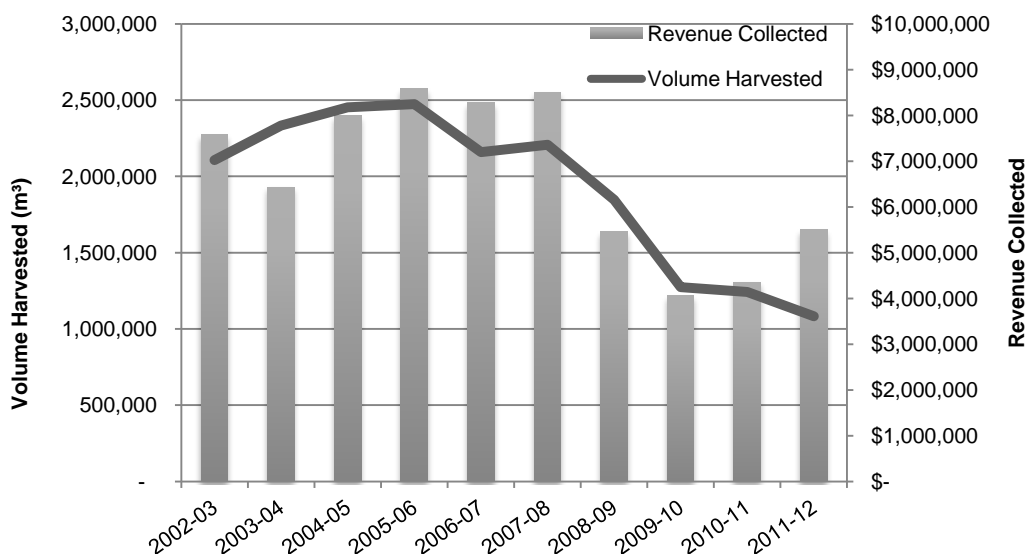


Figure 6 Crown Timber Harvested and Provincial Revenue Collected from 2002-2012

- There were 159 quota operators with long-term timber allocations in 2011/12. Ninety nine of the quota allocations were allocated through Timber Sales (>300 m³) and 60 through Timber Permits (<300 m³). A total of 631,242 m³ are allocated each year through quota. The number of separate quota cutting rights continues to fall as quota are purchased and amalgamated into existing quota timber sales. In addition to quota, timber sales are issued for auctions, special allocations, salvage and community awards.
- FMD has used a specialized computer application (TREES) to track cutting authorities and monitor harvest volumes since 2010. A new 3-year agreement was signed with Ontario in early 2012 to continue to provide the TREES system, and to cooperatively make improvements to the software. A major modification was completed that will allow the Forestry Branch to use TREES for quota volume management. In the future, TREES will be operated solely by Manitoba.
- Electronic data transfer (EDT) is a method to transmit digital records of harvest volumes to the Forestry Branch. The major mills in Manitoba report all Crown timber delivered to them through EDT.

This greatly reduces paperwork for mills and Forestry resulting in a more efficient tracking of volumes and payments of timber dues and other charges. In 2010/11 Domtar in Dryden, Ontario became an EDT mill to report Manitoba wood delivered to them and in 2011/12 Ainsworth in Barwick, Ontario also started reporting via EDT.

- Scaling Plans are used by timber cutting right holders to report their harvest, scaling and delivery plans to the Forestry Branch prior to being given the approval to commence harvest through an Operating Permit. The Scaling Plan form was revised for the 2011/12 season to improve tracking of the measurement and movement of Crown timber.
- Over the last few years, trials were initiated to allow for the processing of harvest debris piles for biomass products. The processing of harvest debris piles to clean up harvest cut blocks provides a renewable energy source rather than burning debris piles. The new biomass boiler at the Pineland Forest Nursery receives biomass from forestry debris piles. In 2011/12, the Tolko kraft mill in The Pas showed increased interest in using woody biomass (hog fuel) to reduce the use of more costly fossil fuels to generate power at their mill. The Forestry Branch began issuing timber cutting rights for otherwise underutilized hardwood species in the area in late 2011/12 to assist Tolko's use of bio-energy.

Forest Management Planning and Forest Practices

Objectives

- Ensure forest management planning is comprehensive and appropriate
- Develop guidelines for forest management planning
- Promote environmentally sustainable and economical forestry practices
- Monitor forestry operations with regional Conservation counterparts
- Maintain existing, and develop new, Forest Management Licence Agreements

Key Results Achieved:

- The Forest Practices Committee, comprised of representatives from other branches and departments of the Government of Manitoba and the forest industry, continued to develop guidelines for forestry practices. Conservation published a new guideline entitled Manitoba's Submission Guideline for Forest Management Operating Plans. This and other guidelines can be found on the internet at: <http://www.gov.mb.ca/conservation/forestry/practices/guidelines.html>. The committee continues to work on guidebooks for Forest Pest Management, Forestry Road Management, Brush Disposal and Landscape Design.
- Tolko, LP and the Mountain Quota Holders Association all submitted annual Operating Plans for 2011/12, which were approved by Manitoba Conservation. Annual meetings were held with each licensee, and Annual Reports were reviewed using a new Annual Report guideline.
- Tolko's previous Forest Management Plan expired at the end of 2009 but has been extended annually through annual Operating Plan approvals. Tolko is expected to deliver a new Forest Management Plan in 2014 for approval in 2015.
- LP's existing Forest Management Plan will be expiring at the end of 2013. A new Forest Management Plan (2006) has been drafted by LP with revised wood supply and harvest modeling. Unfortunately recent moose population concerns in the area will require that the modeling be refined before the Plan can be submitted and reviewed for approval.

Wood Measurement

Objectives

- Ensure Manitoba scaling methods are consistent with national standards
- Ensure that all Crown timber harvested in Manitoba is accurately measured and tracked
- Provide training, licensing and monitoring of industry wood measurement programs
- Track the movement of Crown timber from forests to mill destinations

Key Results Achieved:

- A Manitoba issued scaling licence is required for the measurement of harvested Crown timber before it is moved from the site on which it was harvested, and for the purpose of preparing timber returns or reports. Eleven candidates completed a five-day scaler's licence training course held in Swan River in May 2011. Licensed scalers are also required to complete a mandatory licence refresher course every five years. Nine candidates completed a three-day refresher course held in Swan River in May 2011. Following the 2011 courses, there were 107 licensed scalers in Manitoba.
- To support the new timber administration system, the department and company scalers continued the measurement program initiated in 2007 to determine acceptable deductions for defect and undersize material for timber received at Manitoba mills or exported out of province.
- The provincial scaler position remained vacant throughout 2011/12. Two separate staffing competitions for the position were unsuccessful due to a nationwide shortage of experienced scalers.

Legislation and Policy

Objectives

- Ensure that forestry activities are properly authorized
- Maintain *The Forest Act*, regulations and forestry policies

Key Results Achieved:

- *The Forest Act* and Forest Use and Management Regulation was proclaimed in March 2011. Four regional meetings were held with staff and timber operators to discuss changes and answer questions. Where necessary existing policies and forms were also updated. Various compliance and enforcement options were also explored and a staged implementation approach was initiated.
- The 2006 Canada – United States Softwood Lumber Agreement (2006 SLA) is a bilateral trade agreement which provides certainty and security to Canadian Softwood lumber producers who export into the U.S. Under the 2006 SLA, Manitoba Forestry Branch participates in discussions with the federal government and other provinces and provides notifications to Canada and the U.S. as required. The 2006 SLA was scheduled to expire in October 2013 and in 2011 both Canada and the US agreed to extend the agreement without amendment. An agreement to extend the 2006 SLA by two years to October 2015 was signed by Canada and the US on January 23, 2012 (to be ratified in the spring 2012). The extension secures Canadian Softwood timber producers access to the US market and strengthens the financial security of Canadians.
- As part of the 2006 SLA, Manitoba is guaranteed an annual export quota volume calculated through the Allocation Method Order based on historic shipping amounts. In order to provide increased opportunity for exports of softwood lumber produced in Manitoba, Manitoba's regional quota volume allocation was redistributed in 2011 to incorporate a larger open pool (60%) vs. historic (closed) pool (40%). This change allowed individuals without export history greater opportunity to ship softwood

lumber on a first-come first-served basis. Due to depressed markets and closure of Tolko's sawmill, Manitoba continues to underutilize its allocated export quota volumes.

Forest Development and Consultation

Objectives

- Promote economic development and support existing forest industry
- Facilitate increased Aboriginal participation in the forest sector
- Provide support and advice to regional staff and other departments on Crown consultation

Key Results Achieved:

- A steady increase in biomass opportunities has taken place as industry and private individuals looked for greener, cleaner alternative heat and energy sources. Forestry Branch has participated in numerous discussions and workshops to assess biomass opportunities throughout the province. A new emissions tax on coal has also prompted coal users to look for sustainable options such as using woody biomass as a biofuel. Through a special allocation granted to Tolko, bunker coal fuel was replaced with hardwood hogfuel for their mill operations.
- Edgewater Development Corporation was formed in the Pine Falls-Powerview area through the Community Adjust Fund, a program put in place by the Government of Canada to mitigate the impacts of the economic downturn by encouraging job creation. Forestry Branch and Regional staff have participated in meetings held by this group in order to re-establish a forestry development in an area previously held by Tembec. Staff also continued working with established forestry related working groups such as the Forest Industry Transportation group, created to increase efficiencies in the trucking industry.
- The Forest Management and Development section continued to provide support and advice to regional staff and other departments on Crown consultation, whereas Regional Foresters took on a greater role leading Crown consultation efforts.
- Forest management Operating Plans were consulted on in the Central, Northeast and Northwest regions. Funding agreements were developed in the Central and Western Regions.
- Regional and Forest Management and Development section staff consulted on special allocations in the Western Region.
- Frontiers Foundation Inc. (Manitoba Division) is an Aboriginal Registered Canadian Charity whose primary goal is to address the urgent housing needs in northern Aboriginal communities. Frontiers Manitoba is guided by a Manitoba appointed Advisory Committee. Forestry Branch has one representative on the advisory committee. Frontiers Manitoba works with First Nations communities to harvest wood, saw lumber and build houses. Regional forestry staff worked with the communities to assist in getting Timber Permits and Work Permits to harvest wood. Garden Hill – Frontiers has built five houses, five more are under construction and the plan is to build five annually.

Operational Highlights

Eastern Region

- The Eastern Region completed the salvage harvest of the blowdown storm of 2007 that swept through the North Whiteshell area. The final harvest area was approximately 3,400 hectares and took three years to complete. Site preparation completed in 2012 will allow for the last of the tree planting required to renew the area harvested.

- A late fall fire in the south east portion of the Region, resulted in over 18,000 hectares of forest being burnt. The cumulative impact to this part of the Region from recent fires and wind storms has left the local residents concerned over the future forest condition. Plans are being made to have more community engagement to hear the concerns and address them in the next management plan for southeast Manitoba.
- A Pine Management Strategy is being developed for the region. Permanent Sample Plots are being established with Forestry Branch direction and assistance. The plan will focus on managed stands of Red and Jack Pine to develop thinning and spacing regimes that are most suitable for the Region. In addition the Region has been actively seeking out the documentation of old Canadian Forest Service trails and re-establishing wherever possible the former plots and collecting any documentation that can be found. It is hoped that this data can be used to strengthen assumptions and add credibility to the ongoing wood supply process.
- The Region continues to actively participate with First Nation Communities. Highlights include initiating a consultation process to hear concerns over road decommissioning plans for the Tembec FML and ongoing discussions and participation with economic development opportunities with Shoal Lake # 40 First Nation. Regional staff were also involved in the establishment of and co-chair the Pimitotah (Bloodvein First Nation) Resource Advisory Board.

Central Region

- In July of 2010, an area of blowdown occurred close to Fisherton Manitoba. The area of disturbance was initially assessed to be limited in area and mainly on private land. The local sawmill was informed that there was an opportunity to salvage logs from private property from the blowdown area and no further action by the region was deemed necessary. Further assessment using satellite imagery purchased in 2011, reassessed the area of disturbance to be about sixty-six hectares of significant blowdown. The region is evaluating the effect of the blowdown on private landowners and identifying potential mitigation options.
- Central region forestry staff completed a Crown consultation process involving contact with 12 aboriginal communities regarding 2011/12 Quota Plan. Five meetings in three different aboriginal communities were held. The Central Region completed an Annual Report (AR) on forest management activities for the year 2009-10 in 2011/12. This AR will be used as an input file for The Forest Manager.

Northeast Region

- An extensive rehabilitation program was undertaken to rehabilitate decommissioned sites in the northeast region. A total of 20,800 trees were planted:
 - 8,800 trees planted on three decommissioned mine sites: Ruttan, Soab and Farley Mines
 - 8,400 trees planted on PTH #6 forest areas impacted by Manitoba Infrastructure and Transportation.
 - 3,600 trees planted on decommissioned gravel pits associated with Wuskwatim Dam
- The Region continues to actively participate with First Nation Communities including holding 12 consultation meetings respecting Tolko's annual operating plans, Bipole III, and other land issues.
- The Regional Forester was the department's representative to the Frontiers Foundation of Manitoba, co-chair of the Nelson House Resource Management Board, and co-chair of the City of Thompson Communities in Bloom.

Northwest Region

- In 2011, a boundary marking trial was undertaken by Tolko in two locations to assess the use of Global Positioning System (GPS) boundary marking techniques instead of flagging tape. As part of the trial, GPS boundaries were established and Tolko agreed to meet the retention goals within the block that were identified in mitigation. Some boundary flagging still occurred where necessary or where the company deemed prudent. Post harvest aerial photography for the sites will be provided by Tolko to determine if the method was successful.
- Northwest regional forestry staff completed Crown consultation process involving contact with five aboriginal communities regarding 2011/12 Operating Plans. Consultations were also held respecting the additional harvesting of aspen hog fuel for Tolko's operations.

Western Region

- Forestry staff continues to monitor a bio-mass utilization/measurement trial with Riehl Lumber and logging of the Durban area. This trial involves utilization of hardwood logging waste (mill residue, undersized tops, crooks, sweeps, shattered and short pieces) which is often left in bush following harvest. Riehl Lumber is marketing this biomass as hog fuel and color landscape mulch. A final report will identify recommendations for conditions for going forward operationally.
- Completed a Crown consultation process involving contact with 28 aboriginal communities regarding 2011/12 Operating Plans produced by LP Canada and Mountain Quota holders Association in the Mountain Forest Section, and one special allocation requests for timber.
- Participated in consultations with aboriginal communities and stakeholder groups regarding Moose recovery in the Mountain forest section. As part of the Moose management strategy, the accelerated utilization and forwarding of on-hand chipper wood by industry was facilitated.
- Regional forestry staff also assisted with delivery of natural science, education and conducted tree planting field trips for elementary school students.

Forest Health and Renewal

The Forest Health and Renewal (FHR) section protects forests from damage by insects, disease and other factors and also ensures all harvested Crown forest lands are renewed to maintain ecosystem integrity and biodiversity. The section administers and maintains the *Forest Health Protection Act* and regulations, issues the Manitoba Arborists Licence in collaboration with Financial Services and manages The Tree Improvement and Trees For Tomorrow programs. FHR provides direction in two key program areas: Forest Health and Forest Renewal.

The Forest Health section protects forests from damage by insects, disease and other factors. Surveys, efficacy tests and research on significant insects and diseases are conducted by the section. Participation and collaboration in national and international organizations ensures continued improvement in forest pest management for the province. The general public and industry receives information and assistance on forest health and renewal issues from this section.

Objectives

- Protecting forests from damage by insects, disease and other factors
- Monitoring pest impact and distribution
- Providing extension services on forest pests and tree health
- Issuing arborist licences
- Ensuring all harvested Crown forest lands are renewed to maintain ecosystem integrity and biodiversity

Key Results Achieved:

- Surveys and monitoring continued for significant pests and diseases including spruce budworm, Dutch elm disease, jack pine budworm, elm bark beetles, dwarf mistletoe, western gall rust, Armillaria root rot, eastern larch beetle and invasive forest pests such as gypsy moth.
- Forest health data is collected in regeneration, free-to-grow surveys and pre-harvest surveys to develop management prescriptions and track substantially infected stands.
- The eastern larch beetle infestation continued to expand since it began in 2001. Permanent sample plots established in 2007 to monitor tree health were re-assessed and results showed tree decline and mortality is increasing 10% annually. An aerial survey to map mortality and support Forest Inventory and Resource Analysis calculations was also conducted.
- The Department participates in the National Forest Pest Strategy initiated by the Canadian Council of Forest Ministers to develop a collaborative, integrated and national approach for optimizing forest pest expertise and resources. In 2011, representatives from Forestry attended a Mountain Pine Beetle Response Management Workshop in Alberta and a training session in the Risk Analysis Framework for assessing native and invasive forest pests in Nova Scotia.
- In preparation for the arrival of mountain pine beetle, a provincial response plan was developed.
- Forest Health personnel received and responded to approximately 350 inquiries about insects, diseases and general tree health from the public, industry and provincial staff.
- The Arborist Licensing Regulation under the *Forest Health Protection Act* requires every professional tree care worker active in Manitoba to carry a Manitoba Arborists Licence. The department issued 349 licences, of which 340 were the regular Arborists Licences and 9 were Restricted Arborists Licences which allow for electric utility line clearing only.

Spruce Budworm Program

In Manitoba the spruce budworm, *Choristoneura fumiferana*, is a serious defoliator of balsam fir, white spruce, and occasionally black spruce. Outbreaks of this insect can persist for 10 or more years causing extensive tree mortality and growth loss. Spruce budworm is an economically destructive pest in commercial forests.

Objectives

- Prevent widespread tree mortality and significant timber losses in commercial forests ensuring a sustainable timber supply to the forest industry
- Maintain quality forest cover in high use recreational areas
- Monitor populations of spruce budworm throughout the province for the development of management strategies

Key Results Achieved:

- Spruce budworm continued to infest certain areas of the province in 2011. In northwestern Manitoba, a single application of the biosynthetic insecticide, Mimic® 240 LV (tebufenozide) was applied aurally to a land base of 5,427 ha. Grass River Provincial Park received a double application of Foray 48B (*Bacillus thuringiensis kurstaki*) to 828 ha. The aerial application resulted in good budworm population suppression and foliage protection.

Dutch Elm Disease (DED) Program

The program manages DED in 31 communities in Manitoba and conducts surveys in a buffer zone area protecting the large elm population within the City of Winnipeg. The program is managed through annual cost share agreements between the province and participating communities. Under these agreements, the community and the province are each responsible for the implementation of a specific set of DED control measures.

Objectives

- Reduce the impact of DED on urban elm populations by limiting the annual elm tree mortality to two per cent or less.
- Provide logistical and technical assistance to participating communities

Key Results Achieved:

- There were 5,717 elms marked for removal in 31 cost-share communities and in the buffer zones of Winnipeg and Brandon in 2011. Surveys to mark diseased elms in river bottom forests were hindered due to high water levels in the Red, Assiniboine, and Souris Rivers. As of March 31, 2012, 5,210 elms were removed under the program. Removals were delayed in western communities as the Assiniboine and other river systems were flooded prevented access to these marked trees.
- The Rapid Removal DED Research Project was completed and analyzed by the Department of Entomology, University of Manitoba in 2011. Results of this project indicate there are potential benefits to early removal of diseased elms in DED management communities. This project was a collaboration between the City of Winnipeg, Trees Winnipeg (Coalition to Save the Elms), Manitoba Conservation and the University of Manitoba (project lead).
- The banded elm bark beetle, an invasive forest pest, may contribute to the spread of Dutch elm disease and a Masters project at the University of Manitoba was initiated to study its life cycle in the Prairie Provinces. This study was funded in part by SERG-International, Manitoba Conservation and the Province of Saskatchewan.

Invasive Forest Pests Program

Key Results Achieved:

- ***The Forest Health Protection Act*** - New legislation was proclaimed in 2009 to protect Manitoba's urban, rural and commercial forests. The province now has the ability to prevent the importation of invasive forest pests into Manitoba and to control or eradicate existing infestations. An enforcement manual, notices and forms are being developed. Provincial and municipal staff designated as officers under the Act were issued official identification badges.
- **Emerald Ash Borer** - An Invasive Forest Pest Advisory Committee was formed in 2010 to advise the Minister of Conservation on the management of impending invasive forest pests. This committee is comprised of representatives from several government levels and departments, local forest industry and academia. In 2011, an Emerald Ash Borer Management Plan for Manitoba was completed and circulated to members for their review.
- **Gypsy Moth** - In June 2009, FHR conducted a publicly supported aerial pesticide application program to eradicate Gypsy moth, an invasive forest pest, from two areas immediately south of the City of Winnipeg. No moths were detected in 2011 resulting in these two managed areas being declared gypsy moth-free. A new infestation of gypsy moth was identified in the City of Winnipeg and a management program has been planned for 2012.

- **Banded Elm Bark Beetle** - The provincial monitoring program for the banded elm bark beetle, another invasive forest pest, captured 39 adults in pheromone traps in 2011. The banded elm bark beetle has now been detected in five communities.
- For **invasive forest pest prevention**, there are four firewood collection bins along three major highways into the province. These bins, along with informative highway signs, warn the public that by transporting firewood they may be spreading invasive forest pests. Over 343 pieces of wood were collected from the firewood collection bins in 2011.

Forest Renewal

The role of Manitoba's Forest Renewal Program is to ensure that all harvested forests are satisfactorily regenerated to maintain the existing mosaic of forest ecosystem stand types on untenured Crown land.

Objectives

- Promote natural regeneration on Crown Lands
- Continue site preparation and tree planting on Crown Lands
- Implement stand tending, competitive vegetation management and intensive silviculture in renewed forests and plantations
- Set forest renewal standards and monitor renewal programs to ensure standards are met

Key Results Achieved:

- The Manitoba Silviculture Technical Committee (MbSTC), comprised of government and industry foresters and technicians, continued its work of exchanging ideas and solutions and providing technology transfer. They are currently working on the following priorities:
 - Reviewing Hardwood Renewal Standards
 - Reviewing Free To Grow Survey protocol
 - Conducting Aerial softwood and hardwood regeneration surveys
- A joint aerial survey trial was undertaken by the Department, Tolko Manitoba, Mountain Forest Section Renewal Company and LP Canada Ltd. Regeneration and Free to Grow renewal blocks were ground surveyed and aerially photographed and the photographs were interpreted for species, stocking and density.
- FHR tested forestry staff, contract and company surveyors, and issued Regeneration Surveyor Licences to qualified participants. A successful re-certification program was continued for surveyors who were licensed the preceding year. An audit and check of surveys that had been done by Louisiana Pacific (LP), Mountain Forest Section Renewal Co. and Tolko was completed. LP was issued a Certificate of Reforestation for successful forest renewal.
- Regeneration surveys were used to determine the success of forest renewal on 8,006.24 ha in the province. The Department surveyed 3,670.93 ha, licensed regeneration surveyors from the Mountain Forest Section Renewal Company surveyed 404 ha, LP surveyed 2,883.6 ha and Tembec surveyed zero, due to the closure.
- Free to Grow (FTG) surveys were performed on a total of 5,227.3 ha of softwood-dominated forest stands to determine if they were developing appropriately (i.e. surpassing competing tree species in height within 14-20 years of age).
- The Department and industry carried out forest renewal treatments on 5,988.25 ha. The majority of the harvested areas were planted with approximately 7.9 million trees, delivered through regular tendered contracts. Scarification was used to promote natural regeneration on 1,680.6 ha.

- From 2008 to 2011 the Forestry Branch tendered and awarded 15 tree planting contracts, a total of 2,849,701 seedlings, to aboriginal tree planting companies through the Aboriginal Tree Planting Initiative.
- The majority of hardwood areas harvested were left to regenerate naturally because poplar regenerates readily from root suckering. An additional 22.9 ha of harvested area that had not been restocked sufficiently were re-treated by planting.

Forest Renewal Activities

The provincial forest renewal program and forest industry undertook the following forest renewal activities in 2011 to meet the provincial forest renewal standards as set by Manitoba Conservation and Water Stewardship.

The Tree Improvement Program

Tree improvement is a long-term investment to increase the productivity of forest plantations by providing genetically improved seed. Seedlings reared from improved seed will have increased growth, better form and wood quality, and improved insect and disease resistance. Using the best quality seed source available is the first step in a series of silvicultural activities to increase productivity on the forest land base. The genetic resource is managed to ensure that genetic diversity is maintained so that the forests are able to adapt to changing conditions in the future.

The program consists of eight government/industry co-operatives which includes Tolko Manitoba, Mountain Forest Section Renewal Company and Tembec. In addition, there are six separate provincial programs. Tree Improvement staff manage and provide technical direction for all programs and provide maintenance and assessment of family tests and manage the seed orchards.

Objectives

- Provide a reliable supply of seed
- Provide genetically improved seed
- Ensure the conservation of the genetic resource

Key Results Achieved:

- There are currently 14 seed orchards (62.9 hectares - over 60,000 trees) and 27 family tests (83.3 hectares – over 191,000 trees) across the province.
- Improved jack pine seed is available for the Eastern, Interlake and Northern jack pine breeding zones. Improved white spruce seed is available for the Mountain and Saskatchewan River breeding zones. Also, better quality white spruce seed is available from a seed production area in the Southeast breeding zone. Improved black spruce seed is available for the Lake Winnipeg East, Interlake, Saskatchewan River and Nelson River breeding zones. Better quality black spruce seed is available from a seed production area in the Southeast breeding zone. Genetically improved jack pine and black spruce will be available from other breeding zones in the future.
- To provide seed for forest renewal programs and maintain a five year inventory of seed the following cone collections were undertaken in 2011:

Red Pine – 11.75 hectolitres of cones - zone 03.1- wild collections

Jack Pine – 32.4 hectolitres of cones from the Hillside Pedigree seed orchard – zone 04.1

Jack Pine – 13.5 hectolitres of cones seed from the Cranberry seed orchard – zone 04.3

White Spruce – 0.7 hectolitres of cones- zone 13.13 – wild collections

**Table FO.1
12.3(b) Forestry**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	5,312	68.56	5,693	(381)	
Other Expenditures	5,061		5,966	(905)	
Grant Assistance	28		23	5	
Forest Regeneration Stock	1,088		901	187	
Less: Recoverable from Urban and Rural Economic Development Initiatives	(748)		(978)	230	
Total 12.3(b)	10,741	68.56	11,605	(864)	

Wildlife

The Branch manages wildlife resources to conserve biological diversity, including species and ecosystems, within the context of the principles of sustainable development.

Key Results Achieved:

Made revisions to The Wildlife Act, The Conservation Agreements Act and The Endangered Species Act legislation and regulations, and contributed to revisions to The Environment Act legislation and regulations.

- Thirteen regulations were registered in 2011-2012; most pertained to hunting and trapping annual season dates and general hunting regulation amendments. Two regulations were created: The Moose Conservation Closure Regulation MR 122/2011 and the Ewonchuk Wildlife Management Area under the Designation of Wildlife Lands Regulation MR 128/2011.
- Over 1,300 permits and licences were issued as well as 1,210 hunting guide licences.
- Note: *The Conservation Agreements Act* is administered by the Corporate Policy Division.

Involved other agencies and user groups in Branch programs.

- The Wildlife Branch consults with the Manitoba Wildlife Federation and the Manitoba Lodges and Outfitters Association on hunting regulation changes, and collaborates with organizations to deliver various wildlife related programs (e.g., Manitoba Habitat Heritage Corporate, Mentored Hunt Partnership, Nature Conservancy Canada, Wild Turkey Relocation Program, NatureServe Canada and International).

Cost-effective, flexible programming, workforce responses and annual reporting of approved projects.

- The Manitoba Conservation Data Centre provided cost-effective delivery of Endangered Species inventory, assessment and monitoring programs and reviewed and assessed Endangered Species and Biodiversity Fund projects.

Provided policies and programs responsive to public needs within the sustainable capacity of ecosystems.

- The Watchable Wildlife Program, in cooperation with Culture, Heritage and Tourism, supported site developments in Wildlife Management Areas, such as Oak Hammock Marsh, and published Manitoba's Pine to Prairie International Birding Trail Guide.

Game, Fur and Problem Wildlife Management

Key Results Achieved:

Sustained direct and indirect economic benefit from hunting and trapping; economic returns to the Province; and direct income returns to primary producers.

- Travel Manitoba reported that hunting and fishing expenditures in Manitoba were \$469.0 million. A total of 75,364 hunting licences were sold resulting in revenue of \$3.4 million. Manitoba's 7,984 licenced trappers harvested an estimated \$1.96 million in raw fur. Trapping and hunting also maintains game and fur populations at levels that reduce human-wildlife conflicts such as property damage and livestock depredation.

Accounted 700,000 days of licenced hunting activity: over 700,000 game birds and 35,000 big game animals harvested.

- A total of 483,800 Big Game hunter days and 134,111 Game Bird hunter days were estimated based on 8.2 days per hunter.

Developed species management plans and procedures that provide provincial objectives and guidelines for management.

- The Wildlife Branch has been working with Sustainable Resource and Policy Management Branch to engage First Nations, Métis and stakeholders in developing a provincial moose management strategy and regional moose recovery and management plans for the western and eastern regions. As one step in the strategy, a discussion paper on the current moose situation, that describes issues and opportunities, is currently being drafted for public review and response.
- Annual action plans were prepared for the Bovine Tuberculosis (TB) and Chronic Wasting Disease (CWD) programs. As well, the CWD action plan was updated and maintained. The Big Game Health Program has analyzed over 1,200 elk, white-tailed deer, moose, mule deer, and woodland caribou samples for signs of Bovine TB, CWD, and other diseases. All samples were negative for signs of disease.
- The Wildlife Branch is partnering with the University of Manitoba to collect scientific data on wild turkeys that will be used in the creation of a provincial management strategy. A Canada goose harvest management strategy was recently developed with the Mississippi Flyway states. Manitoba is a partner in a strategic cross-Canada research initiative on the biology and population dynamics of lynx. Manitoba continues to monitor the apparent 4-year cycle of marten harvest, which is likely tied to the population dynamics of voles. This information is a valuable component in the overall management of the species.

Non-resident hunting licences allocated to registered tourism operators.

- Approximately 2,300 of the 5,036 allocated big game licences were utilized by 311 registered tourism operators.

The development and maintenance of a central data-storage and retrieval system for big game, fur-harvest and population information and the development and implementation of a new program for gathering hunter success data.

- The development of the big game management system is ongoing, including the hunter questionnaire program. The Wildlife Branch continues to cooperate in the development of an electronic licensing system and wildlife harvest data collection.

Produced the annual Hunting Guide and Trapping Guide for clients.

- A copy of the annual hunting and trapping guides were posted on the Wildlife Branch website and 125,000 hunting guides and 14,000 trapping guides were printed and distributed. The hunting guide provides information on seasons, bag limits, and regulation changes for the upcoming hunting season. The trapping guide provides seasons, regulatory information, and summaries of problem wildlife removal program in which trappers participate.

Provided services related to the management of problem wildlife to meet defined client needs. Provided initiatives that educate and train the public to deal with problem wildlife issues and secure the future of hunting and trapping.

- An increased subsidy fee (\$15.00 to \$50.00 per beaver) resulted in the removal of approximately 8,000 beaver under the Problem Beaver Removal Program.
- The Problem Predator Removal Program was administered and delivered under an agreement with the Manitoba Trappers Association. Funds provided under this agreement also covered expenses for predator trapping and hunting workshops. Fifty-four Manitoba Agriculture Services Corporation (MASC) claims were actioned and 369 coyotes, 18 wolves and 15 fox were removed. *Thinking Like a Wolf* workshops were held to help producers build capacity in chronic wolf predation areas (Pine River, The Pas, Pine Falls).
- A partnership was developed between the National Wild Turkey Federation, Wild Gobblers Unlimited and the Wildlife Branch that deals with nuisance turkeys using intercept feeding or relocation.
- The 3rd Annual Provincial Hunting Day was celebrated at Oak Hammock Marsh on September 24, 2011 and formal mentored hunts for waterfowl and white-tailed deer were held in various locations in partnership with the Manitoba Wildlife Federation.
- Over 300 new trappers passed the mandatory trapper education exam through cooperative efforts with the Manitoba Trappers Association (MTA) with added support from organizations or companies. Presentations were made to youth, conservation, and professional groups on trapping methods and research on furbearing animals. Public and stakeholder input assisted the continued development of a new furbearer management policy addressing topics including the transfer of trap lines and their role in traditional family activities and the disposition of trapper cabins. Workshops on safe and effective use of traps and power snares were held and several trappers were loaned traps and snares for use in chronic problem areas.
- The “Be Bear Smart” initiative was funded through the Sustainable Development Innovations Fund. This program provided workshops and education displays or materials to industry, staff, association events, and fairs on how to help reduce the potential for an encounter with a black bear by removing bear attractants.

