

**Manitoba Sustainable
Development
Innovations Fund**

**Fonds des innovations
de développement
durable Manitoba**

**Annual Report
2009-2010**

**Rapport annuel
2009-2010**



MINISTER OF CONSERVATION

Legislative Building
Winnipeg, Manitoba, CANADA
R3C 0V8

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

Your Honour:

I am pleased to present you with the Annual Report of the Sustainable Development Innovations Fund for the period of April 1, 2009 to March 31, 2010.

Yours sincerely,

Original "*signed by*"

Bill Blaikie
Minister





Deputy Minister of
Conservation

Legislative Building
Winnipeg, Manitoba Canada
R3C 0V8

Honourable Bill Blaikie
Minister of Conservation
Room 330, Legislative Building
Winnipeg MB R3C 0V8

Dear Minister:

I am pleased to present the Annual Report of the Sustainable Development Innovations Fund (SDIF) for the 2009-2010 fiscal year.

Mandated under *The Sustainable Development Act*, the