Canada-Manitoba Waterfowl Damage Prevention Agreement

Key Results Achieved:

Effectively handled complaints for waterfowl crop damage. Prepared and activated Crown land lure crops as required. Purchased private land lure crops depending on demonstrated need. Manitoba Agriculture, Food and Rural Initiatives (MAFRI) was advised on Waterfowl Crop Damage Compensation Program matters.

- The Waterfowl Crop Damage Prevention Agreement is a three-year federal-provincial agreement whereby Manitoba delivers waterfowl crop damage prevention services to cereal grain producers. Staff responded effectively to an average of 273 complaints. During prolonged harvest conditions the number of complaints can exceed 400 and compensation claims from MAFRI’s Manitoba Agriculture Services Corporation to producers can exceed \$1.0 million. For every \$1.00 spent in prevention results in an estimated \$3.00 saving to producers.
 - Twelve departmental staff delivered the program at the farm gate to cereal grain producers and branch staff provided 2,600 Zon Bangers, propane tanks, pyrotechnics (cracker shells) and scare crows to producers in agriculture areas. Nine Crown land lure crops were prepared and activated

at the Oak Hammock Marsh and Grants Lake wildlife management areas (WMA) and two feeding stations were established at Saskeram WMA and Lidcliff Marsh. Staff engaged with three landowner advisory committees at Oak Hammock Marsh and Saskeram-Summerberry WMAs and Lidcliff Marsh.

Publicize program objectives and activities.

- Program objectives and activities were publicized through the Annual Work Plan and Summary Report.

Enhance program effectiveness through program evaluation in co-operation with the Canadian Wildlife Service.

- This was achieved through participation at Canadian wildlife director's committee meetings and teleconferences.

Biodiversity, Habitat and Endangered Species Section

Key Results Achieved:

Delivered management and stewardship programs to identify, enhance and protect lands set aside for preservation of biodiversity. Protected wildlife habitat by identifying potential development impacts, recommending mitigation measures and sustainable management practices, integrating wildlife values in land-use planning, and securing critical habitats through various programs.

- Manitoba Conservation Data Centre (MBCDC) data was used by The Protected Areas Initiative to set land acquisition goals. Manitoba Habitat Heritage Corporation (MHHC) used MBCDC data during the process of acquiring 43 Conservation Agreements (4051 wetlands, 5380 uplands) totalling 9431 acres of land secured for conservation. The MBCDC was named the outstanding natural heritage program in the Americas receiving the 2011 Conservation Impact Award from the Nature Serve network. The award was given to the MBCDC for partnerships with Manitoba Hydro and the Manitoba Habitat Heritage Corporation who used MBCDC data to guide their efforts to secure, protect, and manage habitat for at-risk species.
- The Wildlife Lands Unit participated in the southwest critical wildlife habitat on Crown Land review to identify potential protected areas and in the identification of provincially significant wetlands to better protect them from adverse impacts. It also reviewed 50 Crown Land sale requests, 147 circulars regarding subdivision applications, 55 Crown Land General Permit Applications, eight development plans, two integrated watershed management plans, and 700 parcels were reviewed for mineral dispositions, including oil and gas lease sales, casual quarry permits, quarry leases, etc.
- The Wildlife Management Area System was expanded by 660 ha (1,631 acres) with the addition of the Ewanchuk WMA in the Interlake and the addition of 275 ha (680 acres) of land to the Delta Marsh WMA.

Effectively communicated with user groups and other government agencies, and increased involvement of aboriginal people, other users and the public in the planning, implementation, and funding of habitat and stewardship programs.

- Wildlife Lands Unit participated in various public meetings, including Whitewater Lake, Lake Manitoba, Lake St. Martin, and Mars Hill WMA, and in various working groups, such as that for Netley- Libau Marsh and Delta Marsh, tasked with planning and implementation of wetland research and habitat improvement projects.

- MBCDC participated in a workshop facilitated by MHHC designed to identify important areas of Manitoba for species at risk. This workshop resulted in 17 hotspots in south west Manitoba that MHHC will target for conservation programming. The MBCDC continues its partnerships with Nature Conservancy Canada and the Canadian Wildlife Service to share data and update records in its database and conduct species at risk inventories. It also partnered with Parks Canada who provided information on plants and animals in Riding Mountain and Wapusk National Parks, and the MBCDC created new and updated records in its database for those species that were of conservation concern. The MBCDC completed an annual exchange of its data with NatureServe, integrating Manitoba's data with the entire North American network. This contributes to a better understanding of biodiversity throughout the continent.

Collected and compiled inventory data on the biodiversity of Manitoba's terrestrial ecosystems.

- The MBCDC received approximately 7,000 observations from eight Species and Biodiversity Fund (ESBF) projects for inclusion in its species at risk data base. These projects included data on birds, butterflies, woodland caribou, insect pollinators, reptiles and amphibians. Some highlights include: 1,261 observations from the Manitoba Breeding Bird Atlas, 1,511 observations from the Manitoba Herp Atlas, and Approximately 2,500 observations from the Tall Grass Prairie Preserve.
- Participated on the Manitoba-Canada Habitat Stewardship Program for Species at Risk (HSP) Working Group to develop program priorities, review projects and allocate funding. Four projects were approved for the HSP funding (Mixed-grass Prairie Stewardship; Tall Grass Prairie Communities and Species at Risk; Species at Risk Inventory and Outreach; and Piping Plover Stewardship) which exceeded \$1.0 million based on a 1:1 federal-provincial funding match.
- Six 5-year agreements were signed to manage and protect 918 ha of native mixed-grass prairie including twice-over rotational grazing, mowing, prescribed burning and invasive species control. A management plan was implemented on a 65 ha sandhill property containing the western spiderwort, hairy prairie clover and other rare species. Removal of invasive and exotic species (leafy spurge and St. John's wort) occurred on 24 ha of tall-grass prairie to conserve species at risk. An additional 539 ha were inventoried for the Mixed-grass Prairie inventory. Four new acquisitions to the Manitoba Tall Grass Prairie Preserve (TGPP), totalling 324 ha were inventoried and assessed for species at risk. Rare Species at Risk monitoring continued on the Preserve and new and updated records were provided to the MBCDC.

Data was made available to other units of the Department (e.g. Environmental Assessment and Licensing Branch, Biodiversity Conservation Section, and Forestry Branch), other government departments, industry, organizations and the public.

- The MBCDC entered into three Data Sharing Agreements to better assist partners in planning and implementing projects that minimized impacts on species at risk in Manitoba, and to improve data holdings of the MB CDC database. It answered 422 requests for information from our rare species database. Over half of the requests came from industry (262), with other requests coming from provincial (90) and federal government departments (29), members of the public (12), First Nations (10), environmental organizations (6), universities (5), and other organizations (8). Approximately 153 hours of staff time went into responding to these requests with an average turnaround time of 2.3 days.

The use of the data collected and the technical expertise of staff, to provide a science-based assessment of potential impacts or sustainability of proposed developments seeking licensing under The Environment Act, and provision of recommendations for land-use practices to ensure sustainability of terrestrial ecosystems and associated biodiversity.

- Seventy-four environmental licence applications were reviewed and recommendations and licence conditions were provided. The MBCDC received 62 requests for Technical Advisory Committee reviews or other information related to licensing, permits and land use planning.

Recommended to the Minister plant and animal species to be considered for designation under The Endangered Species Act.

- A recommendation by the Endangered Species Advisory Committee for the listing of 27 species was submitted to cabinet for review.

Maintained and enhanced the Manitoba Conservation Data Centre, a data bank and decision-support system about Manitoba plants, animals and natural communities at risk and of conservation concern.

- The Manitoba Conservation Data Centre maintains information on 5,272 elements. These are comprised of plants (ferns, flowering plants, lichens, mosses, liverworts and mushrooms) and animals (mammals, birds, reptiles, amphibians, fish, insects, mussels and crayfish) known to occur in Manitoba. Of these 881 are known to be rare or uncommon in Manitoba. The MBCDC has within its database over 43,520 observations of rare and uncommon elements. The MBCDC maintains over 22,000 mapped features, based on one or more discrete observations of an element.

**Table WI.1
12.3(c) Wildlife**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	3,139	47.29	3,439	(300)	
Other Expenditures	2,337		1,725	612	
Grant Assistance	959		959	0	
Canada-Manitoba Waterfowl Damage Prevention Agreement	354		354	0	
Total 12.3(c)	6,789	47.29	6,477	312	

Habitat Enhancement Fund

Key Results Achieved:

Conserved, restored and enhanced Manitoba wildlife habitat, particularly those habitats important to species at risk, and developed and implemented relevant land stewardship initiatives.

- Supported Critical Wildlife Habitat Program (CWHP) stewardship projects on mixed-grass and tall-grass prairies.
- Provided a portion of the funding for cost-sharing initiatives funded by HSP where a minimum 1:1 match is required. See detail on project accomplishments under Biodiversity, Habitat and Endangered Species Section.

**Table HE.1
12.3(d) Habitat Enhancement Fund**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Grant Assistance	50		50	0	
Total 12.3(d)	50		50	0	

Special Conservation and Endangered Species Fund

In 2010/11 this fund was repurposed and named the **Endangered Species and Biodiversity Fund (ESBF)**. The ESBF provides funding for projects that inventory and monitor endangered plants and animals or wildlife species of conservation concern that are delivered by governments, industry, community groups, Northern Affairs communities, First Nation governments, private and non-profit organizations and businesses, educational institutions, and community associations.

Key Results Achieved:

New location data and information was generated for plant and animal species at risk and wildlife species of conservation concern by funding inventory and monitoring projects throughout the Province.

- Eight projects receiving funding through Manitoba's Endangered Species and Biodiversity Fund this year include:
 - Bird Studies Canada - \$25,000 to gather information on bird species at risk as part of Manitoba's five-year breeding bird atlas project;
 - University of Winnipeg - \$10,600 to study the breeding success of endangered burrowing owls released from captivity in southwest Manitoba;
 - University of Manitoba - \$20,000 to evaluate the effects of habitat disturbance on the endangered golden-winged warbler;
 - Manitoba Habitat Heritage Corporation - \$5,000 to mitigate threats to a population of small white lady's-slipper, an endangered orchid, in the Interlake;
 - Nature Conservancy Canada, Manitoba Region - \$24,772 to better assess the status of the poweshiek skipperling, an endangered butterfly found only in southeast Manitoba's tall-grass prairie;
 - University of Manitoba - \$16,250 to determine the effect of habitat fragmentation and loss on endangered grassland birds in southwest Manitoba;
 - Manitoba Model Forest - \$16,250 to satellite collar woodland caribou to assess female survival and habitat use in an experimental forest harvest area; and
 - Manitoba Habitat Heritage Corporation - \$7,128 to determine the distribution of species at risk in the endangered tall-grass prairie in southeast Manitoba.

An enhanced Manitoba Conservation Data Centre endangered species and biodiversity database.

- The Manitoba Conservation Data Centre received over 4,000 observations to add to its database as a result of projects funded by the Endangered Species and Biodiversity Fund as listed above.

An enhanced ability to support environmentally sound decisions and actions, ecotourism, sustainable development, and protected areas planning.

- See Biodiversity, Habitat and Endangered Species section.

Data and information was used to assist with the assessment and re-assessment of endangered species.

- MBCDC staff responded to seven requests for information used in Committee on the Status of Wildlife in Canada (COSEWIC) status report assessments and re-assessments. See also *Endangered Species Act* section.

**Table SC.1
12.3(e) Special Conservation and Endangered Species Fund**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Grant Assistance	125		125	0	
Total 12.3(e)	125		125	0	

Wildlife Enhancement Initiative

To support various wildlife conservation initiatives with a primary focus on species inventories, management of wildlife management areas, cooperative education with Manitoba Universities, and the development and support of various hunting and trapping heritage initiatives.

Key Results Achieved:

The annual wildlife population was estimated for performing resource-allocation decision making.

- Big game populations were evaluated to assist in setting hunting seasons and to determine other management needs. Methods used included winter aerial surveys of populations to estimate abundance, sex and age composition, recruitment and distribution; hunter questionnaires to estimate harvests, hunter effort and hunter distribution; and collection of biological specimens to assess age and reproductive status. Data was entered into computer simulations (models) to estimate the consequences of alternative management options.
- The aerial survey program focused on population estimates for the following big game species and areas: moose in GHA 8; moose in GHA 13, 13A; moose in GHA 18, 18A, 18B, 18C; white-tailed deer in Killarney and, elk in GHA 16, 20.

Fewer firearms accidents, injuries, and deaths among hunters.

- No hunting-related accidents, injuries or deaths were reported and the hunter education program successfully graduated 3,812 students.

Reverse the long-term decline in hunter numbers.

- The depressed world economy contributed to the decline in foreign resident hunters but mentored hunt programs reduced the decline in resident numbers. Game bird licence sales and youth licence sales have stabilized in recent years, after dropping precipitously in previous decades. A survey on recruitment of individuals attending mentored hunts confirmed the effectiveness of this program.

Efficiently resolved problem wildlife issues such as urban geese and urban deer, negative interactions with people, and of potential zoonotic disease issues associated with wildlife.

- Partnerships with other government agencies have successfully reduced Canada geese-related human safety concerns in select areas of Winnipeg. Urban deer issues declined due to fewer deer, property owners fencing properties or not gardening, and loss of deer habitat from residential and other development.

Improved client service delivery of hunting programs and opportunities.

- Regular meetings were held with the Manitoba Wildlife Federation, the Manitoba Lodge and Outfitters Association, and the Archers and Bow hunters Association of Manitoba, as well as many local hunting affiliates to present information and discuss hunting and management programs and opportunities in Manitoba. Hunting regulations were simplified to encourage participation and recruitment.

Enhanced ability to evaluate land use and development proposals and their impact on ecosystems. Enhanced ability to ensure all wildlife, including Committee on the Status of Endangered Wildlife in Canada (COSEWIC) listed species, such as the boreal woodland caribou, are managed in an appropriate and sustainable manner. Wildlife management areas (WMAs) and refuges that contain signage are publicized and maintained to enhance biodiversity, reduce weeds and ensure public access, which includes standard signs for designated wildlife lands.

- See Biodiversity, Habitat and Endangered Species Section.
- Standard signs were produced for selected WMAs and weed control was undertaken at a number of locations.

**Table WH.1
12.3(f) Wildlife Enhancement Initiative**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Other Expenditures	403		409	(6)	
Total 12.3(f)	403		409	(6)	

Lands

Manitoba's boundaries encompass an area of 65 million hectares consisting of 54.8 million hectares of land and 10.2 million hectares of water. The landscape varies from prairie grassland in the south, through to broadleaf, mixed wood and boreal forest, to tundra in the north. Lake Winnipeg, Lake Manitoba and Lake Winnipegosis cover much of the areas in central Manitoba. Lake Winnipeg covers 2.4 million hectares and is the largest lake in Manitoba. It is also the 12th largest freshwater lake in the world.

Manitoba's provincial Crown lands comprise approximately 40.5 million hectares. The Branch is responsible for provincial and regional level management and control of provincial Crown lands that are governed under *The Crown Lands Act*, *The Wild Rice Act* and *The East Side Traditional Lands Planning and Special Protected Areas Act*. Its functions also include policy development and recommendations, the delivery of the Cottage Lot, Treaty Land Entitlement and Manitoba Geographical Names programs and overseeing transactions administered through the Crown Land and Property Agency Special Operating Agency.

Provincial and Regional Land Use Management and Planning

The Land Use and Management Section of the Branch is responsible for the management of Crown land on the provincial scale and the delivery of services through five regional offices by the Regional Land Managers (RLM). The section is also involved in the development of departmental positions for municipal development plans, zoning by-laws, road and Municipal Reserve closings and openings, subdivision application reviews and recommendations for the approval of Crown land applications, including providing support to the Crown Lands Assistant Deputy Ministers Committee.

Volume of Reviews

Municipal Development Plan Reviews/Amendments	50
Municipal Zoning By-Laws and Amendments	121
Road Opening and Closing By-Laws and Other Reviews	32
Subdivision Reviews	320

RLMs provide direction, advice and information to the Region's Integrated Resources and Environmental Management Team (IRMT) and Field Services Section staff, the Bloc Planning Committee, as well as other provincial and federal government departments, to local governments and to external clients on matters related to provincial Crown land administration, legislation, policies, procedures and guidelines.

The interdepartmental regional Bloc Planning Committee reviews operational Crown land use codes to improve long term land and resource use and reduce land use conflicts. A total of 1,124 Operational land use code changes were reviewed and approved to ensure potential allocations and land use activities are consistent and compatible with the long term land planning objectives.

Key Results Achieved:

- The Section was involved in the circulation, review and submission of seven Order-in-Council proposals which included Wildlife Management Areas, Provincial Parks and Ecological Reserve proposals.
- Cost-effective and professional delivery of services to the public in a resource conscientious and environmentally responsible manner in accordance with departmental direction and approved budgets.

- Consideration of regional concerns before land is allocated; resulting in fewer conflicts related to land dispositions and increased resource protection.
- Compliance levels in excess of 95% with land allocation policy and resource legislation.
- Maintenance of effective community relations, particularly greater involvement, participation and cooperation of Aboriginal people in resource management, and effective liaison with municipalities, industry, resource users and the interested public.
- Development of short and long range regional integrated land and resource management plans.

Volume of Crown Land Applications

Disposition Type	Total
Crown Land and Property Agency Circulars	213
Assignments	85
Environment Act Proposals	49
Casual Quarry Permits & Quarry Leases	712
Oil and Gas Sales	4
Oil Well Battery	6
Pipeline	6

Aboriginal Land Programs and Cottage Lot Program

The section is responsible for the preparation of legal documents related to the fulfilment of Treaty Land Entitlement, other Aboriginal Land Claim settlement agreements and federal land transactions. It expedites the transfer of Crown land selected or Crown interests in private lands acquired by 29 First Nations in accordance with their respective Treaty Land Entitlement agreements. These include issuance of Exclusive Use/Land Use Permits, Cabinet Submissions, Federal Transfers/Reversions of Administration and Control, Real Property Applications, Dissolving of Titles, and Fee Simple Transfers as specified in the respective settlement agreement.

Through this section, the Branch operates on the Provincial and Federal level to fulfill Treaty Land Entitlement and other Aboriginal Land Claim obligations to Manitoba First Nations. Provides technical assistance to First Nations, Canada, Treaty Land Entitlement Committee and other government departments with respect to land transfer expertise, tracking and record management.

The section is also responsible for the delivery of the Government’s multi-million dollar 2,000 lot cottage subdivision development initiative. In addition, the section continued to identify sites and assess their potential for cottage lot development. The delivery of the Cottage Lot Program involves consultation and sometimes partnerships with local First Nation communities and municipalities. All cottage lot developments provide wide reaching economic benefits while providing Manitobans with recreational cottage opportunities.

Key Results Achieved:

- To expedite the transfer of Crown land selected or Crown interests in private lands acquired by 29 First Nations in accordance with their respective Treaty Land Entitlement agreements.
- An additional 9,277 acres have been designated as Reserve land under the various Treaty Land Entitlement Agreements in Manitoba.

- Non-TLE agreements include the Northern Flood Agreement, Grand Rapids Forebay Agreements, land exchanges and other requests from Canada and legal counsel. Currently these requests total 500,000 acres. Staff ensures that the implementation is carried out in accordance with the respective land settlement agreements and relevant policies and legislation.
- First Nation communities will be able to utilize their Treaty Land Entitlement and other agreements lands sooner as a result of the expedited review and transfer of lands to Canada.
- To date, the Cottage Lot Program is estimated to have produced around \$100 million in economic activity, through lot sales, construction, purchasing of goods and services and recreational spending. These developments create opportunities for local employment and new business start-ups which helps to grow the local economy. In addition, the First Come, First Served Cottage Lot Program has resulted in the sale or lease of approximately 100 lots not previously selected in a cottage lot draw.
- Fulfilment of Manitoba's commitment to enhance the quality of life for Manitobans through the availability of Crown land recreational cottage lots.
- Benefits to First Nations and local economies in terms of increased employment and business opportunities resulting from cottage developments.

The following table provides a current summary of Crown and other lands designated as reserve land to date.

Volume of Crown land and other land designated as Reserve land to date

First Nation	Crown and Other Land Entitlement Acres +/-	Total Selected or Acquired Acres +/-	Reserve Land Designated
Barren Lands	66,420	28,252	0
Brokenhead	4,344	4,567	672
Brokenhead (Other)	10,137	485	7
Buffalo Point	3,432	2,609	2,370
Buffalo Point (Other)	607	70	0
Bunibonibee	35,434	35,220	31,342
Fox Lake	26,391	6,576	0
Garden Hill	45,339	53,263	43,576
God's Lake	42,600	41,077	16,189
Long Plain (Other)	26,437	5,592	1,908
Manto Sipi	8,725	9,910	4,284
Marcel Colomb	17,007	0	0
Mathias Colomb	217,364	183,045	172,538
Nisichawayasihk	61,761	72,736	33,816
Northlands	94,084	56,600	4,134
Norway House	104,784	106,036	42,045
Opaskwayak	47,658	46,222	24,375
Opaskwayak (Other)	8,410	185	0

First Nation	Crown and Other Land Entitlement Acres +/-	Total Selected or Acquired Acres +/-	Reserve Land Designated
O-Pipon-Na-Piwin	17,674	40,536	0
Peguis	55,038	28,914	0
Peguis (Other)	111,756	5	0
Red Sucker Lake	9,487	9,585	8,943
Rolling River	2,356	2,351	2,351
Rolling River (Other)	44,756	6,151	3,118
Roseau River (Other)	16,218	3,526	75
St. Theresa Point	34,908	35,310	35,310
Sapotaweyak	108,134	112,782	99,702
Sapotaweyak (Other)	36,045	2	0
Sayisi Dene	22,372	9,360	0
Shamattawa	24,912	19,350	0
Swan Lake (Other)	13,035	8,773	8,773
War Lake	7,156	5,586	480
Wasagamach	13,610	13,642	13,642
Wuskwi Sipiik	44,168	40,934	25,190
Wuskwi Sipiik (Other)	14,722	2,131	0
York Factory	29,173	12,917	0
TLE Grand Total	1,426,454	1,004,300	574,840

(Note: 1 acre = 0.404685 hectares)

Traditional Land Planning and World Heritage Site Nomination

This section administers planning area designations and management plans proposed by First Nations for approval by the Government of Manitoba under *The East Side Traditional Lands Planning and Special Protected Areas Act*. The section is working in partnership with First Nations on the east side of Lake Winnipeg to realize strategic land use direction for more than 2 million hectares (5 million acres) of provincial Crown land.

The section coordinates the interdepartmental review of proposed planning area designations and plan approvals, participates in the department's review of applications for Crown land on the east side of Lake Winnipeg and represents the department on planning councils, management boards and the Pimachiowin Aki Corporation.

Key Results Achieved:

- Four management boards have been established through plan implementation agreements between Manitoba and each of the Poplar River, Bloodvein, Little Grand Rapids and Pauingassi First Nations. The purpose of these boards is to guide implementation of approved management plans through the provision of advice and recommendations to the Minister on land use and resource management issues in designated areas of Crown land that First Nations and aboriginal communities have traditionally used.

- Public consultations are now underway on the proposed Little Grand Rapids First Nation Ni-Kes Management Plan and the proposed Pauingassi First Nation Land of Fair Wind Management Plan.
- The proposed Pauingassi management plan covers an area of more than 3,000 square kilometers, and the proposed Little Grand Rapids management plan covers an area of more than 4,000 square kilometers. Both areas are located approximately 270 kilometres north of Winnipeg. Part of Atikaki Provincial Park, which is managed in accordance with an existing management plan, is included within the Little Grand Rapids planning area. Both plans support the establishment of a UNESCO world heritage site on the east side of Lake Winnipeg and in northwestern Ontario.
- Approved management plans for the traditional use areas of the Poplar River and Bloodvein First Nations (Manitoba) and the Pikangikum First Nation(Ontario), for Atikaki Provincial Park in Manitoba, for Woodland Caribou Provincial Park in Ontario and for the Eagle-Snowshoe Conservation Reserve in Ontario are also part of the UNESCO bid.
- The nomination bid was completed on January 18, 2012. A decision by UNESCO on inscription of Pimachiowin Aki on the *World Heritage List* is to be made in July 2013.

Manitoba Geographical Names Program

The Manitoba Geographical Names Program (MGNP) provides a provincial geographical name authority for the management, enhancement, maintenance, protection, and dissemination of Manitoba's geographical nomenclature.

The service relates to the dissemination of geographical name information to all Manitobans (including internal government departments and agencies) regarding the correct spelling, usage, and origin of names, and provides a proactive and vital toponymic quality control service for provincial maps, signs, and other documentation within Manitoba.

Key Results Achieved:

- Provided a similar service to Manitobans as Manitoba's provincial names authority. On average, the MGNP completes 22 New Geographical Name Decisions annually as well as responded to over 2600 written, telephone and in-person requests.
- Continued liaison with the Geographical Names Board of Canada ensuring Manitoba's interests are identified, evaluated, and included in provincial, federal, and international decisions while successfully managing multiple diverse projects such as the Aboriginal Names Program.
- Provided a Provincial Toponymic Information and Base Mapping Program to support the management of Manitoba's natural, heritage and cultural toponymic resources.
- Provided provincial authority for the management of all geographical names and provide policy and direction for the delivery of the Manitoba Geographical Names Program activities and information on geographical names.

Table LA.1
12.3(g) Lands

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	1,665	24.00	1,831	(166)	
Other Expenditures	6,899		6,704	195	
Grant Assistance	216		260	(44)	
Total 12.3(g)	8,780	24.00	8,795	(15)	

Pollution Prevention

Working with local governments, non-government organizations, businesses, industry associations and other agencies, the Branch promotes initiatives and projects that avoid or minimize pollution and waste, and supports these and other provincial priorities through grant funding programs. The Branch develops policies, strategies, legislation, regulations and programs to reduce waste, prevent pollution and protect the stratospheric ozone layer.

The Branch administers the **Waste Reduction and Prevention (WRAP) Act** and the **Ozone Depleting Substances (ODS) Act**. The Branch manages, promotes and reports on the Sustainable Development Innovations Fund (SDIF) established under Part 7 of the **Sustainable Development Act**, including two of the targeted funding programs: the Waste Reduction and Pollution Prevention (WRAPP) Fund and Manitoba Climate Change Action Fund (MCCAF).

Waste Reduction and Prevention

- Establishing, regulating and monitoring producer responsibility programs for post-consumer product management
- Encouraging public-private sector partnerships
- Supporting initiatives to reduce the volume of waste generated and disposed
- Enhancing public awareness

Key Results Achieved:

- Regulated programs under *The WRAP Act* recycled 102,352 tonnes of material in 2011/12 including 12,838 tonnes of rubber from scrap tires, 73,592 tonnes of packaging and printed paper through municipal recycling programs and 15,618 tonnes of used oil products. New programs were launched to collect cell phones, pesticide containers, pharmaceuticals and all batteries. The amount of material collected through these programs increased by 1,750 tonnes from the previous year.
- The Branch continued to work with Green Manitoba and industry groups to establish new Extended Producer Responsibility programs under the *Household Hazardous Material and Prescribed Material Stewardship Regulation* and the *Electrical and Electronic Equipment Stewardship Regulation*. New programs to collect and properly manage antifreeze, batteries, cell phones, mercury-containing thermostats, and expired medications were approved in April and launched in June. Two other new programs will begin collecting end-of-life electronics, or “e-waste”, and other household hazardous waste (HHW) such as paint and fluorescent lighting in 2012.
- Table PP.1 provides a summary of products recycled through the regulated programs that reported in 2011.

**Table PP.1
Products Recycled**

Organization	Product	Total recycled (tonnes)
Rechargeable Battery Corporation of Canada	Rechargeable batteries Other batteries under 5 kg. Cell phones	8.12
Canadian Wireless Telecommunications Association	Cell phones Chargers	4.5
CleanFARMS	Agricultural pesticide containers	283.2
Manitoba Association for Resource Recovery Corp.	Used oil, filters and containers Automotive antifreeze	15,618.0
Multi-Material Stewardship Manitoba	Packaging and printed paper	73,592.0
Post-consumer Pharmaceutical Stewardship Association	Prescription medications Over the counter medications Natural health products	8.82
Tire Stewardship Manitoba	Tires and tubes	12,838.0
Total for Regulated Programs		102,352.64

Key Results Achieved:

- Continued its information and outreach activities with presentations to many citizen and industry groups. Staff continued to participate with the Municipal Advisory Committee on Extended Producer Responsibility (EPR), the Tire Stewardship Manitoba Advisory Committee and the Canadian Council of Ministers of the Environment (CCME) Extended Producer Responsibility (EPR) Task Group. These groups meet regularly to discuss issues and develop strategies to divert more waste from landfill.
- Participated in the biennial National Conference on EPR, the National Mercury containing Lamp Recycling Technical Working Group and the National Forum on the Future of Vehicle Recycling in Canada. As a result of the National Forum, CCME established a new End-of-Life Vehicle Task Group to review and recommend options for management of scrap vehicles and their components.
- Maintained memberships with the Building Energy Management Manitoba (BEMM), the Composting Council of Canada, and the Manitoba Environmental Industries Association. Staff regularly attends presentations, shares information and supports initiatives put forward by these organizations.
- Represented the Department on the Stakeholder Advisory Committee for the City of Winnipeg's Integrated Waste Management Planning process. The Committee assisted in developing a vision and strategy to improve current waste diversion programs, make progress towards zero waste and address the City's waste processing and disposal needs for the next 20 years. The comprehensive plan was released in September. More information is available at www.winnipeg.ca.
- Continued to provide support to Grand Beach Provincial Park for its recycling, waste management and minimization efforts with the installation of bear proof waste containers, waste transfer station enhancements, and creation of a metal recycling, wood chipping and composting area.

Packaging and Printed Paper Recycling

Multi-Material Stewardship Manitoba (MMSM)

MMSM supports municipal recycling programs in Manitoba. Funding to support recycling in Manitoba communities is now shared by all stewards of packaging and printed paper. MMSM operates under the authority of the *Packaging and Printed Paper Stewardship Regulation* and a letter of approval from the Minister of Conservation and Water Stewardship. Information on MMSM is available at: www.stewardshipmanitoba.ca.

Under its approval, MMSM is required to achieve a reduction in plastic bag use in Manitoba by 50% within five years. After two years of operation, the organization reports a 40% reduction in the number of plastic bags distributed in Manitoba since April 2010.

MMSM raised \$12,565,176 from packaging and printed paper stewards and spent \$8,531,412 on municipal support payments. MMSM calculates that Manitobans recycled 60.3 kgs per capita in 2011.

Table PP.2
Residential Recycling Statistics

Material Description	Total Kilograms (kgs)
Aluminum Cans	1,166,469
Aseptic Containers (juice boxes)	316,658
Boxboard (cereal boxes)	6,298,878
Gable Top Cartons (milk cartons)	1,051,727
Glass Containers	6,315,212
#4, 5 and 7 Plastics	2,273,523
Magazines	3,257,856
Newsprint and Flyers	34,027,482
Plastic Bottles ¹	2,763,861
Rigid Plastic Containers ²	1,922,485
Steel Cans	3,159,498
Telephone Directories	393,629
Sub-total	62,947,278
Old Corrugated Cardboard ³	9,937,203
Total	72,884,481
Post-Secondary Education Institutions ⁴	708,000
Total	73,592,481

Table notes:

1. Many materials are collected, processed and sold co-mingled. This creates a challenge in determining precise weights by material. For example, rigid plastics (#2, #4, #5 and #7) are sometimes marketed together. In other cases #2 plastics are marketed separately from the others.
2. Recovery numbers reported by MMSM include only those materials that are recycled through registered local recycling programs in participating municipalities. Manitoba also

has several charity-based organizations and individuals that collect recyclable materials for sale directly to brokers. MMSM believes that some beverage containers are brought to Saskatchewan for a deposit refund even though no deposit has been paid on those containers.

3. MMSM has capped the amount of corrugated cardboard (OCC) recovery that it funds based on estimated volumes generated in the residential collection channel. The intention is not to pay for OCC generated in the commercial sector. The OCC shown in the table includes all OCC collected and reported by participating municipal recycling programs.
4. Materials recovered from Post-Secondary Education Institutions (PSEIs) are based on the 2010/2011 school year instead of the calendar year. PSEIs submit an annual report to MMSM but not all are able to report results by material category.

Canadian Beverage Container Recycling Association (CBCRA)

The beverage industry established CBCRA, a not-for-profit organization, in 2010 to address away-from-home recycling of beverage containers and to support enhanced collection through the blue box. The “Recycle Everywhere” campaign is aimed at achieving the Province’s target of recovering 75% of all beverage containers sold in Manitoba. In 2011, CBCRA raised \$5,384,278 through a two-cent fee on beverage containers and spent \$2,957,344.

In August following public consultation, the Minister of Conservation and Water Stewardship approved CBCRA’s program plan under the *Packaging and Printed Paper Stewardship Regulation* for a two year period. A revised five-year plan was submitted for consultation in March. More information is available at: <http://www.recycleeverywhere.ca/>

CleanFARMS

CleanFARMS is a national non-profit industry stewardship organization concerned with the proper management of agricultural waste. CleanFARMS collected 623,072 lbs. of empty pesticide containers at 109 municipal collection sites in Manitoba. The plastic generated in Manitoba is either reprocessed directly into drain tile or it is washed and processed into recycled plastic resin. The resin is sold to manufacturers to make either plastic drain tile or industrial garbage cans. Clean Farms operates under the authority of the *Packaging and Printed Paper Stewardship Regulation* and a letter of approval from the Minister of Conservation and Water Stewardship. More information is available at: <http://www.cleanfarms.ca/>

Tire Recycling

Tire Stewardship Manitoba (TSM)

TSM is a not-for-profit industry association to manage a province wide scrap tire recycling program. TSM operates under the authority of the *Tire Stewardship Regulation, 2006* and a letter of approval from the Minister of Conservation and Water Stewardship. Following public consultation, TSM received approval in October for a five-year period, ending in 2016.

The organization achieved a 100% diversion rate on tires in Manitoba, helping to recycle 12,835 tonnes of discarded tires and tubes. TSM raised \$5,429,767 through variable fees on new tires and spent \$4,259,781 on administration and recycling costs. More information is available at: www.tirestewardshipmb.ca

Table PP.3
Products from Scrap Tires
Product Breakdown

Product	Tonnes	Percentage
Molded	337	3%
Crumb	394	3%
Sidewalls	1,290	12%
Tire Derived Aggregate (TDA)	9,741	76%
Fabricated	631	5%
Tire Derived Fuel (TDF)	445	3%
	12,838	100%

Used Oil Recycling

Manitoba Association for Resource Recovery Corp. (MARRC)

MARRC is a non-profit corporation established by manufacturers and marketers of lubricating products in Manitoba to operate a province-wide stewardship program for used oil, used oil filters and used oil containers. MARRC operates under the authority of the *Used Oil, Oil Filters and Containers Stewardship Regulation* and a letter of approval from the Minister of Conservation and Water Stewardship.

MARRC has 174 members, and as part of their membership agreement, vendors pay Environmental Handling Charges based on product sales. In total, 53 Eco-Centres have been established in partnership with municipal governments and 26 privately operated depots collect used oil, filters and containers and antifreeze.

In April, MARRC received approval to expand its operations to collect automotive antifreeze and its containers. No information was available on automotive antifreeze collection for 2011.

Oil recovery increased to 13.7 million liters or 76% of the estimated amount recoverable, while filter recovery increased to 1.61 million filters, or 74% of sales. A total of 259,000 kgs of oil containers were recovered, for a 33% recovery rate. More information is available at: www.usedoilrecycling.com.

Table PP.4
Used Oil Products Recycled/Collected

Material	Quantity	% 2010 Recovered
Oil	13.7 Million Liters	76%
Oil Filters	1.61 million	74%
Oil Containers	259,000 kilograms	33%

Household Hazardous Waste Recycling

The following Producer Responsibility Organizations (PROs) operate under the authority of the *Household Hazardous Material and Prescribed Material Stewardship Regulation* and a letter of approval from the Minister of Conservation and Water Stewardship. The programs were approved in April and formally launched in June during Canadian Environment Week.

Rechargeable Battery Recycling Corporation of Canada (RBRCC)

RBRCC operates Call2Recycle, a free, return to retail program to collect and manage all batteries weighing less than five kg, and cell phones. The organization has established 321 sites where consumers can leave spent batteries. Collection of all batteries increased from 8,123 kg in 2010 to 24,187 kg in 2011. Collection of rechargeable batteries increased 51%, primary batteries increased from 577 kg in 2010 to 13,229 in 2011. In total, the program collected more than 24 tonnes of batteries. Canadian revenue (reported in US\$) was \$1,979,000 and expenses were \$3,523,000. Canadian losses were covered by the American program. More information is available at: <http://www.call2recycle.ca/>

Post-Consumer Pharmaceutical Stewardship Association (PCPSA)

PCPSA operated the Manitoba Medications Return Program, a free, return to retail program to recover unwanted or expired prescription drugs, over-the-counter medications and Natural Health Products sold in oral dosage form. PCPSA registered 249 pharmacies representing 66.9% of all licensed pharmacies in the province. In eight months of operation, the program collected and managed 8,820 kg of product. PCPSA received contributions of \$134,713 and had expenses of \$117,281. More information is available at: <http://www.medicationsreturn.ca/>

Heating, Refrigeration and Air Conditioning Institute of Canada (HRAI)

HRAI operates Switch the 'Stat, a program to collect thermostats to recover the mercury containing ampoule, even though this type of thermostat is no longer sold in Canada. Only 31 thermostats were recovered from Manitoba. In 2012, the program will focus on increased communication and securing more collection locations. No financial information is available for this program for 2011. Program information is available at: <http://www.switchthestat.ca>.

Canadian Battery Association (CBA)

CBA represents the manufacturers and distributors of lead acid batteries (LAB). While LAB's have been recycled in Manitoba for many years, the program is now regulated. CBA identified 67 collection facilities throughout Manitoba. Members of CBA sold 5,220 tonnes of batteries and recovered 7,479 tonnes of LAB's for a collection rate of 143%. The high recovery rate is due to the presence in Manitoba of several large automobile shredders that collect material from across the prairies. Funds to support program operation are raised through the sale of battery components. A core charge on purchase of new batteries is credited when a new battery is purchased and an old one is returned. More information is available at: <http://www.canadianbatteryassociation.ca/>

Interstate Batteries

Interstate Batteries has an approved stewardship program to collect lead acid batteries. The organization did not file an Annual Report in time to be included in this report.

Canadian Wireless Telecommunications Association (CWTA)

CWTA operates Recycle My Cell, a free, return to retail collection system for cell phones and chargers. The organization currently operates under a Memorandum of Understanding with the Province of Manitoba. The program recovered 23,501 devices from 131 retail outlets in 29 communities in Manitoba. This total includes phones collected through Call2Recycle. Another 689 devices were collected through the mail-back method. This total is almost double the number of devices collected in 2010, and represents about 4.5 tons of material kept out of waste disposal grounds. No financial information is available for this program for 2011. The organization will focus on expanding consumer awareness of the program in 2012. The organization has submitted a stewardship plan for approval. Public consultations will take place in 2012. More information is available at: <http://www.recyclemycell.ca/>

Ozone Depleting Substances

Promoting and supporting policies and initiatives to reduce and eventually eliminate the release of ozone depleting substances into the atmosphere.

Key Results Achieved:

- Continued to participate on the Federal-Provincial Working Group (FPWG) on Ozone Depleting Substances and Halocarbon Alternatives and met to consult on provincial and federal harmonization approaches for the continued implementation of the 2001 *National Action Plan (NAP) for the Environmental Control of Ozone Depleting Substances and Their Halocarbon Alternatives*. The FPWG is responsible for developing and implementing Canada's National Action Plan which outlines how ODS and other halocarbons will be controlled, reduced and eliminated in Canada. The NAP was created to meet national and international commitments under the Montreal Protocol. The latest NAP was approved by the CCME in 2001 and requires federal and provincial jurisdictions to implement measures to eliminate the release of ODS and alternatives into the environment. Discussions to revise the NAP were initiated.
- Support continued for Refrigerant Management Canada (RMC), a national voluntary industry stewardship organization and its comprehensive halocarbon stewardship program for the proper management, collection and disposal of obsolete and surplus ODS. As of March 31, 2012 RMC accepted and processed 2,671,982 kgs of high and low pressure refrigerants and destroyed 2,526,025 kgs of refrigerant waste.
- Continued to administer an Annual Appointment Agreement between Manitoba Conservation and the Manitoba Ozone Protection Industry Association (MOPIA). The Agreement allows MOPIA to undertake administrative tasks under the *Manitoba Ozone Depleting Substances and Other Halocarbon Regulation* (103/94) and continue its role as a service provider in providing environmental awareness training, issuing permits and collecting annual records and fees.
- Work continued on the orderly transition from CFCs to alternative substances and technologies. In Manitoba, fire suppressant systems containing halon have been decommissioned from use. During 2011, MOPIA issued 5,155 trained service technicians' certificates, and 421 secondary distributor permits. MOPIA hosted a series of industry information sessions throughout Manitoba and held ten environmental awareness training sessions for Manitoba refrigeration and air conditioning service technicians. Red River College and Assiniboine Community College continued to train service technicians as part of the trades training program. Further information on MOPIA is available at www.mopia.ca.
- The Heating and Refrigeration Air Conditioning Institute (HRAI) tracks the number of chillers in Canada that continue to operate on CFC refrigerants and the annual rate of conversions and replacements. In 2011, an estimated 252 chillers were converted or replaced in Canada, representing approximately the same number of conversions/replacements completed in 2010 (253). A total of 3,640 chillers have been converted or replaced, bringing the rate of conversion/replacement from 72.2% (2010) to 83%.

Funding Programs

The Sustainable Development Innovations Fund (SDIF) supports innovative solutions to environmental issues. In addition to administering the overall Fund, the Branch managed the following targeted funding allocations:

- Waste Reduction and Pollution Prevention (WRAPP) Fund
- Manitoba Climate Change Action Fund (MCCAF)

Details on approved projects funded through the SDIF are provided in a separate *Annual Report* tabled in the Legislature. More information on the Fund is available at: www.susdev.gov.mb.ca.

Key Results Achieved:

- Continued its membership with the Canadian Environmental Grantmakers' Network (CEGN). The CEGN is a broad network of organizations that make environmental grants in Canada and provides a national format for information-sharing, collaboration and contributing towards expanding the scope and effectiveness of environmental grant-making in Canada.
- Represented the department on the Northern Healthy Foods Initiative Management Committee. The initiative brings together several departments including Aboriginal and Northern Affairs, Agriculture, Food and Rural Initiatives, Health, and Conservation and Water Stewardship and is intended to promote healthy food choices and support the development of local food sources in northern Manitoba.
- Participated in Manitoba's "streamlining access" pilot project, which is part of a broader provincial strategy to reduce red tape for the non-profit sector.

**Table PP.5
12.3(h) Pollution Prevention**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	367	5.00	354	13	
Other Expenditures	97		97	0	
Total 12.3(h)	464	5.00	451	13	

GeoManitoba

GeoManitoba was created as a re-structured branch within the Department of Conservation and Water Stewardship on uniting branches responsible for survey and geomatic services, topographic and cadastral mapping, remote sensing, map sales, the Manitoba Land Initiative and ortho imagery. GeoManitoba was also given responsibility for the stewardship of and evolution of Manitoba's shared geospatial technology and information assets, and to advance Geographic Information System (GIS) capability across government.

Key Results Achieved:

- Achieved cost-recovery objective for survey services to provincial government departments and agencies. Major clients included the Departments of Infrastructure and Transportation, Conservation and Water Stewardship, Aboriginal and Northern Affairs.
- Initiated, continued or completed 124 survey projects – 111 legal surveys, 10 control surveys, 2 topographic surveys and 1 bathymetric survey. Major legal survey work included a cottage subdivision at Whitemud Falls; public road surveys in Winnipeg (Centrepoint Canada), Brandon and the Whiteshell Provincial Park; water control work surveys at Arborg, parcel surveys for waste disposal sites near Wabowden and Cross Lake; and retracement surveys for future road work at Foxwarren, Wawanesa and Hollow Water Indian Reserve. The majority of control surveys were for integration/coordination of the township system of survey to enable cadastral parcel mapping.
- Continued survey work on the Manitoba Spatial Reference Network, an essential component of the Manitoba GIS enterprise.
- Prepared 409 legal (land) descriptions for disposition of Crown land and/or interest therein – 156 for Crown Lands and Property Agency, 220 for Mines Branch and 33 for Petroleum Branch.
- Prepared 19 boundary plans to define the limits of administrative areas such as wildlife management areas, ecological reserves, provincial parks, aboriginal traditional lands and land planning areas/zones. Notable work included Brokenhead Wetlands Ecological Reserve, Moose Protection Zones and Saskeram Wildlife Management Area.
- Provided 125 marker posts to Manitoba land surveyors free of charge for protection of survey monuments of the Township Survey System.
- Responded to 160 requests for land and control survey information.
- Issued 34 sets of survey instructions, examined 83 plans of survey, tentatively approved 76 surveys and approved 77 surveys – for the disposition of Manitoba Crown lands. This included the approval of 24 Treaty Land Entitlement (TLE) Selection Sites.
- Mapped over 20,000 parcels bringing the total number in the Land Parcel Mapping System close to 630,000. This year's primary focus of work was in the Capital Region.
- Created conceptual designs for the Black River and Bay River subdivisions under the Manitoba Cottage Lot Program, which are joint initiatives with the Black River First Nation and Fisher River Cree Nation respectively.
- Continued the development of a seamless digital reference grid that approximates the location of townships, sections and quarter-sections of the Dominion Government Survey System throughout southern Manitoba. This product is essential for meeting public sector requirements for a general purpose land grid that supports GIS applications.

- Acquired digital photogrammetric workstations to replace 40 year-old, analog stereoplotters for production of topographic base maps and completed initial training of employees on the new technology.
- Compiled base map features of the Highrock Forest Section (23,000 square kilometres) for Forestry Branch. Data collected included buildings and structures, roads and railways, utilities, water courses, designated areas, and land cover. The data was collected two-dimensionally using digital ortho-photography.
- Initiated the development of a Feature Classification Manual for 1:20,000 Base Topographic Mapping.
- Compiled contour maps of Treaty Land Entitlement Sites, selected by Brokenhead Ojibway Nation near Lac du Bonnet, for the determination of water inundation easements by Manitoba Hydro.
- Generated digital elevation maps from Light Detection and Ranging (LiDAR) technology and data to support Aboriginal and Northern Affairs in working with Lake St. Martin First Nation for the purpose of selecting desirable land for transfer following the 2011 spring flood of their lands.
- Continued the acquisition of imagery by private industry under the Provincial Digital Ortho-photography Refresh Program. This program was initiated by the need for high quality, resource photography and is funded by seven government departments and agencies. The photography was flown at a scale of 1:40,000. This was the fifth year of the program which is due to be completed in the summer of 2012. The imagery is now available on the Manitoba Land Initiative (MLI) website.
- Generated weekly crop condition assessments of the Canadian landscape between April 1 and October 30, 2011 for Statistics Canada and Parks Canada using remote sensing technology and NOAA/AVHRR satellite data. This program, known as the Crop Condition Assessment Program (CCAP), celebrated its 25th year of operation in 2011 and is the longest running continuous crop monitoring program using earth observation (satellite data) in Canadian history.
- Created daily and weekly composites of changes in the Canadian landscape for the Global Climate Change Program. This activity uses the Earth Observation Data Management (EODM) system, a satellite image processing system. The product was provided to the Canada Centre for Remote Sensing (CCRS) and is also used by Parks Canada and others.
- Together with the Canadian Space Agency, mapped many areas flooded in the spring of 2011 using remote sensing technology and Radarsat 2 imagery. Key areas were the Shoal Lakes, Lake St Martin, Lake Manitoba, Spruce Woods, Lake Winnipeg and Whitewater Lake.
- Provide maps to Forestry Branch of the Fisherton blow down area utilizing remote sensing technology and high-resolution Quick Bird satellite imagery.
- Produced land use and land cover maps of Agro-Manitoba for the Agri-Environment Services Branch. This activity is on-going using remote sensing technology and Landsat 5 satellite imagery. Data are also provided to the Manitoba Habitat Heritage Corporation.
- The sales area provided fast and efficient services to clients, printing, on demand, topographic maps (including waterproof versions) for locations across Canada.
- Lake depth maps for lakes in Manitoba and Ontario were updated and produced to include the Universal Transverse Mercator grids and coordinates. Geographic mapping produced 60 new lake depth maps this year and also provided customized mapping for The Boy Scouts of America and other government agencies including Education and Conservation and maintained and updated the base maps of Manitoba.

- The Distribution Centre maintained its ranking of third largest distributor of Topographic maps in Canada, selling 20,205 maps directly or through the 150 dealers in Manitoba, Ontario and the north central United States.
- The Canadamapsales.com website received 594 map orders from across North America and internationally from Greece, Australia and Japan.
- A Vexcell photogrammetric scanner was purchased to scan the air photo negatives and move the Air Photo Library into a digital format. This will preserve this historic resource for future generations. In 2011/2012, 3,553 air photo products are produced and sold to the general public and government agencies.
- GIS analysis and project work included: Emergency Measures Organization regional boundaries, Wildlife Management Areas mapping, 40 park management maps, Business Transformation and Technology network location map, preparing Protected Areas Initiative data for Director of Survey plans, mapping flooding in Spruce Woods Provincial Park, Duck Mountain ATV trail mapping, FireSmart program data and maps, Ecological Reserve Boundaries, National Hydrography Network, Game hunting area maps, Whitemud River Watershed cross-sections and centrepoinets, Lake Winnipeg Watershed Map, LiDAR data inventory, creation of contours from LiDAR data, and GIS data library updates and maintenance.
- The Manitoba Land Initiative website was updated with new geospatial data sets. This site has 17,967 registered users accessing land based data information.

**Table GE.1
12.3(i) GeoManitoba**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	2,887	52.00	3,532	(645)	
Other Expenditures	1,295		1,285	10	
Less: Recoverable from Other Appropriations	(1,332)		(1,621)	289	
Total 12.3(i)	2,850	52.00	3,196	(346)	

International Institute For Sustainable Development

The Institute promotes the concept of environmentally sustainable economic development and the integration of the principles and practices of sustainable development within and between the public, private and voluntary sectors on a national and international basis.

The Institute issues a separate Annual Report. Copies can be obtained from the Institute at 161 Portage Avenue East, 6th Floor, Winnipeg, MB R3B 0Y4. The Institute can be contacted at 204-958-7700.

Table IISD.1

12.3J International Institute for Sustainable Development

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Grant Assistance	1,126		1,126	0	
Total 12.3J	1,126		1,126	0	

Green Manitoba and Eco Solutions

Green Manitoba was created as a Special Operating Agency (SOA) effective April 1, 2006, by merging existing elements of the Departments of Science, Technology, Energy and Mines and Conservation. In its fourth year of operations, the SOA was moved to the Department of Conservation and Water Stewardship from the Department of Science, Technology, Energy and Mines. Since its inception, Green Manitoba has functioned as a catalyst, knowledge portal and service delivery agent for government departments and a wide range of public and private sector organizations to help create a greener and cleaner Manitoba.

The mission of Green Manitoba is to promote sustainability practices by bringing together all partners (governments, business and other stakeholder organizations) and in doing so achieve more than if each had acted alone. Green Manitoba serves as the central hub for the public and private sector to access information about provincial sustainability initiatives across the province in all sectors. Using an entrepreneurial approach, focusing on innovation, cost-effective and practical solutions, the Special Operating Agency delivers programs, projects, products and services to foster sustainable practices related to waste reduction, climate change action, the efficient use of water and the promotion and enhancement of sustainability education throughout the province.

As a Special Operating Agency, Green Manitoba issues its own business plan and annual report with information on its mandate, activities and results. Copies of these reports can be obtained on Green Manitoba's website: www.greenmanitoba.ca.

Table GM.1
12.3K Green Manitoba Eco Solutions

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Grant Assistance	1,726		1,726	0	
Total 12.3K	1,726		1,726	0	

Pineland Forest Nursery

Pineland Forest Nursery issues its own Annual Report with information on its mandate and operations. Copies can be obtained from the General Manager at Box 45, Hadashville, Manitoba R0E 0X0. The General Manager can be contacted at 204-426-5235 or toll free or by fax at 204-426-2106. The Pineland Forest Nursery's web site is www.pinelandforestnursery.com .

Table SD.1

12.3M Recoverable from Sustainable Development Innovations Fund

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Less: Recoverable from Sustainable Development Innovations Fund	(1,585)		(1,585)	0	
Total 12.3M	(1,585)		(1,585)	0	

CLIMATE CHANGE AND ENVIRONMENTAL PROTECTION

Divisional Administration

Develops and coordinates the implementation of government-wide climate change programs and ensures that environmental impacts of developments are evaluated. Delivers emergency response programming related to environmental emergencies.

Table ES.1
12.4(a) Divisional Administration

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	369	5.00	307	62	
Other Expenditures	43		55	(12)	
Total 12.4(a)	412	5.00	362	50	

Environmental Services

The purpose of the Environmental Services Branch is to protect human health and Manitoba's environment. To reach this goal, the Branch develops strategies, ensures an effective and efficient regulatory framework, delivers provincial programs, provides technical expertise, and develops standards.

Key Results Achieved

- Facilitated the development of consistent and integrated environmental strategies and policies.
- Ensured an effective and efficient regulatory framework. This included periodically reviewing, updating and developing environmental legislation.
- Delivered provincial programs and services that manage the impacts associated with pollutants. This included administering programs related to the management of impacted and contaminated sites, petroleum storage facilities, solid waste, wastewater, and livestock mortalities and manure.
- Prepared Manitoba for a changing environment by developing standards and processes that define the expectations for future development.
- Provided technical expertise and support to the other branches within the Division.

Key Program Outputs

Environment

- Program specific information on the Department's website was revised and updated.
- Staff responded to 598 requests for file searches for program specific information.

- An updated Homeowner's Manual for Onsite Wastewater Management Systems was posted on the Department's website. An Education Program Manual was developed for certifying installers of onsite systems in Manitoba.
- The Environmental Remediation Program continued to address the assessment and remediation of priority sites. In 2011/12 work included a groundwater sampling and assessment program within the community of Bird's Hill; remediation of soil and groundwater at a site in St. Malo; the completion of the remedial works at the community of West Hawk Lake site; a remediation agreement was entered into for work at the Churchill Rocket Range site; an assessment and remediation agreement was entered into for a site within the City of Winnipeg.

Livestock

- Projects involving construction, expansion or modification of manure storage facilities are subject to a Manitoba Conservation and Water Stewardship permit. A streamlined permit process was implemented. Thirty-five permits for construction, modification and repair of manure storage facilities were issued.
- Registration of manure storage facilities that were constructed prior to the regulatory requirements for permits is mandatory. The registration process provides a process to have the environmental performance of these older facilities inspected and assessed regularly. Applications for registration of approximately 653 manure storage facilities have been received to date.
- Operations with 300 animal units or greater are required to submit annual source water analysis reports to Manitoba Conservation and Water Stewardship. The department received 365 source water monitoring submissions in 2011.
- Manure Management Plans (MMPs) are an effective tool for ensuring the sustainability of livestock production by requiring prior-to-spreading calculation of the rate of manure application that is agronomically appropriate and environmentally sound. 485 MMPs were processed and registered for 2011 crop year.
- Staff met on numerous occasions during the year with livestock producers, most producer organizations, environmental advocacy groups, municipal governments, other government agencies and the general public to communicate regulatory requirements.

Emergency Response

- The environmental emergency response program received over 500 calls to the emergency response 24-hour line. Of these approximately 200 were handled directly by the Department's Emergency Response Team and/or Regional personnel, 250 did not require a response or follow up and 30 were not relevant to the program and were redirected to the appropriate outside agency for action.
- The emergency response coordinator received approximately 100 additional non-emergency phone call enquiries related to dangerous goods and emergency response.
- The Emergency Response Team assisted Police forces in Manitoba with identification, removal, and disposal of chemicals found in clandestine drug operations / marijuana grow operations, and helped evaluate the extent of contamination at the site for remediation purposes.
- The Emergency Response Team assisted EMO with the identification and clean up of house hold hazardous waste resulting from the extensive flooding and property damage on Lake Manitoba.

- The Emergency Response Team is also an active participant in Manitoba's capability to respond to Chemical, Biological, Radiological, Nuclear and Explosives (CBRNE) threats.

Table ES.2
12.4(b) Environmental Services

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	1,679	23.00	2,077	(398)	1.
Other Expenditures	2,691		1,287	1,404	2.
Total 12.4(b)	4,370	23.00	3,364	1,006	

1. Under expenditure in Salaries and Employee Benefits is due to vacant positions.
2. Over expenditure in Other Expenditures is due to environmental remediation costs.

Environmental Operations

The purpose of the Environmental Operations Branch is to undertake inspection activities and enforce legislation to ensure regulatory compliance, and to respond to environmental incidents and complaints to protect human health and Manitoba's environment.

Key Results Achieved:

- Inspected and monitored developments, operations and activities that may impact the environment by the release of pollutants and contamination to ensure compliance with Manitoba's environmental legislation.
- Enforced environmental legislation by ensuring compliance via: education, negotiation, investigation, warnings, orders, offense notices, and information's. The legislation includes *The Environment Act*, *The Dangerous Goods Handling and Transportation Act*, *The Contaminated Sites Remediation Act*, and *The Ozone Depleting Substances Act* and associated regulations. This includes environmental legislation and programs that address the management of contaminated sites, crop residue burning, hazardous waste, livestock manure and mortalities, municipal wastewater, onsite wastewater, petroleum storage and solid waste;
- Responded to environmental accidents and complaints in a prompt and effective manner to prevent or minimize impacts of pollutants and contaminants to the environment.
 - Continued Onsite Wastewater Enhanced Inspection Program Inspections in West St. Paul and St. Clements.
 - Completed year two of a five-year plan to inspect all Municipal Wastewater Management infrastructure in the province.
 - Commenced a training program for Environment Officers.

Table EO.1

Environmental Legislation Enforcement Summary 2011/12

Legislation	Prosecutions	Warnings	Orders	Fines(\$)
<i>Contaminated Sites Remediation Act</i>		1	3	
<i>The Dangerous Goods Handling and Transportation Act</i>	1	3	2	
- Dangerous Goods Handling and Transportation Regulation (Highways)	28			14,720.30
- Storage and Handling of Petroleum Products and Allied Products Regulation	4	12		4,436.55
<i>The Environment Act</i>	1	13	4	
- Litter Regulation	3	3		100.00
- Onsite Wastewater Management Systems Regulation	17	45		9,332.79
- Livestock Manure and Mortalities Management Regulation	2	28		
- Rockwood Sensitive Area Regulation	2	1		
- Waste Disposal Grounds Regulation	4	15		4,941.30
Total	62	121	9	33,530.94

Table EO.2
Suspensions or Variations under *The Environment Act* 2011/12

Date	Location	Purpose
April 7, 2011	LGD of Pinawa	Emergency discharge request.
April 7, 2011	Town of Russell	Emergency discharge request.
April 13, 2011	RM of Siglunes	Emergency discharge request.
April 13, 2011	Town of Beausejour	Emergency discharge request.
April 14, 2011	Town of Winnipegosis	Emergency discharge request.
April 15, 2011	Town of Lac du Bonnet	Emergency discharge request.
April 19, 2011	RM of Strathcona (Belmont)	Emergency discharge request.
April 26, 2011	Town of Gretna	Emergency discharge request.
April 26, 2011	Village of Glenboro	Emergency discharge request.
April 26, 2011	Village of Elkhorn	Emergency discharge request.
April 28, 2011	Town of Rosburn	Emergency discharge request.
April 28, 2011	Town of Gilbert Plains	Emergency discharge request.
April 28, 2011	Town of Birtle	Emergency discharge request.
April 29, 2011	RM of Whitewater (Minto)	Emergency discharge request.
May 2, 2011	RM of Victoria (Holland)	Emergency discharge request.
May 2, 2011	RM of North Norfolk (Austin)	Emergency discharge request.
May 2, 2011	RM of Portage la Prairie (Oakville)	Emergency discharge request.
May 3, 2011	Town of Pilot Mound	Emergency discharge request.
May 3, 2011	Town of Minatonas	Emergency discharge request.
May 3, 2011	Town of Grandview	Emergency discharge request.
May 3, 2011	Town of Winnipegosis	Emergency discharge request.
May 3, 2011	Frontier School Divison (Waterhen School)	Emergency discharge request.
May 3, 2011	Manitoba Conservation (Adam Lake-Turtle Mountain Provincial Park)	Emergency discharge request.
May 4, 2011	RM of Woodlands	Emergency discharge request.
May 4, 2011	Village of St. Claude	Emergency discharge request.
May 6, 2011	Peter Ballantyne Cree Nation (Sturgeon Landing)	Emergency discharge request.
May 8, 2011	Town of Russell	Emergency discharge request.
May 8, 2011	Village of Benito	Emergency discharge request.
May 8, 2011	RM of Shellmouth-Boulton (Inglis)	Emergency discharge request.
May 8, 2011	RM of Whitewater (Minto)	Emergency discharge request.
May 11, 2011	Village of Glenboro	Emergency discharge request.
May 11, 2011	Town of Rapid City	Emergency discharge request.
May 12, 2011	Town of Swan River	Emergency discharge request.
May 13, 2011	RM of Riverside (Ninette)	Emergency discharge request.
May 20, 2011	RM of Shoal Lake (Oakburn)	Emergency discharge request.
May 20, 2011	RM of Pipestone (Reston)	Emergency discharge request.
May 24, 2011	Village of Glenboro	Emergency discharge request.
May 24, 2011	RM of Strathcona (Belmont)	Emergency discharge request.
May 24, 2011	Starlite Hutterite Colony	Emergency discharge request.
June 5, 2011	City of Dauphin	Emergency discharge request.
June 5, 2011	City of Winkler	Emergency discharge request.
June 5, 2011	RM of Siglunes	Emergency discharge request.
June 5, 2011	RM of Whitehead (Alexander)	Emergency discharge request.
June 7, 2011	Village of Glenboro	Emergency discharge request.
June 15, 2011	RM of Rockwood (Balmoral)	Emergency discharge request.

Table EO.3
12.4(c) Environmental Operations

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
Salaries and Employee Benefits	3,024	64.00	3,593	(569)	
Other Expenditures	1,064		1,203	(139)	
Total 12.4(c)	4,088	64.00	4,796	(708)	1.

1. Under expenditure in Salaries, Employee Benefits and Other Expenditures is due to vacant positions and lower program costs.

Environmental Approvals

The Environmental Approvals Branch is responsible to assess development proposals and to issue environmental approvals to ensure that project effects do not adversely impact human health and Manitoba's environment.

Key Results Achieved

- Managed the regulatory processes for applications for new and existing developments to ensure they were thoroughly assessed in accordance with *The Environment Act* and supporting regulations.
- Facilitated public participation in the environmental assessment processes.
- Developed licence and permit terms and conditions that regulate construction and operation activities in an environmentally sustainable manner.
- Improved the availability of information about environmental assessment, permits, and licences through web site and registry upgrades. Feedback from members of the public has been very positive regarding the increasing availability of materials online. Most Technical Advisory Committee reviews are now done electronically which has resulted in using less paper and improving the timeliness of receiving comments.
- Experienced a substantial increase in the number of proposed mining developments. The environmental assessment process was initiated for two substantial, large-scale hydro transmission and generation projects, i.e., Bipole III and Keeyask.

Key Program Outputs

A summary of the environmental approvals reviewed, processed, and issued is provide in Table EA.1 below.

**Table EA.1
Environmental Approvals Activities**

Activities	2010/11	2009/10	2008/09
<i>The Environment Act</i>			
Project proposals received	61	54	42
Licences issued	45	44	44
Project proposals refused	0	1	1
Minor alterations requests received	47	43	51
Minor alterations requests processed	47	45	51
Revision requests to Licences approved	15	6	11
Pre-Licensing activities processed	33	21	42
Highways pre-planning reviews	11	10	3
Infrastructure project reviews-Can/Man	8	17	17
Hydro low voltage reviews	10	3	3
Other reviews - licence not required	54	68	48

Activities	2010/11	2009/10	2008/09
Site inspections, monitoring and enforcement	167	150	191
Pesticide Use Permits Issued	232	237	223
Post Seasonal Reports received/compiled	232	225	223
Public complaints investigated	22	17	32
Public meetings attended	5	22	4
Public Hearings attended	0	0	0
Incinerator Registrations processed	1	3	
<i>The Dangerous Goods Handling and Transportation Act</i>			
Project proposals received	6	5	7
Licences issued	5	7	5
Minor alterations requests received	5	5	6
Minor alterations requests processed	5	5	6
Pre-Licensing activities	9	10	14
Site inspections, monitoring and enforcement	10	8	6
Public meetings attended	0	0	0
<i>The Public Health Act</i>			
Fumigation Permits issued	0	1	1
Applications for Certificates of Approval processed	45	10	-
Water and Wastewater Operator Certification Regulation			
Certification Examination	701	896	559
Plant Classifications Issued	359	109	154
Operators Certificates Issued		444	383

**Table EA.2
12.4(d) Environmental Approvals**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	1,489	27.00	1,448	41	
Other Expenditures	235		287	(52)	
Total 12.4(d)	1,724	27.00	1,735	(11)	

Air Quality Management

The purpose of the Air Quality Management Section is to monitor and safeguard the quality of Manitoba's air for the benefit of citizens today, as well as for future generations.

Key Results Achieved

- Coordinated and managed provincial air quality activities.
- Advocated for Manitoba in discussions on related national and regional agreements regarding air quality.
- Provided ambient air quality monitoring services in co-operation with national monitoring programs and public dissemination of information with the co-operation of interested local citizen and stakeholder groups.
- Collaborated on environmental development application review and licensing duties.

Key Program Outputs

- The Section continued to successfully monitor outdoor ambient air quality at the established provincial sites, audited the air quality monitoring activities of others as required under regulatory provisions, and, when required, made recommendations for improvements. Air quality data statistics for 2010 were released publicly.
- Fulfilled provincial obligations as required by the existing federal/provincial Memorandum of Understanding for operation of the National Air Pollution Surveillance (NAPS) program. New/replacement instrumentation and peripherals were installed and placed into operation.
- Commenced the process of upgrading the system software of the air quality data system for retrieving, handling, managing and reporting air quality data.
- Completed development of the new air quality public web site for display of near real-time and historical air quality levels from provincial air quality monitors.
- Represented Manitoba in national discussions and negotiations regarding air quality management. This included the continued development of the new national Air Quality Management System and associated sub groups like BLIERS, national ambient standards and air zones.
- Played a key role in overseeing the completion and implementation of the company-led Flin Flon Soils Study - Integrated Risk Management Plan Exposure Reduction Strategy and Actions, jointly with the Government of Saskatchewan.
- Provided technical and policy support to a number of Departmental activities. These included:
 - Management of releases from base metal smelters in Manitoba to protect local air quality;
 - On-going scientific and related monitoring activities to assess eco-system vulnerability to acidic deposition;
 - Review of air quality matters related to license applications or license requirements under the *Environment Act* and other related reviews;

- Continued participation on the Department's core environmental Emergency Response Team to assist in response to releases or potential releases, of contaminants that may be detrimental to the environment or public health.
- More information on air quality management in Manitoba is available at: <http://www.gov.mb.ca/conservation/pollutionprevention/airquality/index.html>.

Table AQ.1
12.4e Air Quality Management

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	343	4.00	309	34	
Other Expenditures	75		69	6	
Total 12.4(e)	418	4.00	378	40	

Climate Change Initiatives

The purpose of the Climate Change Branch is to lead Manitoba's response to the economic, environmental and social impacts of climate change by coordinating the government's climate change adaptation and mitigation activities.

Key Results Achieved:

- Implemented new and existing climate change policy commitments, programs, and legislation across government departments and agencies by:
 - a. Coordinating the government-wide implementation of the Beyond Kyoto Climate Change Plan and the Climate Change Emissions Reduction Act in order to reduce greenhouse gas emissions in the province.
 - b. Reporting on Manitoba's progress toward implementing its climate change mitigation and adaptation objectives.
 - c. Developing regulations required under *The Climate Change and Emissions Reductions Act*.
 - d. Implementing Manitoba's Emissions Tax on Coal and working with partner departments to ensure that coal users have appropriate supports enabling a switch to biomass fuels.
 - e. Implementing the Manitoba Climate Investment Program to help Manitoba companies and non-government organizations measure and reduce greenhouse gas emissions.
- Monitored and participated in strategic discussions and negotiations related to federal, provincial, territorial, regional, and international climate change policy by:
 - a. Participating in regional discussions on cap and trade, the development of a carbon offsets program, and discussions on linking regional climate programs
 - b. Liaising with the federal government on the advancement of the national greenhouse gas mitigation and climate change adaptation programs while ensuring that Manitoba's interests are taken into account in the development of these programs.
 - c. Working with Canada's international climate change team to prepare for ongoing negotiations related to a global climate change strategy.
- Lead the development of Manitoba's post-2012 response to climate change and preparing Manitoba for the impacts of climate change through the development of a provincial adaptation strategy by:
 - a. Reviewing options for longer term emission reduction targets, policies and programs to reduce Manitoba's emissions after 2012.
 - b. Collaborating with other departments toward the development of a Manitoba action plan for adaptation.
 - c. Partnering with the other Prairie Provinces to study the impacts of climate change on water resources and develop a strategy to manage these impacts.
- Ensured that effective risk assessment and management practices inform the development and implementation of provincial climate change policies and programs by:
 - a. Assessing the economic costs and benefits associated with implementing various climate change mitigation and adaptation options in Manitoba.
- Tracked Manitoba's provincial greenhouse gas emissions inventory, quantified reductions resulting from government policies and programs, and reporting progress toward Manitoba's reduction targets by:
 - a. Analyzing Environment Canada's annual greenhouse gas emission inventory for Manitoba and tracking expected reductions from programs being implemented in the province.

- b. Reporting on Manitoba's progress towards meeting its climate change goals, and reports progress publicly as required in *The Climate Change and Emissions Reductions Act*.
- Communicated Manitoba's ongoing climate change mitigation and adaptation efforts to the public, and working with externally funded organizations that undertake climate change activities on behalf of Manitoba.

Key Program Outputs

- Reduced greenhouse gas emissions.
- Increased sustainable economic activity.
- Enhanced capacity to adapt to the impacts of climate change.

**Table CC.1
12.4(f) Climate Change Initiatives**

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under) \$(000)	Expl. No.
	\$(000)	FTE	\$(000)		
Salaries and Employee Benefits	529	7.00	490	39	
Other Expenditures	473		461	12	
Grant Assistance	14		14	0	
Total 12.4(j)	1,016	7.00	965	51	

WATER STEWARDSHIP

Divisional Administration

Staff provide the necessary direction and program coordination for the Water Stewardship Division to ensure sustainable development, allocation, and conservation of water resources by developing new policy direction and adhering to current policy and procedures. Staff oversee funding, negotiate and administer contracts, and monitor efficiency and effectiveness of expenditures. In addition, the Assistant Deputy Minister sits on the following boards, councils, and commissions:

- International Joint Commission's International Red River Board
- International Joint Commission's International Souris River Board
- Red River Basin Commission
- Steering Committee, Canada-Manitoba Memorandum of Understanding Respecting Lake Winnipeg and its Basin
- Steering Committee, Canada-Manitoba Fisheries Agreement
- Board of Directors, Lake Winnipeg Research Consortium Inc.
- Alternate Member, Prairie Provinces Water Board
- Working Group on Canadian Recreational Water Quality Guidelines
- Netley/Libau and Delta Marsh Restoration Working Group

Table WS.1

Table 12.5(a) Divisional Administration

Expenditures by Sub-appropriation	Actual 2011/12 \$(000)	FTEs	Estimate 2011/12 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	466	6.00	420	46	
Other Expenditures	588		622	(34)	
Total 12.5(a)	1,054	6.00	1,042	12	

Water Science and Management

Administration

The Water Science and Management Branch consists of over 35 scientific and technical personnel, including hydrologists, limnologists, aquatic biologists, hydrogeologists, engineers, and support staff who provide services in the following main areas:

- managing and protecting the quality and quantity of ground water and surface water including beach water quality;
- providing hydrological scientific services to support the sustainable use of surface water, to assure the protection of people, and to minimize damage to property from floods and droughts;
- providing engineering design services to conservation districts to assist in their water management planning and water infrastructure work;
- protecting the biological and ecosystem health of Manitoba's water systems;
- managing transboundary water issues that may have potential to affect the quality or quantity of waters that flow to Manitoba from upstream jurisdictions; and
- developing and implementing programs aimed at restoring the health of Lake Winnipeg.

The branch is organized into three sections: Groundwater Management Section, Surface Water Management Section, and Water Quality Management Section. Services are provided to the public, local governments, other units within the department, other Manitoba provincial government departments, and other provincial, federal, and international governments. The Water Science and Management Branch delivers strong, scientifically-based programs to ensure Manitoba's water resources and environment are managed and protected in a sound and sustainable manner, including the protection of human health and property.

The branch is represented on numerous inter-departmental, provincial, national, and international boards and committees, including the following:

- Lake of the Woods Control Board
- Shellmouth Operation Advisory Board
- International Joint Commission's International Red River Basin Board - Water Quality (co-chair) and Hydrology (co-chair) Committees
- International Joint Commission's International Souris River Basin Board and its Aquatic Ecosystem Health, Flow Forecasting Liaison and Hydrology Committees
- Prairie Provinces Water Board - Hydrology Water Quality and Groundwater Committees
- Canadian Council of Ministers of the Environment - Water Quality Task Group
- Canadian Council of Ministers of the Environment – Water Agenda Development Committee (Groundwater Subgroup)
- Canadian Council of Fisheries and Aquaculture Ministers - National Aquatic Invasive Species Committee
- Invasive Species Council of Manitoba
- Canada-Manitoba Fisheries Advisory Board – Aquatic Invasive Species Committee
- Canada-Manitoba Memorandum of Understanding on Lake Winnipeg – Steering Committee
- Canada - Manitoba Hydrometric Agreement Coordination Committee

The Branch provides technical and scientific support to a variety of audiences including other government agencies, conservation districts, the public, stakeholders, etc. and responds to thousands of telephone and written requests for information and advice from the private and public sectors. The Branch also provided reviews and comments on approximately 550 projects and proposals related to *Environment Act* assessments, mine closure plans, crown lands allocations, development plans, subdivision requests, drainage licence applications, etc.

Water Science and Management – Groundwater Management

The Groundwater Management Section is responsible for evaluating, monitoring, and protecting the province's groundwater resources. Major activities include: administering *The Ground Water and Water Well Act*; undertaking studies to map the occurrence and quality of groundwater; monitoring groundwater quality and water levels and storing this information in databases; evaluating the sustainable development capacity of aquifers; and carrying out studies to assess the potential for water quality impacts from various human activities.

Key Results Achieved:

- Through participation on watershed and aquifer management programs and through support for regional water well surveys being undertaken by conservation districts, the public, and other government agencies have become more informed of groundwater conditions in many parts of the province and homeowners have been made aware of the water quality from their well and individual responsibilities for well maintenance.
- Groundwater information was compiled and summarized in several parts of the province to support integrated watershed or aquifer management plans. Staff from the Section participated in the

development or implementation of four watershed management plans and three groundwater management plans including the Oak Lake, Assiniboine Delta and Winkler aquifers.

- Field work continued in south eastern Manitoba to improve our understanding of groundwater conditions in this area. Eight test holes were drilled to evaluate the extent of sand and gravel aquifers in the Sandilands area, with most of these wells completed as observation points. Additional studies of groundwater/surface water interactions were also carried out in the Sandilands area, including the drilling of additional test holes, installation of monitoring wells and seepage meters, and monitoring of surface water run-off in Davidson ditch and some creeks.
- The Section launched a groundwater resource evaluation study on the Assiniboine Delta Aquifer. Considerable data have been collected since the last groundwater capacity study was completed in the late 1980s including drilling logs, groundwater levels and chemistry results. Updating the groundwater resource evaluation study will involve geological mapping to produce series maps of aquifers (sand and gravel) and the distribution, thickness and depth of aquitards; hydrogeological mapping to provide groundwater table and depth and the change over time; and recharge calculations to determine recharge rates at different groundwater monitoring locations.
- Twenty-nine firms were licensed under *The Ground Water and Water Well Act* to drill water wells in Manitoba. The Well Drilling Liaison Officer conducted regular visits and provided communication between the well drilling industry and government. The officer also investigated and resolved a number of complaints.
- The Section lead public and stakeholder consultations on a proposed new *Groundwater and Water Well Act*. The proposed new Act would deal with a number of issues not currently included in legislation, and would strengthen the legislation where needed to provide additional protection to groundwater and aquifers.
- Technical support was provided to the 2011 Flood Compensation Programs regarding the restoration of flood impacted water wells. Approximately 20 water wells were inspected and 30 well assessment reports were completed.
- The section also participated in a joint Canada/USA program to evaluate the feasibility of deep disposal of liquid CO₂ in deep geological formations.

Key Program Outputs:

- The section operated a groundwater monitoring network consisting of approximately 550 monitoring wells located on major and minor aquifers. Groundwater levels were recorded continuously at most sites while groundwater quality sampling was done on selected wells.
- The groundwater monitoring network update and modification project was continued as part of an ongoing comprehensive evaluation. Approximately ten observation wells were permanently sealed after having been identified as failing, redundant, or no longer required as part of the provincial network.
- A minimum of 10,827 well logs were added or updated in the GWDrill database. This includes 1,352 nearly drilled well logs and 3,099 sealed well reports submitted in 2011/12 or obtained during water well inventories carried out by conservation districts. Approximately 3,000 groundwater chemistry analyses were also entered into the database. Water level information collected from the observation well network was also entered in the HYDATA database. Information from these data bases is available on request.
- Copies of the full water well data base were provided to more than 16 public and private users.

Water Science and Management – Surface Water Management

The Surface Water Management Section provides hydrological, scientific services to support integrated watershed management planning and the sustainable use of surface water, and to support the protection of people, property and the environment from floods and droughts. The Section also supports activities related to conservation districts' surface water management planning and the engineering design of their water infrastructure work. Finally, the Section plays a lead role in Manitoba's management of transboundary water quantity issues through its work on inter-jurisdictional water issues and opportunities.

Key Results Achieved:

- Conducted research work to develop tools for optimal water supply analysis, hydrological design, and design standards of agricultural drains.
- Ensured that hydrological standards were developed, maintained and applied across Manitoba.
- Investigated and reported on inter-jurisdictional, inter-provincial and international water issues and opportunities such surface water management and the equitable sharing of water through participation on various committees and task forces. For example, the Section represented Manitoba on the International Joint Commission's Lower Pembina River Task Force formed to identify and oversee overall technical work related to finding a scientific solution to flooding within the Lower Pembina River Basin.
- Provided technical and engineering input, advice, planning assistance, assessments, and information for integrated watershed management plans and surface water management plans being developed by watershed planning authorities. Similar technical and engineering services were provided to conservation districts for a variety of water management problems and water infrastructure proposals, as well as for the capital works program planning process in conservation districts that manage large, trunk drainage waterway infrastructure.
- Provided technical support and direction as part of the response to the 2011 flood including operation of water control structures, reporting, and communication.
- Developed computer models that served as the basis for a wind set-up alert system for Lake Winnipeg's south basin, Lake Manitoba, Lake Winnipegosis and Dauphin Lake. Three levels of wind alerts: moderate, high and severe were issued daily and posted online until freeze up in 2011.
- Worked with the City of Winnipeg and KGS Group to better define basement flooding damages from intense rainfall events associated with high Red River water levels.
- Continued work towards the development of a drought management plan for Manitoba that will enable a formal, clear, science-based and coordinated process for the declaration of drought and ongoing drought management.
- Provided information to the North American Drought Monitor and Agriculture and Agri-Food Canada for updating the Monthly Regional Drought Map.
- Participated in climate change adaptation studies to ensure that provincial surface water resources are used sustainably. For example, with funding under the Prairie Regional Adaptation Collaborative, the Section lead and completed two studies on water supply and demand for the Manitoba portion of Assiniboine River under current and future climate change scenarios.
- Participated on the Red River Basin Commission Water Supply Working Group which is developing a drought preparedness strategy for the Red River Basin.

- The Section provided technical and scientific support to a variety of audiences including other government agencies, the public, stakeholders, etc. with respect to hydrologic sciences and the monitoring, protection and sustainable management of Manitoba's surface water quantity resources. For example, the Section provided advice on the operation of the province's hydrometric monitoring program and the delivery of the Manitoba portion of the Canada-Manitoba Hydrometric program.
- The Section maintained databases containing historical streamflow and water level information.
- The Section conducted management of the Department's real-time water level data acquisition system for drought and flood monitoring. The Section also lead project management for the replacement of the existing data acquisition and database system with a state-of-the art technology data acquisition and database system (AQUARIUS). The new system will help to harmonize data collection and management for the development of a drought management plan and will assist in timely flood forecasts.

Key Program Outputs:

- Produced six Water Availability and Drought Conditions reports in 2011/12 through the analysis of data including weather and precipitation predictions. More information is available at http://www.gov.mb.ca/waterstewardship/water_info/hydrology/drought.html.
- Developed discharges for the design of waterways and waterway openings and to accommodate passage of fish for infrastructure planning, design, and environmental approvals. Input was provided to 195 sites in 2011/12.
- Developed flood protection levels to support the design of water control works and to guide development. Flood protection levels were provided for over 200 sites/locations/waterbodies in 2011/12.
- Input and advice was provided on the sustainable supply of water available for allocation and for instream flows under *The Water Rights Act*. Hydrological analysis or provision of input was provided to four assessments in 2011/12.
- Provided technical and engineering input, advice, planning assistance, assessments, and information for three integrated watershed management plans and surface water management plans developed by watershed planning authorities
- Technical and engineering services were provided to conservation districts for about 15 water management problems/projects and water infrastructure proposals, as well as for capital works program planning processes in conservation districts that manage large, trunk drainage waterway infrastructure.

Water Science and Management – Water Quality Management

The Water Quality Management Section provides services in support of the Department's mission by protecting, maintaining, and where necessary, rehabilitating the quality of Manitoba's aquatic ecosystems. This is achieved through a number of activities including operating and maintaining long-term and short-term water quality programs, managing and providing water quality data to various client groups, responding in a timely manner to emergencies and emerging water quality issues, and developing policy to further protect and enhance Manitoba's surface water quality.

Key Results Achieved:

- Regular monitoring of water chemistry and benthic invertebrates from numerous Manitoba streams, rivers and lakes was conducted. Data are used to establish long-term trends in water quality and to quantify general water quality conditions such as with the Water Quality Index. Benthic invertebrate data are used along with water chemistry to further assess the aquatic health of Manitoba's streams and rivers.
- Monitoring of recreational water quality was conducted at beaches across the province and timely results were provided to the public through the Department web site and posting of advisory signs. Bathing water at approximately 60 Manitoba beaches is monitored each year for densities of the fecal indicator bacteria, *Escherichia coli*. Algal blooms are also monitored for concentrations of toxic algae. Incidents of swimmer's itch and subsequent beach posting are coordinated by the Section.
- Routine monitoring of physical, chemical and biological conditions on Lake Winnipeg from the *MV Namao* continued in cooperation with the Lake Winnipeg Research Consortium and others. Three scientific cruises on Lake Winnipeg were completed in 2011. The Section also led the 2012 winter sampling on Lake Winnipeg in both the north and south basins.
- Ongoing, high quality laboratory analytical services were acquired for Manitoba Conservation and Water Stewardship, Manitoba Health and Healthy Living, and Manitoba Agriculture, Food and Rural Initiatives including ensuring on-going communication and collaboration with contracted analytical laboratories.
- The *Water Quality Standards, Objectives and Guidelines Regulation* 196/2011 was registered on November 28, 2011 under *The Water Protection Act* (C.C.C. M. c. W65). This regulation enshrines the Manitoba Water Quality Standards, Objectives and Guidelines in legislation and establishes Water Quality Standards for Nutrients in wastewater. More information is available at http://www.gov.mb.ca/waterstewardship/water_quality/quality/website_notice_mwqsog_2011.html.
- The Section worked with golf courses, municipalities and the agricultural sector to implement the *Nutrient Management Regulation* under *The Water Protection Act* (C.C.C. M. c. W65). This regulation encourages responsible nutrient planning and regulates the application to land of substances containing nitrogen and restricting the development of certain types of nutrient generating facilities in sensitive areas. More information is available at <http://www.gov.mb.ca/waterstewardship/wqmz/index.html>.
- Worked with manufacturers, retailers, and distributors of automatic dishwashing detergents to ensure compliance with *The Phosphorus Reduction Act* (*Water Protection Act* amended). The Act restricts the phosphorus content in household automatic dishwashing detergents that can be manufactured, sold, distributed or imported into Manitoba for use in Manitoba. Under the legislation, only those automatic dishwashing detergents that contain 0.5 % phosphorus or less can be sold or distributed throughout the province.
- In July 2011, the State of Lake Winnipeg report was released by Province of Manitoba and the Government of Canada. The report, led by the Water Quality Management Section and Environment Canada, is a collaborative effort by many researchers from other areas of the Department, other government agencies, universities, and non-governmental organizations and is the first comprehensive assessment of the physical, chemical, and biological characteristics of Lake Winnipeg since intensive lake monitoring began in late 1990s. The State of Lake Winnipeg report serves as a reference to measure progress towards reducing nutrient loading, will help in the assessment of the overall health of the lake, and also provides key information to support current and future research on Lake Winnipeg. In addition to overall coordination and participation in the steering committee, several sections of the report were authored by the Section including those on aquatic invasive species, beach water quality, nutrient loading to Lake Winnipeg, phytoplankton and nutrients in the

lake. More information is available at http://www.gov.mb.ca/waterstewardship/water_quality/state_lk_winnipeg_report/index.html.

- Work continued to reduce nutrient contributions to Lake Winnipeg and its watershed including implementing the *Canada-Manitoba Memorandum of Understanding Respecting Lake Winnipeg and the Lake Winnipeg Basin* to facilitate a cooperative and coordinated approach to understand and protect the water quality and ecological health of Lake Winnipeg and the Lake Winnipeg Basin.
- Support was provided to the Lake Friendly Initiative which aims to protect our waterways and raise awareness about the threats to one of our greatest resources - fresh water.
- Provided technical and scientific support to a variety of audiences, including other government agencies, the public, stakeholders, etc. and recommended activities to alleviate or abate specific water quality concerns.
- Provided educational material and support to the public on water quality to foster greater awareness and to empower local stewardship.
- Continued work to prevent the introduction and transfer of aquatic invasive species. Efforts to heighten public awareness of zebra mussels and other aquatic invaders included the distribution of educational materials (informational pamphlets, surveys, key chains, and posters) and an aquatic invasive species reporting hotline. In 2011-2012, over 400 inspections were made to aquatic-based equipment (such as boats) that were brought into and across Manitoba. In addition, over 45 public presentations were given at various venues and events including provincial parks, fishing derbies, cottage association meetings/events, collaborating agency meetings and many others.
- Worked cooperatively with Environment Canada to conduct weekly zebra mussels sampling on the Red River at Emerson. Approximately 90 samples were collected and analyzed for the presence of larval zebra mussels. No zebra mussel veligers were detected in these samples.

Key Program Outputs:

- Water quality was monitored at 63 long-term stations across Manitoba during 2011/12. The Section worked in collaboration with Conservation Districts, Environment Canada, the University of Manitoba, and Manitoba Hydro in collecting water quality samples at some sites. Benthic invertebrates were monitored at 11 sites across Manitoba.
- Approximately 60 Manitoba beaches were monitored during the summer of 2011. Approximately 137 water samples were collected for analysis of algal toxins and 103 samples were collected for enumeration of cyanobacteria densities to assess the risk to bather health.
- Through work with manufacturers and retailers, the availability of lawn fertilizers containing less than one per cent phosphorus by weight was increased across the province.
- Through work with manufacturers, retailers, and distributors, the availability of automatic dishwashing detergents with less than 0.5 % phosphorus was increased across the province.
- One hundred and fourteen Nutrient Management Plans were registered for golf courses across Manitoba.
- Data, interpretation, and water quality recommendations concerning improvements to surface water quality were made through the Integrated Watershed Management Planning Process. The Section contributed to three integrated watershed management plans. The Section worked closely with conservation districts to deliver land-based programming aimed at reducing impacts to water quality.

Table WS.2
12.5(b) Water Science and Management

Expenditures by Sub- appropriation	Actual 2011/12 \$(000)	FTEs	Estimate 2011/12 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	2,675	36.00	2,611	64	
Other Expenditures	1,500		1,544	(44)	
Total 12.5(b)	4,175	36.00	4,155	20	

Fisheries

Administration

Fisheries Branch oversees the sustainable development of fisheries resources. Management programs are developed to provide greatest benefits to Manitobans by maintaining or enhancing populations and habitat, monitoring harvest and habitat alterations, and allocating resources for best return. The Branch directs and reports on programs and budgets, legislation and policy, standards and guidelines, and co-ordination and monitoring. The Branch also administers the Fisheries Enhancement Fund and the Northern Fisherman's Freight Assistance Program. Head Office and Regional Fisheries Managers report to the Fisheries Director responsible for operational decision-making and program delivery.

The objectives of the Branch are to direct effective branch operations through appropriate allocation of staff and budget by identifying management priorities and programs consistent with government policy, and to develop and interpret branch policies to ensure consistency with sustainable development principles and guidelines.

Detailed information about fisheries activities can be found on Manitoba Water Stewardship's website. <http://www.gov.mb.ca/waterstewardship/fisheries/commercial/history.pdf>

Information includes data on:

- Distribution of Fish Stocked from Fish Hatcheries
- Licensed Fishers Employed in Manitoba Commercial Fishery
- Commercial Fishing Production (Round Weight kg), Total Value and Employment
- Commercial Fishing Production (Round Weight kg) by Area and Total Value by Species,
- Angling Licence Sales and Revenue
- Bait Fishing Industry Statistics
- Manitoba Fish Farming Statistics

Key Results Achieved:

- Review of fisheries governance continued to assure contemporary approaches to partnering and collaboration on management activities with key interest groups.
- Regulatory variances were prepared as required to address season opening and closing dates and quota adjustments for sustainability purposes.
- The Branch provided input to policy development in key areas, particularly Aboriginal consultation, and eco-certification.
- Integrated planning continued by involving user groups through the work of the Fisheries Enhancement Fund Project Review Committee in Branch planning exercises. This process contributed to the key principle of user group involvement in developing fish management strategies.
- The Branch participated in the Inter-jurisdictional Working Group, Aquatic Invasive Species Task Group, Species at Risk Task Group, and Eco-certification Traceability Task Group reporting to the Canadian Council of Fisheries and Aquaculture Ministers (CCFAM) and the Freshwater Fisheries Committee.
- Manitoba Conservation and Water Stewardship and Department of Fisheries and Oceans continued work in areas of mutual interest through the *Canada-Manitoba Fisheries Advisory Committee*.

Fisheries Science and Fish Culture Section

The Section supports efforts to conserve, evaluate, restore, and enhance both fish communities and aquatic ecosystems to achieve a net gain in healthy, productive fish stocks. The objectives of the section are to co-ordinate, evaluate and develop science-based programs that support the sustainability of aquatic ecosystems and enhance, restore and develop fish habitat to sustain fish resources and the benefits that they provide Manitoba.

FISHERIES SCIENCE GROUP

The Fisheries Science group is responsible for evaluating: the impact of all project development in Manitoba on its fisheries resources; fish health and disease issues; fish transfers and movement; instream flow needs; aquatic Invasive species; species at risk; fish stock assessments and methodology developments.

Key Results Achieved:

- A total of 257 development proposals were reviewed.
 - 39 proposals were reviewed under *The Environment Act*.
 - 30 draft licences, 12 pre-licensing *environmental* screening proposals and one Environmental Impact Assessment.
 - Another 175 proposals having potential implications for aquatic ecosystems were reviewed. These included Crown Lands sale/lease/permit applications, municipal development plans/amendments/ zoning bylaws, Mines Branch proposals for oil batteries/mine closures/surface leases, and water withdrawal requests.
- Branch staff participated on several Advisory Committees including the Pointe du Bois Replacement project, Keeyask Generating Station, Minago Open Pit Mine, and Forest Practices.
- The Branch assisted the implementation of various components of the National Aquatic Animal Health Program under the Canadian Food Inspection Agency including Compartmentalization and the Domestic Movement Control Program.
- As part of the Environmental Effects Monitoring Program, monitoring of two pulp and paper and 10 mining effluent proposals/programs continued.
- Staff began developing Standard Operating Procedures at the Grand Rapids Fish Hatchery in accordance with its prior facility audit for biosecurity / health status through the Canadian Food Inspection Agency's Compartmentalization Program.
- Staff Co-chair the CCFAM Aquatic Invasive Species Task Group reporting biannually to the CANMB FAC meetings as well as participating on the National Aquatic Invasive Species Committee.
- As chair of the Introductions and Transfers Committee, participated in meetings addressing the need for renewal of the National Code on Introductions and Transfers of Aquatic Organisms.
- Continued to work with the Fairford Fishway Working Group to investigate fish use of the fishway and to identify ways to improve fish passage.
- Continued to develop and promote various educational events and tools for Kindergarten to Grade 12.

- Continued work on Instream Flow Needs Studies for the Assiniboine, Little Saskatchewan, Whitemud and Birch rivers.
- Submitted for peer reviewed publication instream flows needs methodological paper (due out September 2012)
- Participated on an interdepartmental working group to develop an off-road vehicle land use policy.
- Contributed to Recovery plan for Carmine Shiner
- Represented Manitoba with attendance at Ontario Ministry of Natural Resources, Lake Sturgeon Recovery meeting (Toronto, ON)
- Contributed to the Management plan for Lake Sturgeon.
- 68 scientific collection, 27 live fish handling, and eight salmonid import permits were issued.
- Partnered with Fisheries and Oceans Canada and the Lake Winnipeg Research Consortium, and with funding from the Fisheries Enhancement Fund, the Branch continued to monitor the offshore fish community of Lake Winnipeg from the *MV Namao*.
- Provided trawl data and fish samples to support projects underway at the University of Manitoba
- Collected information about how best to sample offshore, small fishes in Lake Winnipeg by conducting day vs. night sampling regimes
- Data were provided to support a University of Manitoba graduate project describing environmental cues related to the distribution and diel vertical migration of zooplankton in Lake Winnipeg.
- Assisted with site selection and sample processing for the Winnipeg Lake Whitefish Monitoring Initiative, conducted in partnership with the Freshwater Fish Marketing Corporation and commercial fishers.
- Updated stock assessment for Dauphin Lake Fishery Status of Walleye Stocks report and Lake Sturgeon population estimates for the Saskatchewan and Winnipeg rivers.
- Participated in the annual Lake Winnipeg Research Consortium workshop, Waterlution workshop, Canada-Manitoba Fisheries Advisory Committee, and a Canadian Water Resources Association luncheon where results of pelagic fish surveys in Lake Winnipeg were presented.
- The provincial fish ageing assessment unit collected over 1700 age structures to monitor the Lake Winnipeg commercial fishery. Over 10,000 fish were aged to support regional fisheries program operations of which over 3000 of these samples were part of the Coordinated Aquatic Monitoring Program (CAMP).
- Organized and prepared the agenda for the Annual Branch meeting which included key issues facing the Branch.
- Collaborated with the University of Manitoba regarding the use of an oxytetracycline marking technique used by the Fisheries Branch to mark hatchery-reared walleye.

Fish Culture Group

The Fish Culture Program rears and distributes fish, ranging in size from fry to adult fish to meet requirements for recreational, commercial and conservation fish stocking needs throughout the province. To achieve these outcomes, the Program operates two year-round fish hatcheries at Whiteshell and Grand Rapids (in partnership with Manitoba Hydro), and two seasonal facilities at Swan Creek and Clearwater Lake.

Key Results Achieved:

- Ongoing assessment and development of solutions to address infrastructure upgrades at the Whiteshell hatchery
- Whiteshell hatchery continues to welcome approximately 5,000 visitors annually to its Interpretive Centre.
- Completed a field-based study to test the efficacy of stocking triploid versus diploid rainbow trout.
- Approximately 26.5 million walleye fry were stocked. Most fry were marked with oxytetracycline and stocked into four commercial fishing lakes, with close to 11 million stocked into Lake Manitoba. A total of 141 lakes were stocked to support recreational fisheries through-out the province
- Completed environmental liabilities remediation for Clearwater and Swan Creek fish culture facilities
- Protected Swan Creek hatchery from significant damage or destruction during the 2011 flood

Recreational and Commercial Fisheries Management

The Section develops, administers, and evaluates management programs and policies for recreational, commercial, and domestic use, including commercial bait fishing and fish farming. It also manages the Fisheries Enhancement Fund and Northern Fishermen's Freight Assistance Programs, distribution and reconciliation of commercial fishing licences, and fish production information. The objective of the Section is to ensure management programs are delivered in an integrated manner that ensures sustainability of the resource and maximizes benefits from its use.

Key Results Achieved:

- As part of government's obligation to consult with First Nations, Métis and Aboriginal communities in matters related to constitutionally protected Treaty and Aboriginal rights, the Branch participated in Crown-Aboriginal consultations on conservation measures being considered for Dauphin Lake and its tributaries.
- Fisheries Branch continued public meetings around Lake Manitoba to solicit input in the development of a Lake Manitoba Fisheries Management Plan.
- Implemented the Dauphin River Flood Assistance program as part of the Flood 2011: Building and Recovery Action Plan.
- Advanced through discussions a new *Lake Winnipeg Fishery Resource Co-Management Board* that would provide fishers an opportunity for greater participation and input into fisheries management decisions.

- Extended the Whitefish Optimization Quota Allocation program on Lake Winnipeg for an additional year to reduce fish waste and provide economic opportunities to fishers by encouraging Lake Whitefish deliveries.
- Branch officials undertook public consultation meetings around Lake Manitoba towards the development of a comprehensive fisheries management plan.
- Continued efforts towards seeking eco-certification of the Lake Waterhen Walleye commercial gill net fishery using the Marine Stewardship Council's criteria.
- Completed socio economic analyses of the Manitoba's commercial fishing industry.
- *Long Service Fisher Award* program recognized the contributions of commercial fishers to Manitoba's social and cultural foundations and economic well-being for 50 years or more.
- In partnership with Fish Futures, Inc., published the 2012 Manitoba Anglers' Guide that summarizes angling regulations, highlights new and proposed regulations, and includes management and other fisheries information.
- Working in cooperation with Fisheries and Oceans Canada, continued analyses of information provided from the 2010 Survey of Recreational Angling. The survey is conducted every five years to collect information on activity and harvest rates as it relates to recreational fisheries.
- Continued to coordinate Winnipeg's Urban Angling Partnership which offers residents and visitors recreational angling opportunities through structured angling programs.
- Supported the Youth Angling Card initiative and Gear Up - Tackling the Future programs.
- Continued discussions on the development of a BIO/ECO database that will update the ENVIS system developed by Manitoba Hydro (currently the only repository for all of Coordinated Aquatic Monitoring Program data).
- Enhanced fisheries information on the departmental website to provide greater access to the public in a more efficient and timely manner.
- Provided Secretariat services to the *Canada-Manitoba Fishery Advisory Committee* to renew and strengthen working relationships in areas of mutual interest.
- Administered the Northern Fishermen's Freight Assistance Program (\$400.0) and Fisheries Enhancement Fund (\$850.0).

Fisheries Branch - Regional Fisheries Management

The objectives of the Regional Fisheries Management Section are to deliver fisheries programs at a regional level and to assist in the development and management of related provincial programs, to ensure the maintenance of healthy aquatic ecosystems for the use and well being of present and future generations of Manitobans, to provide input to compliance priorities, to assure the maintenance of long-term sustainability of fisheries resources, and to ensure an effective consultation role on behalf of the Branch with commercial and recreational fishers.

Key Results Achieved:

All Regions

- Continued to work with Manitoba Hydro and Water Science and Management Branch per the Manitoba and Manitoba Hydro Memorandum of Understanding about Lake Winnipeg Regulation/Churchill River Diversion Monitoring Activities. This was the fifth year of the Coordinated Aquatic Monitoring Pilot Program and marks the second full program year. Environmental monitoring activities conducted by both Manitoba and Manitoba Hydro have been coordinated and are now using common methodology, which provides Fisheries Branch access to fish stock assessment data collected by Manitoba Hydro's consultants.
- Regional staff contributed to the development of the 2012 Lake Sturgeon management plan.
- Regional staff reviewed Licensing Advisory Committee applications. Environmental licensing proposals, land-use applications, water control works licences, resource allocation requests, development proposals and scientific collection permit applications.

Northwest Region

- Co-chaired the Cedar Lake Resource Management Board and provided input to the Opaskwayak Cree Nation, Moose Lake, and Cormorant Resource Management Boards,
- Regional staff participated in a number of meetings with commercial fishers and recreational angling groups.
- Reviewed and provided input to Crown Lands on applications for wild rice seeding and harvest.
- Participated in the Saskatchewan River Sturgeon Management Board and managed the Manitoba portion of the sturgeon field program.
- Completed index-netting to assess fish populations on Cedar, Wekusko and Cormorant lakes.

Northeast Region

- Participated in the Norway House Resource Management Board and provided input to four other Resource Management Boards. The purpose is to represent Manitoba on the Boards, fulfilling the obligations of specific agreements and develop meaningful relationships with Aboriginal communities and resource users.
- Participated in the Southern Indian Lake Environmental Monitoring Committee to address environmental issues arising from hydroelectric development. Walleye spawn was collected successfully for the first time and fry were stocked into Sandhill Bay, which once had a major walleye spawning run. Poor fishing for the past several years lead the commercial fishery to close its north basin fish plant and operate a reduced fishery near the community. Production is now less than 10% of historical highs.
- Participated in the Nelson River Sturgeon Board and managed its field program. The tagging program continues to show a steady increase in the number of Lake Sturgeon in their main fishing area. The Board also operates an ongoing program to raise sturgeon fingerlings for school aquarium programs and release. New techniques resulted in a dramatic increase in Lake Sturgeon spawn collection success.
- Completed fish stock assessment netting on six recreationally angled lakes in the Thompson area through the Fisheries Enhancement Fund.

- Completed fish stock assessment netting in six commercial/domestically fished lakes in the region through the Coordinated Aquatic Monitoring Program.

Eastern Region

- Coordinated Aquatic Monitoring Program (CAMP) sampling was completed on Lac du Bonnet. This program also acts as our annual long term index netting program.
- Completed non-lethal spring/fall sampling surveys on Jessica, White, Betula, Shoe, Beresford and Black Lakes. A total of 14 lakes surveyed since the implementation of this unique project in 2010.
- Continued monitoring the Falcon Creek Walleye spawn-taking operation, along with the Walleye PIT tagging program. This work is essential in understanding the net benefit of this program to Falcon Lake and the Eastern Region Walleye fry stocking program.
- Assisted a masters student involved in the marking of Walleye fry with oxytetracycline (OTC) and distinguishing naturally produced Walleye from stocked. This will allow the Eastern Region to stock in a more efficient manner.
- Completed the annual Lake Sturgeon tagging program and prepared population estimates for the Nutimik/Numao reach of the Winnipeg River
- Completed all regional Walleye and trout stocking in conjunction with our fish culture section
- Assisted with the Hydronet research project on Lac du Bonnet. This project promotes sustainable hydropower development and healthy ecosystems

Central Region

- Non-lethal sampling of small regional recreational lakes was completed to: 1) generate population estimates for Yellow Perch and Northern Pike on Gull Lake following the adoption of a 60 cm maximum size limit; 2) calculate relative stock densities for Black Crappie, Northern Pike and Walleye on Lake Minnewasta; and 3) assess the success of Northern Pike stocked to Norris Lake following winterkill.
- Graded mesh index nets were used for the first time for the annual spawn monitoring that opens the spring commercial fishing season on Lake Winnipeg. The graded mesh nets revealed late arrival of older female Walleye at spawning sites.
- The 80% season opening rule appears to be forcing the Walleye spawn forward in time.
- All licensing, quota transfers, and quota tracking (including Lake Whitefish optimisation, redistributed Dauphin River quotas, and CLA open quotas) of the Central Region commercial fisheries were well managed.
- The annual Lake Winnipeg indexing program was conducted but in abbreviated form because flooding made the Dauphin River sites inaccessible.
- In addition to stock monitoring on Lake Winnipeg, regional staff collected mercury samples and CAMP samples for Manitoba Hydro.
- Lake St. Martin was indexed for the third year running. A second trip was made to Lake St. Martin in the autumn to assist Water Quality in collecting fish tissue for contaminant analysis in response to community concerns regarding potential impacts of flooding.

- Lake Waterhen continued to deliver more than 20,000 kg of Walleye from its commercial winter fishery marking its eighth year of good post-collapse production. Waterhen was index netted for the third year in a row and the data utilized to develop harvest control rules for ecocertification. The harvest control rules were accepted by the fishers for advancement in Marine Stewardship Certification.
- Two undergraduate theses at the University of Winnipeg resulted from the Lake Waterhen sampling program; one evaluating growth of Walleye, and another of Northern Pike, both using opercular bones for ageing. Central Region staff participated on the steering committees of the thesis students.
- Fisheries Branch began collaborating with researchers from the University of Nebraska in 2011 on a series of projects to understand and improve management of the valuable Red River Channel Catfish fishery. Demographic and food web information was collected.
- Chitek Lake was test-netted in the winter of 2011 to determine whether a winter index program was feasible.
- Oxygen profiles were collected throughout the winter on Chitek and Inland Lakes in response to fisher's concerns.
- The first 2¼" fishery was conducted on Inland Lake and was very successful in meeting the intended goal of reducing the Yellow Perch population.
- A first test-netting of Lake St. Andrew was accomplished in October, a well-received presentation was made on our findings to local anglers.
- Annual test-netting of Lake Manitoba continued during the third year of the expanded four week netting program.
- The second round of town hall meetings for the Lake Manitoba Fisheries Plan development was completed in April.

Western Region

- Consulted with West Regional Tribal Council and other Aboriginal and Métis communities concerning proposed spring conservation measures for the Walleye stocks of Dauphin Lake and its tributaries.
- Staff acted in an advisory capacity to 13 Conservation Districts in the region.
- Completed annual index netting on Lake Winnipegosis, Lake of the Prairies, and Dauphin Lake.
- Conducted commercial sampling on Lake Winnipegosis and Dauphin Lake.
- Stocked 10,300,000 walleye fry, 1800 adult Walleye and 215,000 salmonids in approximately 70 waterbodies throughout the Western region to supplement natural recruitment and diversify angling opportunities.
- Assisted local angling groups with stocked trout water assessments in the Duck Mountains and Porcupine Provincial Forest, as well as spring trap netting and Walleye telemetry on Whitefish and Wellman lakes.
- Reviewed Louisiana Pacific's Annual Operational Plans and Mountain Quota Holder's Association for harvesting near waterways and helped mitigate approximately 60 harvest blocks and associated crossings.

Northern Fisherman's Freight Assistance

The Northern Fishermen's Freight Assistance program assists marginal commercial operations by partial subsidization of transporting eligible species from selected lakes to Winnipeg. Fishers pay the first 20¢/kg of freight, Manitoba pays the next 45¢/kg, and fishers pay any costs over 65¢/kg. Eligible species are Lake Whitefish, Northern Pike, Lake Trout, Yellow Perch, Goldeye, Cisco and several species of sucker. Subsidy payments to fishers are issued weekly by Freshwater Fish Marketing Corporation on behalf of Manitoba. Fisheries allowed to opt out of Freshwater Fish Marketing Corporation are paid by the Branch at season end.

Key Results Achieved:

- To ensure expenditure does not exceed the maximum of \$400,000, fishers receive an initial payment, usually 80% of their estimated eligibility. They receive final payment at fishing-year end. While a full 20% final payment may not be possible when production is high, a final payment higher than 20% may occur in low-production years. The Northern Fishermen's Freight Assistance paid approximately \$322,250 to 245 fishers for 2011 summer season. Payments to 55 fishers for winter season were approximately \$77,750.

Table FI.1
12.5(c) Fisheries Branch

Expenditures by Sub-appropriation	Actual 2011/12 \$(000)	FTEs	Estimate 2011/12 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	2,921	48.31	3,176	(255)	
Other Expenditures	632		582	50	
Northern Fisherman's Freight Assistance	410		410	0	
Total 12.5(c)	3,963	48.31	4,168	(205)	

Fisheries Enhancement Fund

The Manitoba Fisheries Enhancement Initiative was established in 1993 when Manitoba sport fishing groups and commercial fishers indicated a willingness to pay more for their fishing licence if a portion was directed to enhancing fish stocks. The Fisheries Enhancement Initiative funded over 300 projects throughout Manitoba aimed at strengthening fish populations, improving fish habitat, or fisheries education.

The Fisheries Enhancement Fund was introduced in 2007 with significant improvements to the enhancement program with new categories, including fisheries research, fish stock assessment and monitoring, fisheries development through capital investment and stocking, fisheries habitat rehabilitation and enhancement, as well as education and outreach initiatives pertaining to fisheries. The project review committee includes broader representation from a number of associations and stakeholders with an interest in enhancing Manitoba's fisheries.

The objective of the Fisheries Enhancement Fund is to ensure that adequate fish stocks exist for the use and enjoyment of current and future generations of Manitobans, to promote local involvement of fisheries resource stakeholders, and to increase public understanding of the importance and value of fish and fish habitat.

Key Results Achieved:

- Staff received 48 project applications of which 32 projects were funded.
- The annual Fisheries Enhancement Stamp Competition was held in September 2011. The winning artwork "Northern Redbelly Dace" painted by Lesley Nakonechny was unveiled at Oak Hammock Marsh.

Table FE.1
12.5(d) Fisheries Enhancement Fund

Expenditures by Sub-appropriation	Actual 2011/12 \$(000)	FTEs	Estimate 2011/12 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Other Expenditures	823		850	(27)	
Total 12.5(d)	823		850	(27)	

**Table FI.2
Licensed Fishers Employed in Manitoba Commercial Fishery, 2010/2011**

	Northern Lakes	Lake Winnipeg	Lake Manitoba	Lake Wpgosis	Other Lakes	Overall*
Summer						
Licence Holders	353	817	3	30	49	1,256
Winter						
Licence Holders	192	165	342	162	166	1,027
Annual						
Licence Holders	410	867	343	165	171	1,956

Note: Those who fish in more than one area or season, or who fish both as hired persons and licence holders, are counted only once in the appropriate total column. Commercial fishing licences are issued on a fiscal year basis (April 1st - March 31st). Commercial fishing statistics for 2011/2012 were not available in time to be included in this report. They will appear in the annual report for the next fiscal year.

*Annually, licensed commercial fishers hire approximately 1,000 hired men/helpers.

**Table FI.3
Commercial Fishing Production (Round Weight kg), Total Value and Employment
(Licensed Fishers) 2000/2001 to 2010/2011.**

Year	Northern Lakes		Lake Winnipeg		Lake Manitoba	
	Weight (kg)	\$ Value	Weight (kg)	\$ Value	Weight (kg)	\$ Value
2000-01	3,318,650	5,608,800	6,217,850	20,386,750	2,342,400	2,847,050
2001-02	3,188,100	5,341,850	6,237,950	20,380,350	2,115,750	3,797,100
2002-03	3,260,350	5,750,000	6,204,150	20,894,400	2,286,850	2,877,650
2003-04	3,025,250	4,883,100	6,543,300	17,030,250	1,995,650	1,992,400
2004-05	2,813,900	4,299,400	6,380,100	16,724,900	1,362,650	1,046,900
2005-06	2,231,600	3,135,350	6,397,500	16,736,250	1,074,000	1,201,500
2006-07	2,294,400	3,900,400	6,355,550	17,707,500	1,211,950	1,575,500
2007-08	2,140,916	3,013,438	6,201,620	17,797,541	935,164	1,261,735
2008-09	1,891,950	2,926,796	6,818,695	19,623,797	928,023	1,473,616
2009-10	1,852,977	2,504,732	6,763,585	18,640,267	795,132	1,355,354
2010-11	1,744,327	2,269,535	6,379,666	15,792,411	395,319	769,116

Year	Lake Winnipegosis		Other Lakes		Manitoba Total		No. of Licencees*
	Weight (kg)	\$ Value	Weight (kg)	\$ Value	Weight (kg)	\$ Value	
2000-01	2,753,550	2,004,200	892,250	1,131,450	15,524,700	31,978,250	2,228
2001-02	2,577,000	1,846,600	702,400	917,200	14,821,200	32,283,100	2,156
2002-03	2,681,150	1,416,400	661,250	827,800	15,093,750	31,766,250	2,204
2003-04	2,221,550	1,111,300	1,171,200	1,832,850	14,956,950	26,849,900	2,354
2004-05	1,079,350	842,000	1,113,800	1,826,650	12,749,800	24,739,850	2,404
2005-06	1,343,600	854,000	1,016,600	1,852,500	12,063,300	23,779,600	2,310
2006-07	1,228,900	916,500	1,110,450	1,879,400	12,201,250	25,979,300	2,206
2007-08	1,143,477	799,159	722,618	821,282	11,143,795	23,693,155	2,167
2008-09	1,451,871	1,285,677	1,039,638	1,428,048	12,130,177	26,737,934	2,048
2009-10	1,299,150	983,968	1,088,249	1,686,030	11,799,093	25,170,351	1,979
2010-11	794,838	814,564	1,009,939	1,494,951	10,324,096	21,140,584	1,956

NOTE:

Total value includes both Initial Value and Final Payment. Commercial fishing statistics prior to 2007/2008 were based on a fiscal year (April 1st - March 31st). Statistics from 2007/2008 on are based on a "fishing year" (May 1st - April 30th). Statistics for 2011/2012 were not available in time to be included in this report. They will appear in the annual report for 2012/2013.

*Annually, licensed commercial fishers hire approximately 1,000 hired men/helpers.

Table FI.4
Commercial Fishing Production (Round Weight kg) by Area and Total Value by Species, 2010/11.

Species	Northern Lakes		Lake Winnipeg		Lake Manitoba		Lake Winnipegosis	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Bass	0	0	4,030	6,030	0	1	0	0
Carp	177	0	240	41	0	896	0	598
Carp Roe	0	0	36	0	0	6	0	5
Goldeye	2,464	2	5,042	311	0	4	2	1
Mullet	179,487	42,151	50,271	6,947	0	48,665	137,820	79,089
Northern Pike	494,721	101,828	50,368	3,896	0	93,892	60,391	321,655
Perch	231	1,324	7,101	1,092	0	142,261	5	356
Pickereel	443,473	18,377	4,185,822	312,548	0	97,596	97,661	25,895
Pike Roe	0	4,537	0	58	0	1,004	0	10,675
Sauger	8,723	552	67,187	156,653	0	5,598	0	2
Trout	47,036	477	30	0	0	0	0	0
Tullibee	34,594	8,839	0	0	0	0	0	0
Tullibee Roe	894	0	0	0	0	0	0	0
Whitefish	275,374	73,752	844,910	658,971	0	5,396	20,003	40,649
Whitefish Roe	5,313	0	18,083	0	0	0	0	34
Total	1,492,487	251,839	5,233,120	1,146,547	0	395,319	315,878	478,959
Species	Other Lakes ¹		Total Production			Total Value \$ ²		
	Summer	Winter	Summer	Winter	Total	Summer	Winter	Total
Bass	0	0	4,030	6,031	10,061	1,808	3,124	4,932
Carp	0	2,171	417	3,706	4,123	0	172	172
Carp Roe	0	163	36	174	210	65	335	400
Goldeye	0	0	7,508	318	7,826	19,727	937	20,664
Mullet	89,075	52,338	456,653	229,192	685,845	139,227	72,636	211,863
Northern Pike	154,573	236,023	760,053	757,294	1,517,347	505,978	511,786	1,017,764
Perch	13	12,863	7,350	157,896	165,246	13,325	409,881	423,206
Pickereel	239,364	95,551	4,966,320	549,967	5,516,287	13,772,771	1,780,084	15,552,855
Pike Roe	0	8,169	0	24,443	24,443	0	119,754	119,754
Sauger	38	71	75,948	162,876	238,824	166,600	438,343	604,943
Trout	0	0	47,066	477	47,543	30,098	288	30,386
Tullibee	0	843	34,594	9,682	44,276	18,043	4,663	22,706
Tullibee Roe	0	0	894	0	894	5,212	0	5,212

Whitefish	56,904	60,109	1,197,191	838,877	2,036,068	1,445,201	1,541,353	2,986,554
Whitefish Roe	1,673	0	25,069	34	25,103	138,981	192	139,173
Total	541,640	468,301	7,583,124	2,740,964	10,324,096	16,257,036	4,883,548	21,140,584

¹ Includes; Cedar, Chitek, Crab, Dauphin, Inland, Little Limestone, Little Strong, Pelican, Red Deer, St Martin, Swan, Tan, Waterhen, William.

² Total \$ Value includes both initial value and final payments.

NOTE: Commercial fishing statistics are based on a "fishing year" (May 1st - April 30th). Statistics for 2011/2012 were not available in time to be included in this report. They will appear in the annual report for 2012/2013.

**Table FI. 5
Angling Licence Sales and Revenue 1997/98 to 2010/11**

Year	Resident/Manitoba – Senior Conservation			Total: Resident of Manitoba Senior	
	Number	Fee \$	Revenue \$	Number	Revenue \$
1997/98	7,878	5.61	36,615.58	7,878	36,615.58
1998/99	8,700	5.61	40,315.00	8,700	40,315.00
1999/00	8,935	5.61	41,411.35	8,935	41,411.35
2000/01	8,532	5.61	39,537.52	8,532	39,537.52
2001/02	8,621	5.61	39,940.81	8,621	39,940.81
2002/03	8,341	5.61	38,657.01	8,341	38,657.01
2003/04	12,256	0	(9,593.98)	12,256	(9,593.98)
2004/05	12,530	0	(12,050.00)	12,530	(12,050.00)
2005/06	12,977	0	(12,491.00)	12,977	(12,491.00)
2006/07	13,923	0	(13,394.00)	13,923	(13,394.00)
2007/08	13,978	0	(13,518.00)	13,978	(13,518.00)
2008/09	14,585	0	(14,069.00)	14,585	(14,069.00)
2009/10	15,139	0	(14,579.00)	15,139	(14,579.00)
2010/11	15,353	0	(14,812.00)	15,353	(14,812.00)

Year	Resident of Manitoba- Regular			Resident of Manitoba- Conservation			Total: Resident of Manitoba (includes Sr. licenses above)	
	Number	Fee \$	Revenue \$	Number	Fee \$	Revenue \$	Number	Revenue \$
2004/05	44,885	15.89	669,173.65	73,934	10.28	686,978.52	131,349	1,344,102.17
2005/06	44,851	15.89	668,658.39	71,155	10.28	661,127.40	128,983	1,317,294.79
2006/07	46,810	15.89	697,872.90	74,851	10.28	695,393.28	135,584	1,379,872.18
2007/08	48,997	15.89	730,453.33	71,741	10.28	666,559.48	134,716	1,383,494.81
2008/09	50,196	18.89	898,899.44	72,379	13.28	889,604.12	137,160	1,774,434.56
2009/10	51,983	18.89	930,843.87	74,239	13.28	912,479.92	141,361	1,828,744.79
2010/11	53,284	18.89	954,034.76	72,225	13.28	887,663.00	140,862	1,826,885.76

Year	Resident of Canada-Regular			Resident of Canada- Conservation			Total: Resident of Canada	
	Number	Fee \$	Revenue \$	Number	Fee \$	Revenue \$	Number	Revenue \$
1993/94	58,833	12.50	706,624.50	73,227	7.50	512,963.00	132,060	1,219,587.50
1994/95	57,783	12.50	694,044.00	77,716	7.50	544,498.00	135,499	1,238,542.00
1995/96	55,235	12.50	663,355.00	76,844	7.50	538,289.00	132,079	1,201,644.00
1996/97	52,158	12.50	626,742.00	75,081	7.50	526,422.50	127,239	1,153,164.50
1997/98	51,859	14.02	676,760.18	73,603	8.41	546,849.23	125,462	1,223,609.41
1998/99	57,381	14.02	748,238.62	84,000	8.41	623,386.00	141,381	1,371,624.62
Continued...								

Year	Resident of Canada-Regular			Resident of Canada-Conservation			Total: Resident of Canada	
	Number	Fee \$	Revenue \$	Number	Fee \$	Revenue \$	Number	Revenue \$
1999/00	57,567	14.02	750,690.37	84,938	8.41	630,356.58	142,505	1,381,046.92
2000/01	56,092	14.02	731,276.84	85,256	8.41	632,700.96	141,348	1,363,977.80
2001/02	56,951	14.02	742,473.02	86,223	8.41	639,893.43	143,174	1,382,366.45
2002/03	54,801	14.02	714,456.02	81,629	8.41	605,678.89	136,430	1,320,134.91
2003/04	53,995	14.02	703,974.90	82,576	8.41	612,873.16	136,571	1,316,848.06
2004/05	1,906	37.38	69,383.28	8,939	18.69	158,350.91	10,845	227,734.19
2005/06	1,705	37.38	62,055.90	8,495	18.69	150,422.55	10,200	212,478.45
2006/07	1,831	37.38	66,634.78	9,106	18.69	161,263.14	10,937	227,897.92
2007/08	2,101	37.38	76,469.38	9,139	18.69	161,851.91	11,240	238,321.29
2008/09	2,043	40.38	80,495.34	9,626	21.69	199,366.94	11,669	279,862.28
2009/10	2,150	40.38	84,714.00	10,055	21.69	208,258.95	12,205	292,972.95
2010/11	2,085	40.38	82,149.30	9,759	21.69	202,126.71	11,884	284,276.01

Year	Non-Resident of Canada – Regular			Non-Resident of Canada-Conservation			Total: Non-Resident of Canada	
	Number	Fee \$	Revenue \$	Number	Fee \$	Revenue \$	Number	Revenue \$
1993/94	8,770	32.50	280,744.00	20,742	17.50	352,905.50	29,512	633,649.50
1994/95	8,299	32.50	265,668.50	21,906	17.50	372,702.50	30,205	638,371.00
1995/96	7,821	32.50	250,369.50	22,448	17.50	381,856.00	30,269	632,225.50
1996/97	6,840	32.50	218,945.50	21,757	17.50	370,199.50	28,597	589,145.00
1997/98	6,712	37.38	244,557.56	23,406	20.56	458,473.36	30,118	703,030.92
1998/99	7,149	37.38	260,237.62	26,223	20.56	513,312.88	33,372	773,550.50
1999/00	7,192	37.38	261,840.96	27,151	20.56	531,532.56	34,343	793,373.52
2000/01	6,130	37.38	223,166.40	29,959	20.56	586,452.04	36,089	809,618.44
2001/02	6,120	37.38	222,788.60	27,716	20.56	542,490.96	33,836	765,269.56
2002/03	6,075	37.38	221,122.50	26,121	20.56	511,251.76	32,196	732,374.26
2003/04	5,974	37.38	217,466.12	24,952	20.56	488,348.12	30,926	705,814.24
2004/05	4,755	51.40	239,777.00	24,089	28.04	651,714.56	28,844	891,491.56
2005/06	4,271	51.40	215,364.40	23,116	28.04	625,376.64	27,387	840,741.04
2006/07	3,694	51.40	186,241.60	21,353	28.04	577,719.12	25,047	763,960.72
2007/08	3,331	51.40	167,975.40	20,448	28.04	553,163.92	23,779	721,139.32
2008/09	2,773	54.40	148,145.20	17,597	31.04	528,931.88	20,370	677,077.08
2009/10	2,637	54.40	140,908.80	14,801	31.04	444,855.04	17,438	585,763.84
2010/11	2,509	54.40	134,064.60	15,275	31.04	459,135.00	17,784	593,199.60

Year	Total Regular Licenses		Total Conservation Licenses		Total Licenses	
	Number	Revenue \$	Number	Revenue \$	Number	Revenue \$
1993/94	67,603	987,368.50	93,969	865,868.50	161,572	1,853,237.00
1994/95	66,082	959,712.50	99,622	917,200.50	165,704	1,876,913.00
1995/96	63,056	913,724.50	99,292	920,145.00	162,348	1,833,869.50
1996/97	58,998	845,687.50	96,838	896,622.00	155,836	1,742,309.50
1997/98	58,571	921,317.74	104,887	1,041,938.17	163,458	1,963,255.91
1998/99	64,530	1,008,476.24	118,923	1,177,013.88	183,453	2,185,490.12
1999/00	64,759	1,012,531.20	121,024	1,203,300.49	185,783	2,215,831.79
2000/01	62,222	954,443.24	123,747	1,258,690.52	185,969	2,213,133.76
2001/02	63,071	965,251.62	122,560	1,222,325.20	185,631	2,187,576.82
2002/03	60,876	935,578.52	116,091	1,155,587.66	176,967	2,091,166.18
2003/04	59,969	921,441.02	119,784	1,091,627.30	179,753	2,013,068.32
2004/05	51,546	978,333.93	119,492	1,484,993.99	171,038	2,463,327.92
2005/06	50,827	946,078.29	115,743	1,424,435.59	166,570	2,370,513.88
2006/07	52,335	950,749.28	119,233	1,420,981.50	171,568	2,371,730.70
2007/08	54,431	974,898.11	115,306	1,381,575.31	169,737	2,356,473.42
2008/09	55,012	1,127,539.98	114,187	1,617,902.94	169,199	2,745,442.92
2009/10	56,770	1,156,466.67	114,234	1,565,593.91	171,004	2,707,482.00
2010/11	57,878	1,170,248.66	112,612	1,548,924.71	170,490	2,719,173.37

Note: Revenue figures are net (less vendor's commission).
Resident of Manitoba Senior's Conservation Licenses were introduced in 1998/99.
Starting with the 1999/2000 season – angling licenses will be valid from May 1 – April 30.
License sale statistics for the 2011/2012 Annual Report will be based on the most recent complete season (i.e. the 2010/2011 season).
Resident of Canada, Non Resident of Manitoba Regular and Conservation Licenses were introduced in 2004/2005.

Table FI.6
Bait Fishing Industry Statistics

	Year				
	2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
No. of licensed bait fish Fishers (frozen & live)	64	61	61	64	63
No. licensed for collection of live bait fish	36	32	33	32	33
No. of leech harvesters	23	22	22	21	22
No. of live bait dealers	52	42	47	46	43
No. of kgs of Frozen Bait Fish Produced	65,900	108,350	103,300	102,710	79,200
No. of live bait fish Produced (dozen)	127,180	93,100	78,720	105,900	114,880
No. of kgs of Leeches Produced	1,480	1,500	1,080	1,180	1,120
Estimated Gross sales					
Live bait fish	\$199,070	\$141,670	\$143,990	\$198,690	\$209,620
Frozen bait fish	\$531,720	\$812,960	\$805,650	\$834,630	\$814,180
Leeches	\$73,380	\$86,300	\$59,200	\$66,450	\$65,800
Total	\$804,170	\$1,040,930	\$1,008,840	\$1,099,770	\$1,089,600

**Table FI.7
Manitoba Fish Farming Statistics**

		Year				
		2007/2008	2008/2009	2009/2010	2010/2011	2011/2012
No. of Licensed Operators		31	29	29	27	27
	Species					
No. of Eggs Imported	Rainbow Trout	27,500	114,000	179,000	0	110,000
	Arctic Char	0	0	0	10,000	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Fingerlings Imported	Rainbow Trout	120,800	125,300	109,500	189,810	93,000
	Arctic Char	0	0	0	0	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Eggs/Fry Purchased in Manitoba	Rainbow Trout	0	0	0	0	400
	Arctic Char	30,000	129,000	140,000	0	0
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	0
No. of Fingerlings Purchased in Manitoba	Rainbow Trout	6,850	22,750	13,000	5,600	5,000
	Arctic Char	0	43,540	41,580	73,900	2,000
	Brook Trout	0	200	0	1,000	500
	Other	0	0	0	0	0
No. of Fingerlings Sold	Rainbow Trout	170,050	183,800	169,200	86,000	141,800
	Arctic Char	30,000	43,540	68,370	60,000	2,000
	Brook Trout	0	0	0	0	0
	Other	0	0	0	0	100,000
No. of kegs of Fish Sold	Rainbow Trout	21,100	20,180	7,060	92,200	9,560
	Arctic Char	4,000	30,130	52,110	8,180	20,710
	Brook Trout	0	35	0	0	0
	Other	20	0	0	0	0
No. of Fingerling Customers		652	803	845	328	305

Conservation District and Watershed Assistance

The Conservation Districts Program is a partnership between the Province and the participating municipalities to provide for the conservation, control and prudent use of resources through the establishment of conservation districts, under *The Conservation Districts Act*.

The mandate of the program is to promote the sustainable use and management of land, water and related resources on a watershed basis. The Province promotes watershed based partnerships with municipalities to: develop integrated watershed management plans; implement voluntary, incentive based programs and projects through partnerships that address risks to water resources and aquatic ecosystems; and ensure that the ecological integrity and overall health of each watershed is protected by empowering the local district boards to make decisions that will have impacts for present and future generations.

Manitoba provides grants to support the Conservation Districts Program in areas such as water protection, water management, soil conservation, water storage, wildlife habitat, historic resources and recreation, public education, administration and a variety of other programs that promote sustainable resource management.

In 2011/12 provincial grants totalling \$5,615,000.00 were provided to 18 Conservation Districts, as follows:

Alonsa	\$ 290,000.00
Assiniboine Hills	\$ 255,000.00
Cooks Creek	\$ 325,000.00
East Interlake	\$ 335,000.00
Inter-Mountain	\$ 305,000.00
Kelsey	\$ 164,000.00
Lake of the Prairies	\$ 190,000.00
La Salle Redboine	\$ 300,000.00
Little Saskatchewan River	\$ 195,000.00
Pembina Valley	\$ 410,000.00
Seine-Rat River	\$ 340,000.00
Swan Lake Watershed	\$ 210,447.50
Turtle Mountain	\$ 345,000.00
Turtle River Watershed	\$ 460,000.00
Upper Assiniboine River	\$ 300,000.00
West Interlake	\$ 155,000.00
West Souris	\$ 226,000.00
Whitemud Watershed	\$ 750,000.00
Watershed Planning Grant / Governance Workshop	\$ 59,552.50
Total	\$ 5,615,000.00

The annual budgets and activities of the eighteen conservation districts are overseen and directed by the Conservation Districts Commission, chaired by the Deputy Minister of Conservation and Water Stewardship. The Conservation Districts Commission is comprised of ten people having a direct relationship with the program (six departmental deputy ministers, one representative from the Manitoba Conservation Districts Association, one representative from the Association of Manitoba Municipalities, and two private citizens). Watershed Planning and Program staff provides assistance to the Conservation Districts in developing sustainable, integrated watershed management plans, administering provincial grant funding, implementing policy for and monitoring the activities of the Conservation District Program.

Table CA.1**12.5(e) Conservation District and Watershed Assistance**

Expenditures by Sub- appropriation	Actual 2011/12 \$(000)	FTEs	Estimate 2011/12 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Other Expenditures	5,613		5,615	(2)	
Less Recoverable from Other Appropriations	(1,165)		(1,165)	0	
Total 12.5(e)	4,448		4,450	(2)	

Office of Drinking Water

Key Results Achieved:

- Work focused on expansion of the provincial regulatory oversight program for semi-public water systems, including hospitals, schools, daycare facilities and personal care homes; implementation of chemical standards for public water systems; and ongoing monitoring of the operation and construction activities associated with the 421 public water systems that comprise the primary drinking water supplies for over 85% of Manitobans.
- Monitored water quality (raw and treated) through review of laboratory analytical results of bacteriological monitoring for 421 public water systems and 309 semi-public water systems.
- Undertook 260 routine and unscheduled on-site inspections of public water systems to verify their adequacy and reliability for producing and distributing safe water, and 85 inspections of semi-public water systems to verify their adequacy and reliability for producing safe water and to initiate the semi-public water system licensing process.
- Issued 56 public water system licence renewals and 74 new semi-public water system licences, bringing the total number of licensed semi-public water systems to 100.
- Prepared and distributed to owners, 360 public water system report cards (annual audits) assessing the performance of 421 public water systems with regard to meeting the conditions outlined in their operating licence.
- Reviewed design plans and specifications for approximately 80 public water system projects and 10 semi-public water system projects, and issued 70 *Drinking Water Safety Act* permits for construction or alteration of water systems. Conducted 10 post-commissioning inspections of newly constructed or upgraded water treatment plants.
- Continued the review of engineering assessment reports for public water systems to support owners and operators in making water system improvements.
- Initiated the process of reviewing and responding to compliance plans for non-compliant public water systems outlining steps they intend to take to meet new and existing standards. Approved 40 statements of compliance for public water systems that already meet the standards.
- Continued to work with the Department of Health on the issuance of water quality advisories relating to low level, long term health risks associated with chemical standards including the issuance of four water quality advisories to public water systems with treated water quality arsenic levels exceeding the standard.
- Conducted research studies on levels of currently unregulated disinfection by-products, including haloacetic acids (HAAs) and N-nitrosodimethylamine (NDMA), in Manitoba public water systems.
- Continued to provide input into the development of the *Guidelines for Canadian Drinking Water Quality* through the Federal-Provincial-Territorial Committee on Drinking Water.
- Continued to work with Manitoba Health on the development of policies and procedures relating to non-potable systems, and on the registration of non-potable systems.
- Participated in the development of integrated watershed management plans as they relate to drinking water source protection, including review and input into two new watershed management plans.
- Reviewed and provided comment on 58 subdivision proposals and planning documents.

- Participated in the co-ordination of operator training and certification programs to ensure compliance with the requirements of the Water and Wastewater Certification Regulation administered by Environmental Approvals.
- Facilitated the provision of on-going educational opportunities (workshops and seminars) for Water and Wastewater System Operators through representation on the Manitoba Water and Wastewater Association Board.
- Provided on-going technical support to water treatment plant operators in need of such service, and to emergency response services for environmental accidents involving drinking water.

**Table ODW.1
12.5(f) Office of Drinking Water**

Expenditures by Sub- appropriation	Actual 2011/12 \$(000)	FTEs	Estimate 2011/12 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	1,515	28.00	1,852	(337)	1
Other Expenditures	642		1,093	(451)	2
Total 12.5(f)	2,157	28.00	2,945	(788)	

1. Under expenditure in Salaries and Employee Benefits due to vacancy management.
2. Under expenditure in Other Expenditures due to lower laboratory and other operating costs.

Drainage and Water Control Licensing

This Branch ensures that private and municipal drainage, dams and other water control works are constructed, established, operated and maintained in accordance with *The Water Rights Act*.

Key Results Achieved:

- Licensing – Drainage and Water Control Works Licensing Branch received 2,500 new applications and issued 1,800 licences. More than 700 subdivisions and 300 crown land sales were reviewed by Branch staff.
- Enforcement – A total of 14 fines were issued, six “long-form” charges were laid and 24 Orders were issued. Fines, charges and Orders are issued to ensure compliance with *The Water Rights Act*.
- Policy Review – A new policy on authorization of municipal minor works was announced in 2011. Highlights include, expanding the definition of minor works to include more low-impact works typically constructed by municipalities, and allowing for quicker approval of proposed minor works. This policy has been adopted and is being implemented across the province. Many municipalities are taking advantage of the new policy which has resulted in a streamlined licensing process for minor works.
- Information Management – Data migration into a section database continues. As well, work continues on the development of a new database designed to serve the Branch as well as other branches in the Department.

Table DW.1

12.5(g) Drainage and Water Control Licensing

Expenditures by Sub-appropriation	Actual 2011/12 \$(000)	FTEs	Estimate 2011/12 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	1,533	24.00	1,596	(63)	
Other Expenditures	547		535	12	
Total 12.5(g)	2,080	24.00	2,131	(51)	

Water Use Licensing

Water Use Licensing consists of two distinct program areas: the licensing of water abstraction projects as required under the provisions of *The Water Rights Act* and the licensing of water power (hydroelectric) projects under *The Water Power Act*. The common theme of both programs is the allocation of a valuable provincial Crown resource for a beneficial purpose while ensuring the protection of the interests of all Manitobans and potentially directly affected third parties. The academic backgrounds of staff include engineers, hydrogeologists, environmental scientists, engineering technologists, and a database management specialist.

Water Rights Licensing Program:

Working under the authority of *The Water Rights Act*, staff of the Water Rights Licensing program process applications requesting the allocation of surface water or groundwater for municipal, agricultural (i.e. livestock), industrial, irrigation and other purposes. All new projects require the issuance of either a Development Authorization for surface water projects or a Groundwater Exploration Permit for groundwater sourced projects in advance of such projects proceeding to construction. Water rights licences are issued to the applicants subsequent to the satisfactory completion of a project. In addition to these instruments, water rights licensing staff also respond to requests to divert water for short term purposes, for example the hydrostatic testing of petroleum products pipelines, for dust suppression purposes on road construction projects, wetting soil base for road compaction projects, etc. In such cases, a letter of authorization is normally issued rather than a formal licence.

Key Result Achieved:

- Over the past year, a process has been developed to replace an existing (legacy) database and knowledge management system with a modern web-based system that will allow for the dissemination of water rights use licensing information over the internet.

Water Power Regulation and Crown Land Development Review:

The Water Power Licensing program is responsible for two important sub-program areas, the most high profile of which is the licensing (or re-licensing) of new and existing water power generating stations and associated water power diversion and/or storage projects. Currently, there are 18 water power projects that have been licensed, some of which were first licensed over 50 years ago. The primary tasks of this program area include: (1) the issuance of water power licences; (2) monitoring of licensing terms and conditions; (3) reviewing of *The Water Power Act and Regulation*; (4) conducting of Crown-Aboriginal consultations in accordance with Section 35 of *the Constitution Act (1982)*; and, (5) the ongoing development of new compliance and reporting tools based on international best practices.

The other sub-program is concerned with the assessment and transfer of lands to Canada to fulfill obligations under the Treaty Land Entitlement program and the disposition of applications to develop Crown land parcels located within the Water Power Licence areas and/or Water Power Reserve areas. Although these projects have a short time frame compared to the licensing of water power projects, they are of great importance to the applicant.

Key Result Achieved:

- In early 2012, a review was completed of Statements and Severance Line Plans received in support of Manitoba Hydro's request for the issuance of a Final Licence for the Churchill River Diversion Project.

- As part of government's responsibility to consult in a meaningful way with First Nations, Metis, and other Aboriginal communities about government decisions that might affect the exercise of Treaty or Aboriginal rights, various Crown-Aboriginal consultations have been conducted with a number of communities for a number of Manitoba Hydro projects. The hydro projects currently the subject of a consultation process include the Churchill River Diversion for a Water Power Final Licence, the Kelsey Re-running Project for an Amending Licence, and the Keeyask Generation Project for an Interim Licence.
- A number of templates were developed to guide the development of support reports including those for short-term extension and short-term amending licences and an annual compliance report for all the 18 water power projects (currently in operation under the *Water Power Act* licences) as well as a Water Power Licensing website to share information related to water power licences with members of the general public.

Table WU.1
12.5(h) Water Use Licensing

Expenditures by Sub-appropriation	Actual 2011/12 \$(000)	FTEs	Estimate 2011/12 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Salaries and Employee Benefits	1,381	21.00	1,442	(61)	
Other Expenditures	157		156	1	
Total 12.5(h)	1,538	21.00	1,598	(60)	

Water Stewardship Initiatives

Water Stewardship Initiatives provides funding for scientific research, innovative policy development, incentives, and projects or activities that improve management or protection of Manitoba's water quality, aquatic ecosystem health, fisheries and includes development and implementation of watershed management and source water protection plans, flood protection and mitigation, and protection of riparian areas and wetlands.

The following initiatives were supported in 2011/12:

- **Development and Implementation of Legislation, Regulations, and Innovative Policies**

Support was continued to protect and restore wetlands including restoring the health of the Province's large marshes and Delta and Netley-Libau marshes and to continue work towards development of an innovative clean water technology strategy for Manitoba.

- **Water Quality Science Protection Initiatives**

Support was provided for operation of the Lake Winnipeg Research Consortium's ship the *MV Namao*, to undertake water quality and fisheries science on Lake Winnipeg including research into *E. coli* at Lake Winnipeg beaches, to protect Manitoba from transboundary activities that may unacceptably impact Manitoba's water, to support work of the South Basin Lake Winnipeg Mayors and Reeves in its Lake Friendly Product Campaign, plus other similar initiatives, and to undertake analysis to assist in setting long-term water quality objectives for phosphorus and nitrogen for Manitoba's water systems including Lake Winnipeg.

- **Fisheries Science Initiatives**

Support was provided to programs aimed at conserving fish stocks in Lake Dauphin, to undertake the necessary assessments to be in position to eco-certify the Province's fisheries, and to work towards establishing a new fisheries resource management board on Lake Winnipeg, to support co-management initiatives with Buffalo Point First Nation, and to support fish culture activities at the Whiteshell Fish Hatchery.

- **Hydrological Science Initiatives**

Support was provided to the operation of approximately 200 hydrometric monitoring sites across Manitoba, operated in partnership with Environment Canada and with Manitoba Hydro.

- **Watershed Planning Initiatives**

Support was provided to conservation districts to assist with the development of integrated watershed management plans and to implement such plans once developed.

- **Water Control and Risk Management Initiatives**

Support was provided for the preparation of emergency preparedness and response plans for a number of the province's dams, for the operation of ice jam mitigation equipment such as the Amphibex on the Red River, and for work related to mitigating the effects of flooding.

- **Boards and Committees to Support Citizen Engagement Initiatives**

Support was provided to the Department's boards and committees including advisory bodies such as the Manitoba Water Council, the Minister's special advisor on Lake Winnipeg, the Manitoba Eco-Network's water caucus, plus others as well as those assisting in the engagement of local citizens in water governance such as the Partners FOR the Saskatchewan River Basin.

- **Water Conservation and Drought Management Initiatives**

Nominal support was initially allocated to assist in the development of drought management plans for Manitoba. However, this work was ultimately covered elsewhere in the Department's budget.

- **Information and Data Management Initiatives**

Support was provided to assist in upgrading the province's extensive library of orthophotography.

Project	Amount (000s)
Development and Implementation of Legislation, Regulations, and Innovative Policies	\$236,210.06
Water Quality Science Protection Initiatives	\$268,318.19
Fisheries Science Initiatives	\$211,100.71
Groundwater Science Initiatives	0
Hydrological Science Initiatives	\$923,100.00
Watershed Planning Initiatives	0
Water Control System Assessments (including Ice Jam Prevention and Mitigation)	\$1,589,771.23
Boards and Committees to Support Citizen Engagement Initiatives	\$79,203.32
Water Conservation and Drought Management Initiatives	0
Information and Data Management Initiatives	\$28,978.45
Flood Mitigation	\$3,944,016.97
Total	\$7,280,698.93

Table WSI.1
12.5(i) Water Stewardship Initiatives

Expenditures by Sub-appropriation	Actual 2011/12 \$(000)	FTEs	Estimate 2011/12 \$(000)	Variance Over/(Under) \$(000)	Expl. No.
Other Expenditures	1,959		3,002	(1,043)	1
Total 12.5(i)	1,959		3,002	(1,043)	

1. Under expenditure in Other Expenditures due to delays and cancellation of program activities and reduced spending in various initiatives, due to 2011 flooding.

COSTS RELATED TO CAPITAL ASSETS

Table ACA.1
12.6 Costs Related to Capital Assets

Expenditures by Sub-appropriation	Actual 2011/12	Estimate 2011/12		Variance Over/(Under)	Expl. No.
	\$(000)	FTE	\$(000)	\$(000)	
(a) General Assets					
(1) Amortization Expense	1,861		1,657	204	
(2) Interest Expense	650		760	(110)	
(b) Infrastructure Assets					
(1) Amortization Expense	2,808		3,039	(231)	
(2) Interest Expense	3,653		3,682	(29)	
Total 12.6	8,972		9,138	(166)	1.

1. Lower infrastructure amortization and interest expense is due to project deferrals as a result of weather, adjustments to project scope, and reprioritization of projects

The in-year cost of acquiring capital assets or assets under construction is provided through Part B - Capital Investment for which amortization and interest expense is reflected as a departmental operating expense. Part B - Capital Investment is highlighted in the following section.

Part B – Capital Investment

General Assets

General Assets provides for the refurbishment and upgrade of facilities and the acquisition of machinery and equipment.

Machinery and equipment purchases included three heavy trucks, five industrial mowers, one Motor Grader, two snowmobiles, two tractors/front end loaders on winter ski trail groomer, two backhoe tractor/excavators, one walk-in freezer unit, two outboard motors, one programmable highway sign, and one tandem industrial trailer.

Facility refurbishments and upgrades include a significant investment in the Polar Bear Holding compound in Churchill, Manitoba.

As well, a significant investment was made by the department in cooperation with the Assiniboine Park Conservancy, for the development of the International Polar Bear Conservation Centre at Winnipeg's Assiniboine Park Zoo.

Infrastructure Assets

Infrastructure provides for the refurbishment and upgrade of facilities and the acquisition of machinery and equipment, which are utilized by the general public in their enjoyment of Manitoba's outdoors.

Key Results Achieved:

- Phase 1 of the redevelopment of the Grand Beach Boardwalk, destroyed by extreme weather in October 2010, was completed. The work included a new sheet pile wall with timber facade, extensive decorative paving, a new railing and a new accessible ramp to beach level.
- Design and construction of the Winnipeg Beach Sea Wall and Safety Railing was completed.
- Design work was completed on the redevelopment of the West Hawk Lake Town-site Road and construction is underway. Improvements include a new road surface, a pedestrian amenity zone, clearly organized parking and a new boat launch.
- Design of the Grindstone Waste Transfer Station was completed and construction is nearing completion.
- Improvements to the existing washrooms at the beach in Birds Hill were initiated.
- Assessment and planning for wastewater facility upgrades at Grand Beach Provincial Park and Spruce Woods Provincial Park were initiated. Design of a new wastewater truck haul lagoon at Dorothy Lake was completed and construction is now complete.
- New water treatment plant upgrades at Watchorn Provincial Park, Hnusa Provincial Park, and Winnipeg Beach Provincial Park were completed.
- Site improvements at Trappist Monastery Provincial Park were initiated with improvements to lighting and drainage. Boundary delineation work is also underway at this site.
- Repairs and improvements are underway to ten parks that suffered significant damage during the 2011 flood event. At Spruce Woods Provincial Park significant repairs have been completed on roads, campsites, the beach, the day use area, and other park infrastructure. Planning work is now underway for a major reparation and redevelopment program for this park.

- Further flood repairs are underway at Asessippi, Oak Lake, Rainbow Beach, and Manipogo Provincial Parks.
- Design of the Duff Roblin Park Centre Building with Observation Tower was completed with anticipated construction start date of fall 2012.
- Green Roof Installation on the Grand Beach Washroom Building and the Birds Hill Shower Building was completed.
- Construction is underway on the relocation of a forty foot viewing tower from the north point on Hecla Island in Hecla Grindstone Provincial Park.
- Design and construction of a new campground office, road and landscape improvements, and a new trailer dump station in St. Malo Provincial Park were initiated and are nearing completion.

Camping Initiatives

As part of the Provincial Camping Initiative, improvements and infrastructure upgrades were made to various campgrounds throughout the Province.

Key Results Achieved:

- Construction of a new fully-serviced 120 site campground at Winnipeg Beach Provincial Park was completed. This development includes three washroom/shower buildings and a new campground office. The campground was designed with energy conservation measures in mind and includes solar heating for hot water, low-flush fixtures and coin-operated showers. The campground was opened to the public in July 2011.

MINOR CAPITAL PROJECTS

Key Results Achieved for Wildlife Related Projects:

At Delta Marsh, the support of research related to marsh water quality, vegetation changes, and the control of hybrid cattail and the effect of common carp. Supported a working group, and entered into agreements with partner agencies to cost share the construction of carp exclusion structures.

- Regulatory approval for the Common Carp Exclusion Project was received from Fisheries and Oceans Canada. Construction was deferred due to the Lake Manitoba flood.

Promoted the control of purple loosestrife, an alien invasive species that threatens biodiversity of local wetlands. Participated on Manitoba Invasive Species Council.

- The Wildlife Lands Unit worked with Ducks Unlimited Canada and the City of Winnipeg to control the spread of purple loosestrife in Manitoba through the Manitoba Purple Loosestrife Project. A bio-control program raised approximately 20,000 beetles that eat this invasive plant were released at loosestrife stands in wetlands across southern Manitoba. A monitoring protocol to evaluate and refine goals of the project was initiated. The Wildlife Lands Unit participated in the Manitoba Invasive Species Council.

Enhanced public satisfaction at various Heritage Marshes, through the acquisition of equipment, increased signage, and completion of numerous smaller projects.

- Public facilities and water control works were improved at the Oak Hammock Marsh Wildlife Management Area.

Sustainable Development Integration

Under The Sustainable Development Act, each department is required to integrate into its annual reporting process information about progress made in incorporating sustainable development into its activities. The section below provides examples of some of the activities the Department has undertaken to incorporate or apply the Principles and Guidelines of Sustainable Development into its everyday operations and activities.

Principles of Sustainable Development

1. Integration of Environmental, Social, Health and Economic Decisions

To meet the intent of Principle # 1, the Department would need to ensure:

- a) its economic decisions and activities adequately reflect environmental, human health and social effects; and
- b) its environmental and health decisions, activities and initiatives adequately take into account economic, human health and social consequences.

Examples:

- Departmental officials continued efforts to maximize long-term economic benefits to fishers and explore opportunities to enhance new markets and develop value added products from underutilized fish while ensuring sustainable harvesting practices.
- Air Quality Management played a key role in overseeing the completion and implementation of the company led Flin Flon Soils Study - Integrated Risk Management Plan - Exposure Reduction Strategy and Actions, jointly with the Government of Saskatchewan.
- The Branch advanced work towards the development of a provincial peatlands stewardship strategy with interest groups and organizations. The Branch also worked intra-departmentally to better understand the carbon values and ecological goods and services provided by boreal forests, wetlands and peatlands.

2. Stewardship

To meet the intent of Principle # 2, the Department would need to ensure:

- a) its plans, policies and decisions ensure the economy, the environment, human health and social well being are managed for the equal benefit of present and future generations; and
- b) its decisions are balanced with tomorrow's effects.

Examples:

- The Department is responsible for management programs that ensure sustainable recreational and commercial fisheries resources. This is accomplished by maintaining or enhancing fish populations and habitat, monitoring harvest, habitat alterations, and allocating resources to provide the greatest benefits to Manitobans.
- Forestry Branch utilizes the latest technology and scientific knowledge to support the management of Manitoba's forest resources sustainably. They also apply statistical techniques to create models for consistently predicting growth, decay, yield and quality of Manitoba's forests.
- Forestry Branch determines sustainable harvest levels (Annual Allowable Cuts) ensuring ecological processes, timber and non-timber resources and values associated with forest ecosystems are accounted for.

- The Wildlife Lands Unit participated in the southwest critical wildlife habitat on Crown Land review to identify potential protected areas and in the identification of provincially significant wetlands to better protect them from adverse impacts.
- Big game populations were evaluated to assist in setting hunting seasons and to determine other management needs. Methods used included winter aerial surveys of populations to estimate abundance, sex and age composition, recruitment and distribution; hunter questionnaires to estimate harvests, hunter effort and hunter distribution; and collection of biological specimens to assess age and reproductive status.

3. Shared Responsibility and Understanding

To meet the intent of Principle # 3, the Department would need to ensure:

- a) it takes responsibility for sustaining the economy, the environment, human health and social well-being and be accountable for its decisions and actions in a spirit of partnership and open co-operation with all Manitobans;
- b) its decisions and activities reflect Manitoba's shared common economic, physical and social environment;
- c) it understands and respects differing economic and social views, values, traditions and aspirations in its decision making and activities; and
- d) it considers and reflects in its decisions and activities the aspirations, needs and views of the people of the various geographical and ethnic groups in Manitoba, including aboriginal peoples to facilitate equitable management of Manitoba's common resources.

Examples:

- Manitoba Conservation and Water Stewardship advanced discussions on a new *Lake Winnipeg Fishery Resource Management Board* that would provide fishers an opportunity for greater participation and input into fisheries management decisions.
- Frontiers Foundation Inc. (Manitoba Division) is an Aboriginal Registered Canadian Charity whose primary goal is to address the urgent housing needs in northern Aboriginal communities. Frontiers Manitoba works with First Nations communities to harvest wood, saw lumber and build houses. Forestry Branch has a representative on the advisory committee and regional staff works with the communities to assist in getting Timber Permits and Work Permits to harvest wood. Garden Hill – Frontiers has built five houses, five more are under construction and the plan is to build five annually.
- A community-based timber volume sampling survey, jointly funded by the province, federal government, and Mathias Colomb Cree Nation, was completed within a portion of the Highrock forest section. The program provided training to participating individuals and enhanced the community's capacity to become engaged in sustainable resource planning and forest development discussions.
- The Aboriginal Relations Branch advocates for the engagement of the Aboriginal community in all aspects of Manitoba Conservation's programs and services. The Branch promotes the inclusion of the Aboriginal community through engagement with leadership, elders, youth & resource users in the planning and decision-making processes. The Aboriginal community brings the world-view and a holistic approach respecting natural law with special consideration to harmony and balance and the seven teachings for seven generations ahead.

4. Prevention

To meet the intent of Principle # 4, the Department would need to ensure:

- a) its activities and decisions and legislation anticipate, and prevent or mitigate, significant adverse economic, environmental, human health and social effects, and
- b) have particular careful regard to its decisions and actions whose impacts are not entirely certain but which, on reasonable and well-informed grounds, appear to pose serious threats to the economy, the environment, human health and social well being.

Examples:

- Manitoba Conservation participates in the National Forest Pest Strategy initiated by the Canadian Council of Forest Ministers to develop a collaborative, integrated and national approach for optimizing forest pest expertise and resources. Provincial response plans were developed for Mountain Pine Beetle and Emerald Ash Borer.
- *The Forest Act* and Forest Use and Management regulation underwent recent amendments which were proclaimed in March 2011. Where necessary, existing policies and forms were also updated. Various compliance and enforcement options were also explored and a staged implementation approach was initiated.
- The Wildlife Lands Unit participated in the southwest critical wildlife habitat on Crown Land review to identify potential protected areas and in the identification of provincially significant wetlands to better protect them from adverse impacts.
- New programs to collect and properly manage automotive antifreeze, household and vehicle batteries, cell phones, mercury-containing thermostats, and expired medications were approved in April and launched in June.

5. Conservation and Enhancement

To meet the intent of Principle # 5, the Department would need to ensure:

- a) its activities and decisions maintain the ecological processes, biological diversity and life-support systems of the environment;
- b) that renewable natural resources are harvested on a sustainable yield basis;
- c) that those persons who have been allocated provincial resources make wise and efficient use of them; and
- d) its programs and activities enhance the long-term productive capability, quality and capacity of natural ecosystems.

Examples:

- In annual licensing/permitting the use of provincial fisheries resources, the department ensures the long-term sustainability of the fisheries resource while balancing the needs of all resource users.
- The Fisheries Enhancement Fund has funded over 300 projects directed at strengthening fish populations, improving fish habitat, and fisheries education. In 2011/12, the Fisheries Enhancement Fund funded 32 projects totalling \$810,000.
- Manitoba Conservation Data Centre (MBCDC) data was used by The Protected Areas Initiative to set land acquisition goals. Manitoba Habitat Heritage Corporation (MHHC) used MBCDC data during the process of acquiring 43 Conservation Agreements (4051 wetlands, 5380 uplands) totalling 9431 acres of land secured for conservation. The MBCDC was named the outstanding natural heritage program in the Americas receiving the 2011 Conservation Impact Award from the Nature Serve network. The award was given to the MBCDC for partnerships with Manitoba Hydro

and the Manitoba Habitat Heritage Corporation who used MBCDC data to guide their efforts to secure, protect, and manage habitat for at-risk species.

- In 2011, Forestry Branch and industry carried out forest renewal treatments on approximately 6,000 ha. The majority of the harvested areas were planted with approximately 7.9 million trees, delivered through regular tendered contracts. Scarification was used to promote natural regeneration on 1,680.6 ha.
- Wood Supply analyses were completed for FML#1 and Pineland forest section, technical assessments were conducted for Bipole III, and the provincial ACC table was updated to reflect new utilization standards and changes to the available land base.
- Tree improvement program is a long-term investment to increase the productivity of forest plantations by providing genetically improved seed. Seedlings reared from improved seed will have increased growth, better form and wood quality, and improved insect and disease resistance. In 2011, 58.3 hectolitres of cone seeds were collected to provide seed for forest renewal programs and maintain a five year inventory of seed.

6. Rehabilitation and Reclamation

To meet the intent of Principle # 6, the Department would need to ensure:

- a) it actively endeavours to repair or have repaired damage to, or degradation of, the environment; and
- b) that the Department builds into its future allocations of and plans for the use of resources the requirement to rehabilitate and reclaim areas and resources that may be damaged.

Examples:

- Spruce budworm continued to infest certain areas of the province in 2011. Aerial applications of a biosynthetic insecticide were done and resulted in good budworm population suppression and foliage protection.
- An extensive rehabilitation program was undertaken to rehabilitate decommissioned sites in the North East region. A total of 20,800 trees were planted.
- Repairs and improvements are underway to ten parks that suffered significant damage during the 2011 flood event. At Spruce Woods Provincial Park significant repairs have been completed on roads, campsites, the beach, the day use area, and other park infrastructure. Planning work is underway for a major repair and redevelopment program for this park.
- Fisheries Branch implemented the Dauphin River Flood Assistance program as part of the Flood 2011: Building and Recovery Action Plan.

7. Global Responsibility

To meet the intent of Principle # 7, the Department would need to ensure:

- a) it thinks globally when acting locally, recognizing there is economic, ecological and social interdependence among provinces and nation; and
- b) it works co-operatively, within Canada and internationally, to integrate economic, environmental, human health and social factors in decision making while developing comprehensive and equitable solutions to problems.

Examples:

- The department continued in partnership with Fisheries and Oceans Canada as part of the *Canada-Manitoba Fishery Advisory Committee* to renew and strengthen working relationships in areas of mutual interest.

- Manitoba Conservation and Water Stewardship continued eco-certification efforts of Manitoba's commercial fisheries to ensure sustainable fisheries management practices are in place to address global market demands for eco-certified products.
- In 2011, representatives from Forestry Branch attended a Mountain Pine Beetle Response Management Workshop in Alberta and a training session in the Risk Analysis Framework for assessing native and invasive forest pests in Nova Scotia.
- Fisheries Branch began collaborating with researchers from the University of Nebraska in 2011 on a series of projects to understand and improve management of the valuable Red River Channel Catfish fishery. Demographic and food web information was collected.
- CONFORGEN (a Canadian program for conservation of forest genetic resources) is an initiative of a Canada wide network of forest tree genetic experts to promote conservation of genetic resources of native tree species. Forestry Branch representatives participate on the steering committee.
- Under Manitoba's Climate Change Initiative, the Trees For Tomorrow program has planted or provided over four million conifer seedlings or hybrid poplar cuttings since the beginning of the program in 2008. In June 2011, the provincial government provided an additional \$1.23 million to plant an extra one million trees for a new program goal of six million trees to be planted by 2013.

Sustainable Development Guidelines

1. Efficient Uses of Resources

To meet the intent of Guidelines # 1, the Department ensures:

- a) encourage and facilitate development and application and use of systems for proper resource pricing, demand management and resource allocation together with incentives to encourage efficient use of resources; and
- b) employ full-cost accounting to provide better information for decision-makers.

Examples:

- The department participated on national Eco-certification and Traceability task groups reporting through the Canadian Fisheries and Aquaculture Ministers Committee to promote sustainable use of the fisheries resource to meet global market demands.
- Manitoba Conservation and Water Stewardship developed fisheries management plans to ensure resource allocation priorities, efficient use of the resource, and to maximize benefits to all resource users.
- Manitoba Conservation and Water Stewardship continued to implement the Community Whitefish Optimization program on Lake Winnipeg to reduce the potential of fish wastage, and provide opportunities for fishers to maximize economic returns while ensuring the long-term sustainability of the fisheries resource.
- Since 2008, timber dues charged on all Crown timber harvested in Manitoba have been calculated monthly on a commodity based timber pricing system. Under this system, timber dues increase and decrease with fluctuating commodity prices with pre-established minimum rates (base rate).
- The Manitoba Silviculture Technical Committee (MbSTC), comprised of government and industry foresters and technicians, continued its work of exchanging ideas and solutions and providing technology transfer.

- The Forest Practices Committee, comprised of representatives from other branches and departments of the Government of Manitoba and the forest industry, continued to develop guidelines for forestry practices. Conservation published a new guideline entitled Manitoba's Submission Guideline for Forest Management Operating Plans. The committee continues to work on the Forest Pest Management, the Forestry Road Management, Brush Disposal and Landscape Design Guidebooks.

2. Public Participation

To meet the intent of Guideline # 2, the Department ensures:

- a) use and establish forums which encourage and provide opportunity for consultation and meaningful participation in departmental decision making processes by Manitobans;
- b) provide due process, prior notification and appropriate and timely redress for those adversely affected by departmental decisions and actions; and
- c) strive to achieve consensus amongst citizens and the Department with regard to decisions affecting them.

Examples:

- As part of government's obligation to consult with First Nations, Métis and Aboriginal communities in matters related to constitutionally protected Treaty and Aboriginal rights, the Aboriginal Relations Branch participated in Crown-Aboriginal consultations on conservation measures for Walleye stocks on Dauphin Lake and its tributaries.
- Departmental officials undertook public consultation meetings around Lake Manitoba towards the development of a comprehensive fisheries management plan.
- The department chaired Winnipeg's Urban Angling Partnership to promote, encourage and facilitate the sharing of information and stewardship values through outreach programming.
- Forestry Branch participates in several trade shows throughout the year to educate the public on sustainable forest practices and forest pests. They also met with educators at a Science Teachers Association of Manitoba (STAM) meeting.
- For invasive forest pest prevention, the public continues to participate in the Firewood collection program. Over 343 pieces of wood were collected from the firewood collection bins in 2011, reducing the spreading of invasive forest pests.
- Forestry Branch continues to actively participate with and engage First Nation Communities. Forest management Operating Plans were consulted on in the Central, Northeast and Northwest regions. Road decommissioning plans were consulted on in the Eastern region. A total of 42 meetings were held with communities across the province with respect to forest activities. Funding agreements using the Crown-Aboriginal Consultation Participation Fund were developed in the Central and Western Regions.
- Forestry staff participated with consultation with aboriginal communities and stakeholder groups regarding Moose recovery in the Mountain forest section. As part of the Moose management strategy, the accelerated utilization and forwarding of on-hand chipper wood by industry was facilitated.

3. Access to Information

To meet the intent of Guideline # 3, the Department ensures:

- a) improve and refine economic, environmental, human health and social information related to natural resources and the environment; and
- b) provide and promote the opportunity for equal and timely access to its information by all Manitobans.

Examples:

- Manitoba Conservation and Water Stewardship provided fisheries information to the public through the departmental website to enhance access to information by all Manitobans.
- Forestry Branch continues to operate the Provincial Tree Line enabling the public direct access to professional staff that can assist with forestry related concerns. In 2011, Forest Health personnel received and responded to approximately 350 inquiries about insects, diseases and general tree health from the public, industry and provincial staff.
- Website activities in 2011 included regular Forest Management and Development updates: timber pricing, timber sale auction announcements, quota holder information, and a forest practices guideline public review. Key website updates include tree planting contractor information, a new Emerald Ash Borer page and revised Gypsy Moth pages.
- The 24-hour toll free telephone service (1-800-782-0076), aimed at reducing the illegal harvest of fish and wildlife' received 311 calls, resulting in 20 prosecutions and 9 warnings. In addition, the toll free line received 185 calls reporting forest fires.

4. Integrated Decision Making and Planning

To meet the intent of Guideline # 4, the Department ensures:

- a) encourage, facilitate, establish and ensure its decision making and planning processes are efficient, timely, accountable and cross-sectoral; and
- b) incorporate into its decision making and planning an inter-generational perspective of future needs and consequences.

Examples:

- Sustainable Resource and Policy Branch provided a strategic and systematic approach for the Department to cooperate with other governments on environment and natural resource issues, and contributed to a strong role and voice in national discussions on environmental protection in Canada. The Branch represents the department on interdepartmental, provincial, national, and international agencies, boards and committees including for the themes of wetlands, water conservation and efficiency, water security and sustainability, and conservation agreements.
- Helping to reverse the long-term decline in hunter numbers, the hunter education program successfully graduated 3,812 students. Youth licence sales have stabilized in recent years, after dropping in previous decades and a survey on recruitment of individuals attending mentored hunts confirmed the effectiveness of this program.
- Sustainable Resource and Policy Management Branch coordinated the development of a response to the federal government's proposed national recovery strategy for boreal woodland caribou, for submission to Environment Canada in spring 2012. This work was in collaboration with Wildlife Branch and incorporated comments from other provincial departments and agencies into a single response.
- Watershed, Land Use and Protected Areas Branch continued work with 13 water planning authorities to develop integrated watershed management plans with consideration to land and water management, conservation, drinking water quality and aquatic ecosystem protection.

5. Waste Minimization and Substitution

To meet the intent of Guideline # 5, the Department ensures:

- a) encourage and promote, within and outside of the Department, the development and use of substitutes for scarce resources where such substitutes are both environmentally sound and economically viable; and
- b) reduce, reuse, recycle and recover the products the Department uses in its daily operations and encourage, promote and facilitate the 4 R's in society generally.

Examples:

- The Department Chaired a Canadian Council of Ministers of the Environment (CCME) national committee responsible for developing possible approaches to reduce packaging on store shelves in Canada. Following direction from Ministers, Manitoba then co-chaired a joint CCME-Industry task group, developing a set of proposed industry commitments to reduce packaging, which will be presented to Ministers in fall 2012.
- Forestry staff continues to monitor a biomass utilization / measurement trial. This trial involves utilization of hardwood logging waste (mill residue, undersized tops, crooks, sweeps, shattered and short pieces) which is often left in bush following harvest. This biomass can be marketed as hog fuel and color landscape mulch.
- Forestry Branch participated in numerous discussions and workshops to assess biomass opportunities throughout the province. Through a special allocation granted to Tolko, bunker coal fuel was replaced with hardwood hogfuel for their mill operations.
- Pollution Prevention Branch continued to work with Green Manitoba and industry groups to establish new Extended Producer Responsibility programs under the *Household Hazardous Material and Prescribed Material Stewardship Regulation* and the *Electrical and Electronic Equipment Stewardship Regulation*. New programs to collect and properly manage antifreeze, batteries, cell phones, mercury-containing thermostats, and expired medications were approved in April and launched in June. Two other new programs will begin collecting end-of-life electronics, or "e-waste", and other household hazardous waste (HHW) such as paint and fluorescent lighting in 2012.

6. Research and Innovation

To meet the intent of Guideline # 6, the Department ensures:

- a) encourage and assist in the research, development, application and sharing of knowledge and technologies which further economic, environmental, human health and social well-being.

Examples:

- Through a Fisheries Enhancement Fund grant, the department conducted fisheries research (Namao vessel) on Lake Winnipeg to enhance the understanding of the fish community and monitor the health of the lake to ensure a sustainable multi-use fishery for future generations.
- The initial phase of a Climate Change Vulnerability Assessment was completed on the Sandilands Provincial Forest.
- The initial phase of a Climate Change Vulnerability Assessment was completed on the Sandilands Provincial Forest.
- Wildlife Branch is partnering with the University of Manitoba to collect scientific data on wild turkeys that will be used in the creation of a provincial management strategy. A Canada goose harvest management strategy was recently developed with the Mississippi Flyway states.

- Manitoba is a partner in a strategic cross-Canada research initiative on the biology and population dynamics of lynx. Manitoba continues to monitor the apparent 4-year cycle of marten harvest, which is likely tied to the population dynamics of voles. This information is a valuable component in the overall management of the species.
- The Rapid Removal DED Research Project was completed and analyzed by the Department of Entomology, University of Manitoba in 2011. Results of this project indicate there are potential benefits to early removal of diseased elms in DED management communities. This project was a group effort between the City of Winnipeg, Trees Winnipeg (Coalition to Save the Elms), Manitoba Conservation and the University of Manitoba (project lead).

Sustainable Development Procurement Goals

1. Education, Training, and Awareness

To meet the intent of Goal #1, a department would need to ensure a culture that supports sustainable procurement practices exists within their department by:

- (a) increasing awareness about the benefits of Sustainable Development Procurement among departments, employees and vendors; and
- (b) expanding the knowledge and skills of procurement practitioners and end users.

Examples:

- Parks and Natural Areas Branch developed a policy regarding the use of Green Cleaning Products in provincial parks. The policy directs districts to use certified, environmentally-friendly cleaning products in park operations where possible.
- At select parks, Regional Services and Parks Division produces recycling newsletters and other communications to encourage park visitors to make green choices.
- Regional forestry staff assists with delivery of natural science, education and conducts tree planting field trips for elementary school students.
- A Woodland Caribou lesson was jointly created with the Manitoba Model Forest to enhance the Manitoba's social studies curriculum for high school students. The lesson puts students in the role of a GIS Analyst working for Manitoba Conservation to prepare and analyze boreal woodland caribou location.
- Forestry Branch (central and regional staff) supports and participates in Envirothon. Envirothon is an annual hands-on environmental education competition for high school students, designed to encourage team work, problem-solving skills, and public speaking skills while fostering an appreciation for current environmental issue. The Manitoba Forestry Association (MFA) has delivered Manitoba Envirothon since 1996.
- Requests for proposals for microbiological analytical services for public, semi-public and private water systems included consideration of green practices in the evaluation of proposals.

2. Pollution Prevention and Human Health Protection

To meet the intent of Goal #2, a department would need to protect the health and environment of Manitobans from possible adverse effects of their operations and activities, and provide a safe and healthy working environment by:

- (a) reducing their purchase and use of toxic substances; and
- (b) reducing solid waste sent to landfill from Government of Manitoba owned or leased facilities occupied by the department.

Examples:

- Parks and Natural Areas Branch purchased \$20.0 of green cleaning products to pilot a green cleaning products initiative in parks along the Lake Winnipeg Basin in 2011. Further procurement of green products is ongoing at the district level.
- Regional Services and Parks Division has implemented recycling programs at high-visitation parks, as well as selected lower-visitation parks. Products recycled can range from paper, cardboard, tin, glass, plastic, and aluminum.
- Water and wastewater treatment facilities are upgraded as resources allow.
- The review of Crown land applications identifies potential adverse effects of new dispositions to existing adjacent and bordering properties.
- The Pollution Prevention Branch provided funding and staff support to Grand Beach Provincial Park for its recycling, waste management and minimization efforts with the installation of bear proof waste containers, waste transfer station enhancements, and creation of a metal recycling, wood chipping and composting area.

3. Reduction of Fossil Fuel Emissions

To meet the intent of Goal #3, a department would need to reduce fossil fuel emissions of their operations and activities by:

- (a) reducing both consumption and emissions of vehicle fuels; and
- (b) as a substitute for regular fuels, increase their use of ethanol-blended fuels and alternative energy sources.

Examples:

- A hybrid fleet vehicle is used by Manitoba Parks employees to travel to site visits and meetings.
- Regional Services and Parks Division have installed bike racks in many parks to encourage bike use.
- Regional Services and Parks Division, Eastern Region, continues to expand use of electric golf carts for janitorial and maintenance staff operating duties.
- Forestry Branch continues working with the Forest Industry Transportation group, which was created to increase efficiencies in the trucking industry.

4. Resource Conservation

To meet the intent of Goal #4, a department would need to reduce their use and consumption of resources in a sustainable and environmentally preferable manner by:

- (a) reduce the total annual consumption of utilities including natural gas, electricity, propane, fuel oil and water in all leased or owned Government of Manitoba buildings and premises occupied by the department; and
- (b) within the context of reduced resource use, increase the proportion of environmentally preferable products and environmentally preferable services used by the department.

Examples:

- Parks and Natural Areas Branch, has initiated an ongoing Green Building program which includes renovating existing facilities and building new ones that incorporate green building technologies and promote sustainable operations. A major focus of the work currently underway or recently completed is replacing aging and inefficient washroom/shower and office buildings with new or

renovated buildings that conserve resources and are designed to be vandal resistant, easy and more affordable to maintain, inexpensive to service, long lived, and aesthetically pleasing.

Some of the Green Building technologies employed include:

- solar water heating systems
- natural day lighting to reduce dependence on artificial light
- occupancy and daylight sensors for lighting and ventilation
- asphalt shingles with recycled content
- radiant floor heating in the showers
- LED and Power Smart artificial lighting components
- low flow toilets & waterless urinals
- coin operated showers to reduce water usage
- Low VOC finishes
- zero use of CFC in H/VAC
- green roofs

These green technologies have been installed over the past few years in Whiteshell, Duck Mountain, Grand Beach, Birds Hill and Winnipeg Beach Provincial Parks, to name a few.

- Other operating improvements include CFL lights in buildings, solar powered lights in winter warm-up shelters.
- The review and compilation of responses from departmental contacts to provide a balanced approach to land management.
- Conditions of use assigned to Crown land dispositions ensure that development is in accordance with the principles of sustainability.
- Protecting area under the East Side Traditional Lands Planning and Special Protected Areas Act, the World Heritage Site nomination would enhance long term quality and capacity of natural ecosystems.

5. Community Economic Development

To meet the intent of Goal #5, a department would need to ensure that their procurement practices foster and sustain community economic development by:

- (a) increasing the participation of Aboriginal peoples and suppliers in providing for the department's goods and services needs;
- (b) assisting in the development and growth of local environmental industries and markets for environmentally preferable products and services; and
- (c) increasing the participation of small businesses, community based businesses and Co-ops in the department's procurement opportunities.

Examples:

- All Requests for Proposals include an Aboriginal Procurement Initiative section, which serves to increase the participation of Aboriginal business in providing goods and services to Manitoba. Ensure, at minimum, that Provincial-Aboriginal procurement policies are followed.
- Forestry Branch and Eastern Regional staff have participated in meetings held by Edgewater Development Corporation in order to re-establish a forestry development in an area previously held by Tembec.

- From 2008 to 2011 the Forestry Branch tendered and awarded 15 tree planting contracts, a total of 2.9 million seedlings, to aboriginal tree planting companies through the Aboriginal Tree Planting Initiative. A number of smaller tree planting contracts were awarded under the Trees For Tomorrow Program.
- Requests for proposals for microbiological analytical services for public, semi-public and private water systems included consideration of aboriginal procurement initiatives in the evaluation of proposals.
- The Lands Branch, through the First Nation Joint Cottage Lot Development Program is providing economic development opportunities and knowledge transfer through partnerships with Aboriginal communities. Opportunities range from road building and contract management to real property sales and other numerous benefits associated within the development and ongoing servicing of a cottage lot subdivision.
- Through the East Side Traditional Lands Planning and Special Protected Areas Act, land management plans have been developed with First Nations to sustainably protect and manage traditional lands through a formal traditional lands planning process.
- The Commercial Operations Unit of Parks and Natural Areas Branch manages relations with private-sector business operators to ensure high-quality services for visitors. Approximately 134 commercial operations provide such services as restaurants, stores, accommodation, golf courses, marinas, and beach concessions throughout Manitoba's provincial parks.

Revenue and Expenditure Summaries

**Table RE.1
Reconciliation Statement**

DETAILS	\$(000s)
2011-12 MAIN ESTIMATES	\$126,582
MAIN ESTIMATES AUTHORITY TRANSFERRED FROM:	
- Water Stewardship	27,240
Enabling Appropriations	
• Canada-Manitoba Enabling Vote	3,835
• Internal Reform, Workforce Adjustment, and General Salary Increase	1,541
2011-12 ESTIMATE	\$159,198

Table RE.2

Revenue Summary by Source

For the year ended March 31, 2012 with comparative figures for the previous year

Actual 2010-11	Actual 2011-12	Increase (Decrease)	Source	Actual 2011-12	Estimate 2011-12	Variance	Expl. No.
OTHER REVENUE:							
0	69	69	Clean Environment Commission Cost Recovery	69	100	(31)	1.
1,911	1,831	(80)	Cottaging Initiative	1,831	3,837	(2,006)	2.
699	691	(8)	Environment Fees and Sundry	691	539	152	3.
4,356	5,512	1,156	Forestry Fees and Sundry	5,512	4,128	1,384	4.
435	352	(83)	GeoManitoba Fees and Sundry	352	368	(16)	
1,468	1,368	(100)	Land Information Sales and Fees	1,368	1,222	146	
10,220	10,109	(111)	Parks Fees	10,109	9,968	141	
5,633	5,759	126	Regional Operations Fees and Cost Recovery	5,759	4,720	1,039	5.
3,941	3,775	(166)	Wildlife Sundry	3,775	4,178	(403)	6.
225	330	105	Sundry	330	319	11	
2,918	2,958	40	Fisheries Fees and Sundry	2,958	3,107	(149)	
114,850	112,070	(2,780)	Water Power Rentals	112,070	115,000	(2,930)	7.
180	210	30	Water Resources Sundry	210	84	126	
146,836	145,034	(1,802)	Subtotal	145,034	147,570	(2,536)	
GOVERNMENT OF CANADA:							
151	151	0	(a) Waterfowl Crop Damage Prevention	151	151	0	
753	0	(753)	(b) Community Based Timber Volume Sampling-Highrock Forest	0	0	0	
0	0	0	(c) Ecosystem Monitoring Network	25	114	(89)	8.
904	151	(753)	Subtotal	151	265	(114)	
147,740	145,185	(2,555)	Total	145,185	147,835	(2,650)	
SALE OF GOVERNMENT ASSETS:							
93	55	(93)	Sale of Government Assets	55	0	55	

Explanation Number:

1. Lower Clean Environment Commission revenue due to reduced cost recovery in 2011/12.
2. Lower Cottaging Initiative revenue was due to deferral of revenue, as fewer lots were completed to lock up stage.
3. Higher Environment Fees and Sundry revenue was due to increased revenue from Certification Fees for Operators of Water and Waste Water Facilities and On-Site Wastewater management fees.
4. Higher Forestry Fees and Sundry was due to increase in Forest Renewal and Fire Protection charges levied.
5. Higher Regional Operations Fees and Cost Recovery was due to increased fire suppression cost recovery for out of province fire fighting activity.
6. Lower Wildlife Sundry revenue was primarily due to fewer non-resident hunting licences sold.
7. Lower Water Power Rental revenue was due to decreased demand for electricity as a result of mild fall and winter.
8. Lower Ecosystem Monitoring Network revenue was due to no eligible cost shared expenditures incurred as a result of other priority projects.

Table RE.3
Expenditure Summary

For fiscal year ended March 31, 2012 with comparative figures for the previous year.

Estimate 2011/12	Appropriation	Actual 2011/12	Actual 2010/11	Increase (Decrease)	Expl. No.
12-1 Administration and Finance					
37	(a) Minister's Salary	33	37	(4)	
	(b) Executive Support				
675	Salaries and Employee Benefits	655	628	27	
232	Other Expenditures	166	175	(9)	
	(c) Administration & Financial Services				
3,928	Salaries and Employee Benefits	3,783	3,690	93	
1,625	Other Expenditures	1,478	1,748	(270)	
	(d) Sustainable Resource and Policy Management				
1,860	Salaries and Employee Benefits	1,807	1,297	510	
597	Other Expenditures	991	334	657	1.
145	Grant Assistance	139	139	0	
	(e) Watershed, Land Use and Protected Areas Planning				
1,421	Salaries and Employee Benefits	1,251	1,347	(96)	
277	Other Expenditures	247	390	(143)	
	(f) Aboriginal Relations				
609	Salaries and Employee Benefits	621	509	112	
250	Other Expenditures	267	193	74	
826	(g) Wabanong Nakaygum Okimawin	1,059	679	380	2.
	(h) Corporate Crown Land Policy				
224	Salaries and Employee Benefits	197	149	48	
18	Other Expenditures	33	17	16	
	(i) Clean Environment Commission				
311	Salaries and Employee Benefits	329	321	8	
337	Other Expenditures	219	128	91	
13,372	Total 12-1	13,275	11,781	1,494	
12-2 Regional Services and Parks					
	(a) Regional Support Services				
2,330	Salaries and Employee Benefits	2,920	3,160	(240)	
1,421	Other Expenditures	1,893	2,053	(160)	
	(b) Northwest Region				
1,934	Salaries and Employee Benefits	1,837	1,877	(40)	
753	Other Expenditures	759	738	21	
	(c) Northeast Region				
2,169	Salaries and Employee Benefits	2,394	2,205	189	
1,237	Other Expenditures	1,286	1,355	(69)	
	(d) Central Region				
3,490	Salaries and Employee Benefits	3,477	3,356	121	
1,352	Other Expenditures	1,330	1,272	58	
	(e) Eastern Region				
3,343	Salaries and Employee Benefits	3,179	3,378	(199)	
949	Other Expenditures	1,007	1,411	(404)	
	(f) Western Region				
3,209	Salaries and Employee Benefits	3,469	3,363	106	
1,287	Other Expenditures	1,285	1,237	48	
	(g) Parks and Natural Areas				
16,305	Salaries and Employee Benefits	15,588	15,553	35	
10,571	Other Expenditures	11,975	10,008	1,967	3.
472	Grant Assistance	471	477	(6)	

Estimate 2011/12	Appropriation	Actual 2011/12	Actual 2010/11	Increase (Decrease)	Expl. No.
(472)	Less: Recoverable from Rural Economic Development Initiatives	(472)	(472)	0	
6,702	(h) Fire and Emergency Response Program				
11,341	Salaries and Employee Benefits	6,464	6,213	251	
	Other Expenditures	10,162	9,678	484	
(500)	Less: Recoverable from Emergency Expenditures	(488)	(468)	(20)	
67,893	Total 12-2	68,536	66,394	2,142	
	12-3 Conservation Programs				
	(a) Divisional Administration				
148	Salaries and Employee Benefits	189	193	(4)	
331	Other Expenditures	378	404	(26)	
	(b) Forestry				
5,693	Salaries and Employee Benefits	5,312	5,712	(400)	
5,966	Other Expenditures	5,061	5,447	(386)	
23	Grant Assistance	28	23	5	
901	Forest Regeneration Stock	1,088	990	98	
(978)	Less: Recoverable from Urban and Rural Economic Development Initiatives	(748)	(808)	60	
	(c) Wildlife				
3,439	Salaries and Employee Benefits	3,139	3,315	(176)	
1,725	Other Expenditures	2,337	1,457	880	4.
959	Grant Assistance	959	959	0	
354	Canada-Manitoba Waterfowl Damage Prevention Agreement	354	317	37	
50	(d) Habitat Enhancement Fund	50	50	0	
125	(e) Special Conservation and Endangered Species Fund	125	125	0	
	(f) Wildlife Enhancement Initiative				
409	Other Expenditures	403	230	173	
	(g) Lands				
1,831	Salaries and Employee Benefits	1,665	1,622	43	
6,704	Other Expenditures	6,899	4,277	2,622	5.
260	Grant Assistance	216	340	(124)	
	(h) Pollution Prevention				
354	Salaries and Employee Benefits	367	408	(41)	
97	Other Expenditures	97	98	(1)	
	(i) GeoManitoba				
3,532	Salaries and Employee Benefits	2,887	2,867	20	
1,285	Other Expenditures	1,295	1,261	34	
(1,621)	Less: Recoveries from other appropriations	(1,332)	(1,452)	120	
1,126	(j) International Institute for Sustainable Development	1,126	1,176	(50)	
1,726	(k) Green Manitoba Eco Solutions	1,726	2,304	(578)	6.
	(l) Pineland Nursery				
(1,585)	(m) Less: Recoverable from Sustainable Development Innovations Fund	(1,585)	(1,585)	0	
32,854	Total 12-3	32,036	29,730	2,306	
	12-4 Climate Change and Environmental Protection				
	(a) Divisional Administration				
307	Salaries and Employee Benefits	369	310	59	
55	Other Expenditures	43	53	(10)	
	(b) Environmental Services				
2,077	Salaries and Employee Benefits	1,679	1,872	(193)	

Estimate 2011/12	Appropriation	Actual 2011/12	Actual 2010/11	Increase (Decrease)	Expl. No.
1,287	Other Expenditures	2,691	1,517	1,174	7.
	(c) Environmental Operations				
3,593	Salaries and Employee Benefits	3,024	2,752	272	
1,203	Other Expenditures	1,064	833	231	
	(d) Environmental Assessment and Licensing				
1,448	Salaries and Employee Benefits	1,489	1,358	131	
287	Other Expenditures	235	223	12	
	(e) Air Quality Management				
309	Salaries and Employee Benefits	343	330	13	
69	Other Expenditures	75	65	10	
	(f) Climate Change Initiatives				
490	Salaries and Employee Benefits	529	484	45	
461	Other Expenditures	473	391	82	
14	Grant Assistance	14	14	0	
11,600	Total 12-4	12,028	10,202	1,826	
	12-5 Water Stewardship				
	(a) Divisional Administration				
420	Salaries and Employee Benefits	466	477	(11)	
622	Other Expenditures	588	624	(36)	
	(b) Water Science and Management				
2,611	Salaries and Employee Benefits	2,675	2,684	(9)	
1,544	Other Expenditures	1,500	1,196	304	
	(c) Fisheries Branch				
3,176	Salaries and Employee Benefits	2,921	3,018	(97)	
582	Other Expenditures	632	584	48	
410	Grant Assistance	410	410	0	
850	(d) Fisheries Enhancement Fund	823	818	5	
	(e) Conservation District and Watershed Assistance				
5,615	Conservation District and Watershed Assistance	5,613	5,605	8	
(1,165)	Less: Recoverable from Rural Economic Development Initiatives	(1,165)	(1,165)	0	
	(f) Office of Drinking Water				
1,852	Salaries and Employee Benefits	1,515	1,433	82	
1,093	Other Expenditures	642	790	(148)	
	(g) Drainage and Water Control Licensing				
1,596	Salaries and Employee Benefits	1,533	1,566	(33)	
535	Other Expenditures	547	521	26	
	(h) Water Use Licensing				
1,442	Salaries and Employee Benefits	1,381	1,302	79	
156	Other Expenditures	157	154	3	
3,002	(i) Water Stewardship Initiatives	1,959	4,035	(2,076)	8.
24,341	Total 12-5	22,197	24,052	(1,855)	
	12-6 Costs Related to Capital Assets				
	(a) General Assets				
1,657	(1) Amortization Expense	1,861	1,667	194	
760	(2) Interest Expense	650	542	108	
	(b) Infrastructure Assets				
3,039	(1) Amortization Expense	2,808	2,554	254	
3,682	(2) Interest Expense	3,653	3,069	584	
9,138	Total 12-6	8,972	7,832	1,140	
159,198	TOTAL EXPENDITURES	157,044	149,991	7,053	

Estimate 2011/12	Appropriation	Actual 2011/12	Actual 2010/11	Increase (Decrease)	Expl. No.
B.12 Capital Investment					
9,950	(a) General Assets	6,583	4,552	2,031	9.
	(b) Infrastructure Assets				
10,992	(1) Parks Infrastructure Projects	11,926	6,445	5,481	10.
3,265	(2) Camping Improvements	1,826	7,124	(5,298)	11.
2,500	(3) Cottage Lots Development	679	150	529	
26,707	TOTAL B.12 CAPITAL INVESTMENT	21,014	18,271	2,743	

Explanations:

1. The increase of \$657 in 2011/12 operating expenditures was primarily due to Bipole III consultations.
2. The increase of \$380 in 2011/12 operating expenditures was primarily due to grant assistance for East Side land use planning.
3. The increase of \$1,967 in 2011/12 operating expenditures was primarily due to increased operations and maintenance requirements and legal settlements.
4. The increase of \$880 in 2011/12 operating expenditures was primarily due to the Moose Management and Problem Beaver Programs.
5. The increase of \$2,622 in 2011/12 operating expenditures was primarily due to the Province's contribution to the Winnipeg Foundation for the Pimachiowin Aki World Heritage Site Trust Fund.
6. The decrease of \$(578) in 2011/12 grant assistance was primarily due to reduced funding for the Electronic Waste (E-Waste) Round-Up Program and Household Hazardous Waste Diversion Program as a result of transfer of these programs to an industry funded model.
7. The increase of \$1,174 in 2011/12 operating expenditures was primarily due to remediation expenses.
8. The decrease of \$(2,076) in 2011/12 operating expenditures was primarily due to year over year variation in the cost of projects and programs funded by Water Stewardship Initiatives.
9. The increase of \$2,031 in 2011/12 general asset expenditures was primarily due to Assiniboine Park Conservancy Arctic Exhibit Building and Research Centre Building construction costs.
10. The increase of \$5,481 in 2011/12 Parks Infrastructure Project expenditures was primarily due to Grand Beach and North Whiteshell lagoon upgrades.
11. The decrease of \$(5,298) in 2011/12 Camping Improvement expenditures was primarily due to Winnipeg Beach redevelopment project costs in 2010/11

Table RE.4**Five Year Expenditure and Staffing Summary by Appropriation**

For year ending March 31, 2007 – March 31, 2012*

	2007/2008		2008/2009		2009/2010		2010/2011		2011/2012	
	FTEs	\$(000)	FTEs	\$(000)	FTEs	\$(000)	FTEs	\$(000)	FTEs	\$(000)
Administration and Finance	132.83	12,805	135.58	16,948	134.58	12,905	134.58	11,781	134.58	13,275
Regional Services and Parks	592.89	62,095	607.89	62,892	607.89	65,662	616.58	66,394	619.58	68,536
Conservation Programs	192.47	29,207	194.85	37,083	196.85	38,786	196.85	29,730	198.85	32,036
Climate Change and Environmental Protection	124.00	9,335	128.00	7,720	124.00	12,014	126.00	10,202	126.00	12,028
Water Stewardship	152.31	22,248	161.31	24,074	156.31	23,653	159.31	24,052	163.31	22,176
Costs Related to Capital Assets		6,794		6,603		7,266		7,832		8,972
Total Appropriations	1,194.50	142,484	1,227.63	155,320	1,219.63	160,286	1,233.32	149,991	1,242.32	157,044

*Adjusted figures reflect historical date on a comparable basis in those appropriations affected by re-organization, during the years under review.

Performance Reporting Table 2011/12

The following section provides information on key performance measures for the department for the 2011/12 reporting year. This is the fifth year in which all Government of Manitoba departments have included a Performance Measurement section, in a standardized format, in their Annual Reports.

Performance indicators in departmental Annual Reports are intended to complement financial results and provide Manitobans with meaningful and useful information about government activities, and their impact on the province and its citizens.

For more information on performance reporting and the Manitoba government, visit www.manitoba.ca/performance.

Your comments on performance measures are valuable to us. You can send comments or questions to mbperformance@gov.mb.ca.

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	What is the starting point? (base-line data and year) (C)	What is the 09/10 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
Percentage of provincial Crown land co-managed with First Nations.	The amount of co-managed land provides an indication of government's efforts to establish good relationships with First Nations.	The baseline year is 2000/01 - MOUs on co-management were signed.	42.3% co-managed or under negotiation to be co-managed (Note: Actual 09/10 percentage TBC).	Percentage of Crown land under co-management is increasing.	
The availability of high quality outdoor recreation opportunities and experiences for Manitobans; measured by: - Number of improved	It is important to measure the expansion of available recreational campsites because the ability to enjoy outdoor recreation experiences is very important to	The baseline year is 2004/05 – 225 improved campsites were made available to Manitobans that year.	No new campsite improvements were realized in 2011/12, however three additional yurts were added at Kiche Manitou campground. The average campsite occupancy was 35%	From 2004/05 through 2011/12, a total of 902 camping improvements were implemented. Campsite occupancy has held	The Province has made significant commitments with respect to increasing camping and cottaging opportunities for Manitobans.

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	What is the starting point? (base-line data and year) (C)	What is the 09/10 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
<p>campsites made available (e.g., washrooms, showers).</p> <ul style="list-style-type: none"> - Yearly occupation rates of all campsites. 	<p>Manitobans. Camping is a growing activity in Manitoba and it is important to know if the camping program is meeting the needs of Manitobans.</p>		<p>which is up 1.7% from 2010/11.</p>	<p>fairly steady over the past six years, with an average of 34%, a low of 32.7% in 2008/2009.</p>	<p>In 2011/12, seven campgrounds were partially or fully closed due to 2011 flooding in western Manitoba. For further information on recreational opportunities for Manitobans, please see the relevant section of the report.</p>
<p>Number of cottage lots made available to Manitobans.</p>	<p>Providing cottaging opportunities is important to government and Manitobans. Relative affordability of cottage properties is a major reason why Manitoba remains attractive as a place to live.</p>	<p>The baseline year is 2004/05 when the Cottage Lot Program began. The commitment at that time was to create 1,000 new cottage lots. In 2007 government announced another 1,000 new cottage lots would be created under the program. The focus of the Program since 2007 has been on joint</p>	<p>1,441 cottage lots have been made available to Manitobans by the end of 2011/12 through the Cottage Lot Draw and First Come First Served Cottage Lot programs. There are currently 568 lots remaining in inventory. From 2007 to 2009/10 Manitoba entered into Memorandums of Understanding with two First Nations to work towards joint cottage lot development agreements and continues to work towards development.</p>	<p>The number of Manitobans applying/expressing interest for cottage lots through the Cottage Lot Draws and First Come First Served Cottage Lot programs remains consistently high since inception of the program.</p>	<p>Conservation and Fisher River Cree Nation have completed the joint development of the 88 lot Bay River subdivision. Conservation and Black River First Nation have entered into a joint cottage lot development agreement and continues construction of the Black River Cottage lot development.</p> <p>Recent high water levels, flood disasters and significant shoreline</p>

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	What is the starting point? (base-line data and year) (C)	What is the 09/10 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
		cottage lot development with First Nations as a means to create economic opportunities.			erosion issues on Manitoba's major lakes in 2011 may affect demand in future cottage lot offerings. Appropriate assessments are undertaken to ensure these concerns are addressed in the future.
Reduction in environmental liabilities for which the Department is responsible.	Contaminated and impacted sites may be harmful to human health and/or the environment. They need to be tracked to ensure public safety and health and environmental protection.	The baseline year is 2005/06. Recorded value of environmental liabilities was \$39 million as of March 31, 2006.	Recorded value of environmental liabilities for the Department was \$98 million as of March 31, 2012.	Recorded value of environmental liabilities should decrease as sites are remediated, and environmental quality should increase as a result.	Initial identification and assessment phase is complete. Remediation of priority sites is ongoing.
Hectares of protected land in Manitoba.	Protected areas help ensure conservation of biodiversity, maintain natural cycles, provide pristine areas and preserve land for Aboriginal people to maintain their traditional activities. Measuring the growth	The baseline year is 1990 - 350,000 hectares were designated as protected when the Protected Areas Initiative began.	Currently 6.6 million hectares or 10.2% of Manitoba is protected – a significant increase since 1990. This includes two national parks, 22 ecological reserves, all or parts of 44 provincial parks and park reserves, all or parts of 50 wildlife	Since 1990, the area of protected lands has increased from 350,000 hectares to 6,680,000 hectares, as of March 31, 2012.	The two new traditional use planning areas are the first to be designated under The East Side Traditional Lands Planning and Special Protected Areas Act (2009). The total number of

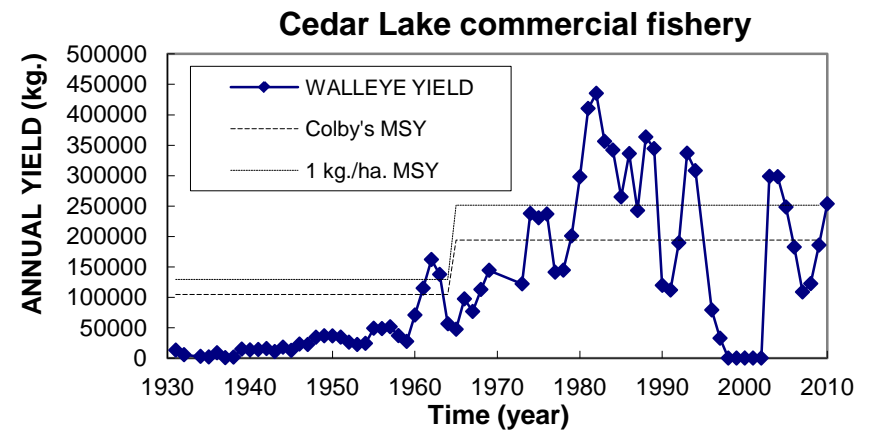
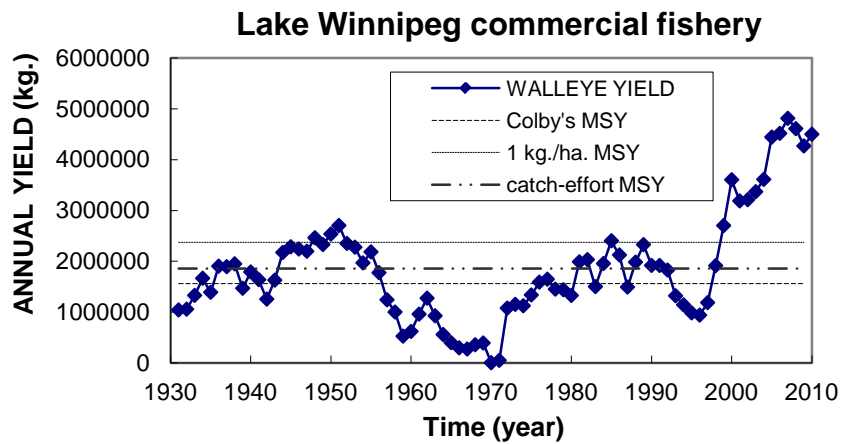
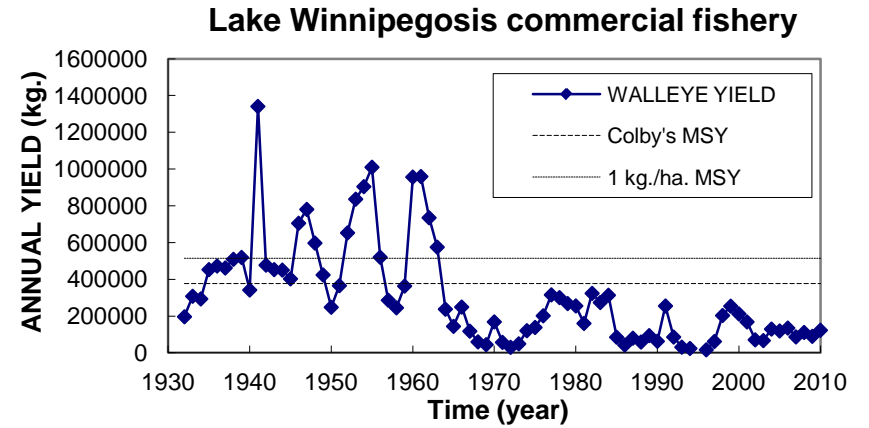
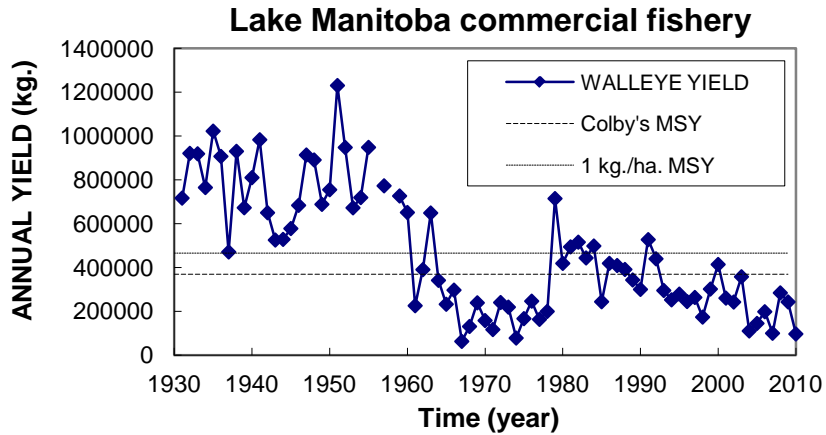
What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	What is the starting point? (base-line data and year) (C)	What is the 09/10 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
	in protected areas will tell us how well we are meeting our goal for protected lands that represent the biodiversity in each of Manitoba's natural regions.		management areas, two areas designated under <i>The Forest Act</i> , two traditional use planning areas, and various parcels of conservation agency-owned private land.		parks and park reserves went from 45 to 44 because the Poplar/Nanowin Park Reserve was designated as the Asatiwisiipe Aki Traditional Use Planning Area.
The number and type of forestry co-management agreements in place, projects or developments undertaken by Aboriginal communities or number of contacts with communities or companies.	Provides an indication of the level of economic development opportunities in the forest sector for Aboriginal communities.	The baseline year is 2008/09.	<p>A total of ten timber allocations of 24,200 m³ of softwood and hardwood to First Nations or Community Councils were provided as Community Awards (7).</p> <p>A total of four tree planting contracts valued at \$126.5 awarded to three First Nations contractors to plant 526,000 million trees.</p> <p>Forestry Branch in Partnership with Mathias Colomb Cree Nation, INAC, Federal First Nations Forestry Program, acquired digital early imagery for the community's Indian</p>	<p>Due to the downturn in the forest economy, requests for community award timber allocations remain low.</p> <p>Increasing involvement in all area of forest renewal.</p> <p>Imagery obtained in 2009 will be interpreted producing a new Forest Lands Inventory for IR areas as part of government's contract (2010-11). Volume sampling partnerships resulted in an</p>	Forestry Branch continues to explore opportunities to engage First Nation involvement within the provincial forest inventory program.

<p>What is being measured and using what indicator? (A)</p>	<p>Why is it important to measure this? (B)</p>	<p>What is the starting point? (base-line data and year) (C)</p>	<p>What is the 09/10 result or most recent available data? (D)</p>	<p>What is the trend over time? (E)</p>	<p>Comments/recent actions/report links (F)</p>
			<p>Reserve (IR) areas, (78,000 ha).</p> <p>Community members from the Mathias Colomb and the Opaskwayak Cree Nations are participating in a \$1.6 million community based timber volume sampling program in the Highrock Forest Section.</p> <p>A funding partnership between Forestry Branch, Indian and Northern Affairs Canada (INAC), and the community of Mathias Colomb Cree Nation (MCCN) will provide opportunities for community members to participate in the fall 2011 implementation of the volume sampling program within the Highrock forest section, which will include field sampling of the community's</p>	<p>accelerated completion of the data collection component of the project.</p> <p>Timber volume sampling within the Highrock forest section will continue into 2011/12.</p> <p>Meetings with Resource planning boards for Split Lake, Cross Lake and Norway House to explore partnership opportunities for imagery acquisition in and around the Nelson River Forest Section. The Province is acquiring imagery in 2011 and 2012.</p>	

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	What is the starting point? (baseline data and year) (C)	What is the 09/10 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
			Treaty Land Entitlement selection areas.		
Hectares of forest burned in the “Red Zone” (priority forested areas) as a percentage of total hectares burned in the province.	Protection of people and property and the surrounding forested areas helps contribute to viable communities in these areas that are primarily in the north.	The baseline year is 2000/01. 0.23% of the highest priority forest protection zone (Red Zone) was burned.	In 2011/12, 0.374% of the highest priority forest protection zone (Red Zone) was burned.	Although this shows an increase from 2000/01 data, due to a large fall fire in SE Manitoba. There is no clear directional trend for this measure because risk of forest fire varies widely from year to year, primarily due to weather conditions.	
The status of fish stocks is being measured by comparing the commercial production of the most economically valuable fish species against Maximum Sustainable Yield (MSY). These comparisons are made for four large commercial fisheries: Lake Winnipeg, Lake Manitoba, Lake Winnipegosis and Cedar lake.	It is important to measure the status of these fish stocks because they are an indicator of both aquatic ecosystem health AND economic opportunity for fishers. It is important to track production (i.e. annual species catch – see graphs, below) against lake-specific MSY, because harvest of consistently valuable species is reflective of	The baseline used for management purposes is MSY and historic annual catch.	See walleye production & MSY graphs, below. Current walleye and mixed species quotas are: Lake Winnipegosis – 263,320 kg (walleye) Lake Manitoba – 907,200 kg (walleye, sauger) Cedar Lake – 496,600 kg (walleye, sauger, goldeye, whitefish) –	Lake Winnipegosis – production has experienced long term decline. Lake Manitoba – production has experienced long term decline. Cedar Lake – recent increases in production reflect five-year closure due to decreased fishery.	Lake Winnipegosis – The Department continued to implement rehabilitation strategies as part of overall stock recovery efforts. Lake Manitoba – The Department is undertaking community meetings to solicit resource user input into the development of a fisheries

What is being measured and using what indicator? (A)	Why is it important to measure this? (B)	What is the starting point? (base-line data and year) (C)	What is the 09/10 result or most recent available data? (D)	What is the trend over time? (E)	Comments/recent actions/report links (F)
	<p>stock abundance.</p> <p>MSY and annual production contribute to the establishment of quotas for each lake.</p>		<p>tolerance: not more than 300,000 can be walleye</p> <p>Lake Winnipeg – 6,500,000 kg (walleye, sauger, whitefish)</p>	<p>Lake Winnipeg – production at record levels but high nutrients and invasive species leaves concerns for stability.</p>	<p>management plan.</p> <p>Cedar Lake – Recovery of fish stocks is not complete. Fishery continues to be adjusted, in accordance with the management plan implemented in June 2006.</p> <p>Lake Winnipeg – Monitoring efforts on Lake Winnipeg will continue because of available staff resources are now in place. A <i>Lake Winnipeg Quota Review Task Force</i> was established to conduct a biological review.</p>

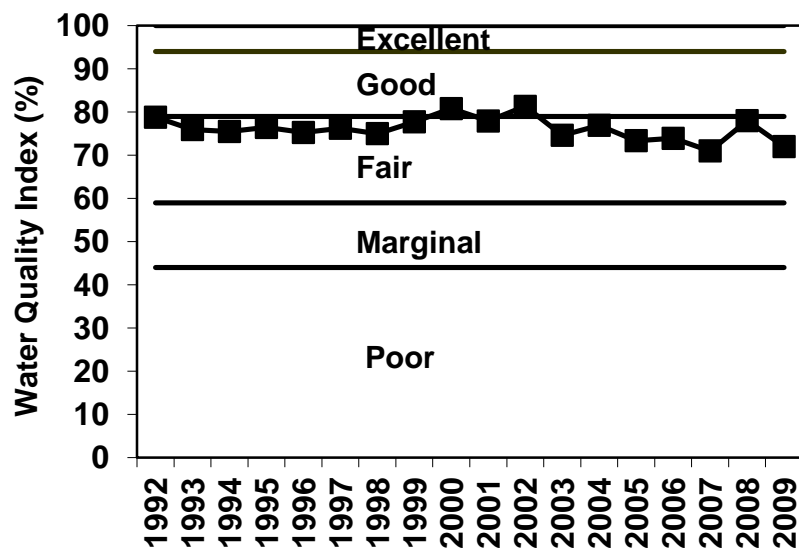
Commercial production and maximum sustainable yield (MSY) on four large Manitoba fisheries.



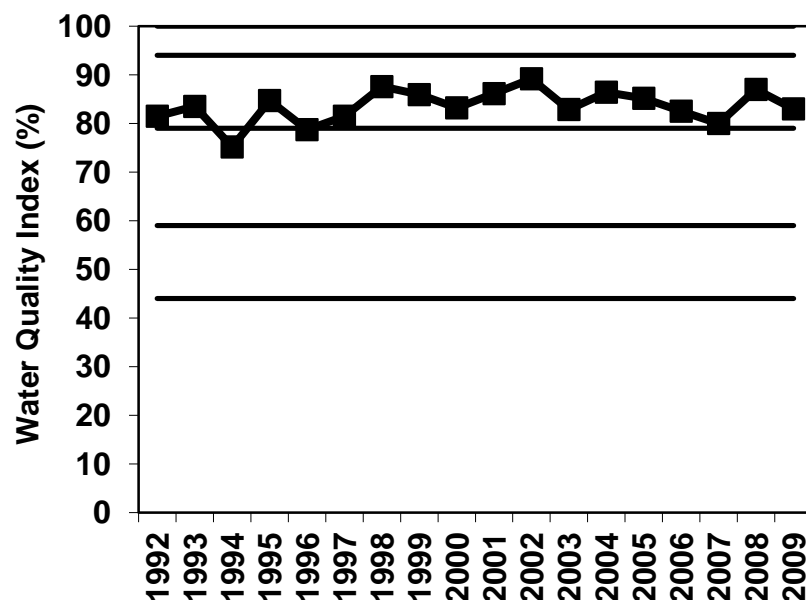
What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Comments/recent actions/report links
<p>Water quality in Manitoba, by assessing water quality data using the CCME (Canadian Council of Ministers of the Environment) Water Quality Index.</p>	<p>It is important to measure water quality because we want to protect drinking water, fish and other aquatic life, recreation, and other important water uses.</p>	<p>Water quality has been tested at many rivers, streams and lakes since the early 1970s. The Water Quality Index has been calculated for 40 to 50 sites since 1992.</p>	<p>The latest data available is for 2009.</p> <p>Within the Prairie Ecozone, the CCME Water Quality Index Value was 72 or of “fair” quality.</p> <p>Within the Boreal Plains, the CCME Water Quality Index Value was 83 or of “good” quality.</p> <p>Within the Boreal Shield Ecozone, the CCME Water Quality Index Value was 99 or of “excellent” quality.</p>	<p>The Water Quality Index in Manitoba has been stable since 1992 (see graphs below).</p>	<p>Work is underway to protect, maintain and improve water quality in Manitoba including measures to reduce nutrient loading to waterways. For example, in 2011/12, Water Stewardship worked with manufactures, distributors and retailers to improve the availability of low phosphorus lawn fertilizers and automatic dishwashing detergents, and worked with golf courses to prepare and register nutrient management plans. The Section also began to implement the <i>Water Quality Standards, Objectives and Guidelines Regulation</i> that includes new standards to reduce nutrient loading from wastewater treatment facilities. Since development and drainage can also impact water quality, Water Stewardship recommends mitigation measures to minimize impacts.</p>

CCME Water Quality Index for Manitoba

Prairie Waterbody Average
CCME Water Quality Index



Boreal Plains Waterbody Average
CCME Water Quality Index

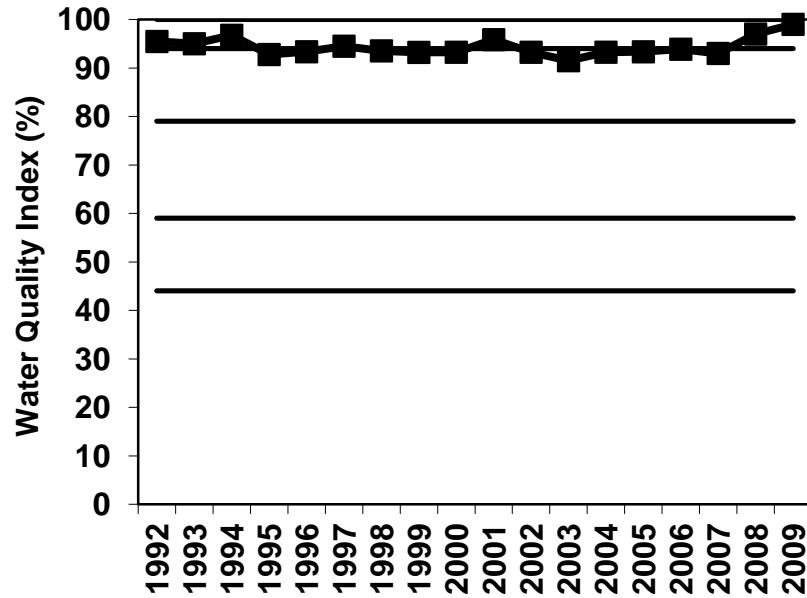


The Water Quality Index compares a number of important water quality parameters against established standards, objectives, or guidelines. When compared over time, it provides a useful indicator of how water quality may be changing. Annual data from 40 to 50 consistently monitored sites are used in the WQI.

The Water Quality Index yields a number between 0 and 100 that is indicative of the overall water quality.

Excellent: (CCME WQI Value 95-100) - water quality is protected with a virtual absence of threat or impairment; conditions very close to natural or pristine levels. These index values can only be obtained if all

Boreal Shield Waterbody Average CCME Water Quality Index



measurements are within objectives virtually all of the time.

Good: (CCME WQI Value 80-94) - water quality is protected with only a minor degree of threat or impairment; conditions rarely depart from natural or desirable levels.

Fair: (CCME WQI Value 65-79) - water quality is usually protected but occasionally threatened or impaired; conditions sometimes depart from natural or desirable levels.

Marginal: (CCME WQI Value 45-64) - water quality is frequently threatened or impaired; conditions often depart from natural or desirable levels.

Poor: (CCME WQI Value 0-44) - water quality is almost always threatened or impaired; conditions usually depart from natural or desirable levels.

What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Is target a commitment? (Y?N) Indicate source.	Comments/recent actions/report links
<p>Approximately 400 public water supply systems in Manitoba serve over 80% of residents. The remainder of the population is served by semi-public or private water systems or fall within federal jurisdiction, e.g. First Nations.</p> <p>The microbiological compliance index captures public water system compliance with the most critical regulatory requirements associated with microbiological parameters and acute health effects, including: bacteriological testing schedules, bacteriological water quality standards, chlorine</p>	<p>It is important to measure compliance with microbiological and chemical standards to confirm that acute and chronic risks to public health from drinking water consumption are decreasing, and to ensure steps are taken to address any increases.</p> <p>The microbiological compliance index captures more critical acute public health risks</p>	<p>The Office of Drinking Water's compliance monitoring program was initiated in 2003.</p> <p>That year, a baseline microbiological compliance index was established for bacteriological and chlorine standards and frequency of testing in public water systems.</p> <p>The baseline microbiological compliance index for Manitoba's</p>	<p>The microbiological compliance index for public water systems in Manitoba was 78% in 2007.</p> <p>The 78% value represents the average compliance of approximately 400 public water systems many of which are small and lack resources to maintain compliance.</p> <p>From a population perspective, >95% of the population serviced by a public water system receive water from a utility that is in compliance >95% of the</p>	<p>Between 2003 and 2006, the percentage of compliance improved because of the presence of new drinking water officers in the field providing regulatory and technical service.</p> <p>As anticipated in last year's report, microbiological compliance diminished slightly as officers discovered previously unknown smaller systems that lack the resources to achieve compliance.</p> <p>Trends have not yet been</p>	<p>N/A</p> <p><i>Drinking Water Safety Act.</i></p>	<p>For more information, see the Office of Drinking Water web site: http://www.gov.mb.ca/waterstewardship/drinking_water/index.html</p> <p>The site contains several technical documents associated with Manitoba's drinking water program.</p> <p>Drinking water safety is protected through the use of construction permits and operating licences for water suppliers, scheduled and non-scheduled inspections of facilities, scheduled water quality monitoring and ongoing education of utility owners/operators and the general public.</p> <ul style="list-style-type: none"> • Licensing and permitting ensures that minimum engineering and construction standards are met or exceeded. • Inspections ensure that minimum operational performance and water quality standards are met by utilities and, that there is ongoing public reporting and

What is being measured and how?	Why is it important to measure this?	Where are we starting from?	What is the most recent available value for this indicator?	What is the trend over time for this indicator?	Is target a commitment? (Y?N) Indicate source.	Comments/recent actions/report links
<p>residual testing schedules, and chlorine residual standards. These standards came into effect in 2007.</p> <p>New this year, the department will also be reporting on compliance with chemical standards that come into effect on March 1, 2012. These standards are typically based on lifetime exposure and are associated with lower level public health risks.</p>	<p>associated with disease-causing microbiological organisms.</p> <p>The chemical compliance index captures lower level public health risks, typically associated with lifetime exposure to chemical parameters.</p>	<p>public water systems was 72%..</p> <p>The baseline chemical compliance index for Manitoba's public water systems established in 2011 is 66%.</p> <p>From a population perspective, >85% of the population serviced by a public water system receive water from a utility that is in compliance with all chemical standards.</p>	<p>time.</p>	<p>established for chemical compliance.</p>		<p>accountability.</p> <p>All of the activities focus on the importance of public health protection through the assurance of water supply quality and reliability and maintenance of public confidence.</p>

The Public Interest Disclosure (Whistleblower Protection) Act

The Public Interest Disclosure (Whistleblower Protection) Act came into effect in April 2007. This law gives employees a clear process for disclosing concerns about significant and serious matters (wrongdoing) in the Manitoba public service, and strengthens protection from reprisal. The Act builds on protections already in place under other statutes, as well as collective bargaining rights, policies, practices and processes in the Manitoba public service.

Wrongdoing under the Act may be: contravention of federal or provincial legislation; an act of omission that endangers public safety, public health or the environment; gross mismanagement; or, knowingly directing or counseling a person to commit a wrongdoing. The Act is not intended to deal with routine operational or administrative matters.

A disclosure made by an employee in good faith, in accordance with the Act, and with a reasonable belief that wrongdoing has been or is about to be committed is considered to be a disclosure under the Act, whether or not the subject matter constitutes wrongdoing. All disclosures receive careful and thorough review to determine if action is required under the Act, and must be reported in a department's annual report in accordance with Section 18 of the Act.

The following is a summary of disclosures received by Manitoba Conservation and Water Stewardship , Pineland Forest Nursery and Green Manitoba Eco Solutions for fiscal year 2011/12.

Information Required Annually (per Section 18 of The Act)	Fiscal Year 2011/12.
The number of disclosures received and the number acted on and not acted on <i>Subsection 18(2)(a)</i>	NIL
The number of investigations commenced as a result of a disclosure. <i>Subsection 18(2)(b)</i>	NIL
In the case of an investigation that results in a finding of wrongdoing, a description of the wrongdoing and any recommendations or corrective actions taken in relation to the wrongdoing, or the reasons why no corrective action was taken. <i>Subsection 18(2)(c)</i>	NIL

Statutory Responsibilities of the Minister of Conservation and Water Stewardship

- The Climate Change and Emissions Reductions Act***, C.C.S.M. chapter C 135
- The Conservation Agreements Act***, C.C.S.M. chapter C 173
- The Conservation Districts Act***, C.C.S.M. chapter C 175
- The Contaminated Sites Remediation Act***, C.C.S.M. chapter C 205
- The Crown Lands Act***, C.C.S.M. chapter C 340
[sections 1, 5 and 5.1, clause 7(1)(c), section 7.1.1, subsection 7.2(1), section 8, subsections 12(2), 13(1) and (2), 13.1(1), sections 19, 22 and 27 to 29; sections 4, 6 and 6.1, clauses 7(1)(a), (b), (d) and (e), subsections 7(2) to (6), sections 7.1, 10, 14, 16 to 18, 21, subsection 23(3), section 24, subsections 25(1) and (2) and sections 26 and 30 to 35 insofar as they relate to the administration of Crown lands not designated as agricultural Crown lands, including setting fees and rents and issuing work permits but excluding other dispositions]
- The Dangerous Goods Handling and Transportation Act***, C.C.S.M. chapter D 12
- The Drinking Water Safety Act***, C.C.S.M. chapter D 101
- The East Side Traditional Lands Planning and Special Protected Areas Act***,
C.C.S.M. chapter E 3
- The Ecological Reserves Act***, C.C.S.M. chapter E 5
- The Endangered Species Act***, C.C.S.M. chapter E 111
- The Environment Act***, C.C.S.M. chapter E 125
- The Fisheries Act*** [except Part III], C.C.S.M. chapter F 90
- The Fishermen's Assistance and Polluters' Liability Act***, C.C.S.M. chapter F 100
- The Forest Act***, C.C.S.M. chapter F 150
- The Forest Health Protection Act***, C.C.S.M. chapter F 151
- The Ground Water and Water Well Act*** [except as it relates to the planning, construction or operation of provincial water control works], C.C.S.M. chapter G110
- The Manitoba Habitat Heritage Act***, C.C.S.M. chapter H3
- The Manitoba Hazardous Waste Management Corporation Act***, C.C.S.M. chapter H 15
- The International Peace Garden Act***, C.C.S.M. chapter I 70
- The Manitoba Natural Resources Transfer Act***, C.C.S.M. chapter N 30
- An Act to Ratify a Certain Agreement Between the Government of the Dominion of Canada and the Government of the Province of Manitoba***, C.C.S.M. chapter N 50
- The Manitoba Natural Resources Transfer Act Amendment Act***, C.C.S.M. chapter N 60
- The Manitoba Natural Resources Transfer Act Amendment Act, 1963***, C.C.S.M. chapter N 70
- The Ozone Depleting Substances Act***, C.C.S.M. chapter O 80
- The Provincial Parks Act***, C.C.S.M. chapter P 20
[except section 22 and clause 33(u) and the Debt Certificate Regulation M.R. 140/96]
- The Pimachiowin Aki World Heritage Fund Act***, C.C.S.M. chapter P 70
- The Plants Pests and Diseases Act***, C.C.S.M. chapter P 90
[that portion of clause 16(c) that pertains to arborists and clause 16(i)]
- The Polar Bear Protection Act***, C.C.S.M. chapter P 94
- The High-Level Radioactive Waste Act***, C.C.S.M. chapter R 10
- The Resource Tourism Operators Act***, C.C.S.M. chapter R 119.5
- The Surveys Act***, C.C.S.M. chapter S 240 [Part II]
- The Sustainable Development Act***, C.C.S.M. chapter S 270
- The Upper Fort Garry Heritage Provincial Park Act***, C.C.S.M. chapter U 80
- The Waste Reduction and Prevention Act***, C.C.S.M. chapter W 40
- The Water Power Act***, C.C.S.M. chapter W60 [except as it relates to the planning, construction or operation of provincial water control works],
- The Water Protection Act***, C.C.S.M. chapter W65
- The Water Resources Conservation Act***, C.C.S.M. chapter W72

The Water Rights Act, C.C.S.M. chapter W80

[except as it relates to the planning, construction or operation of provincial water control works]

The Wildfires Act, C.C.S.M. chapter W 128

The Wildlife Act, C.C.S.M. chapter W 130

[except that portion of clause 89(e) that applies to compensation for damage to crops caused by wildlife as it pertains to big game and migratory waterfowl]

The Wild Rice Act, C.C.S.M. chapter W 140

[except subsections 10(1) and 11(1)]

and:

Manitoba Fishery Regulations 1987 made under section 43 of the *Fisheries Act* (Canada))

As per Schedule "E", Order in Council No. 19/2012

The Manitoba Natural Resources Development Act, C.C.S.M. chapter N 33

As per Schedule "T", Order in Council No. 350/2009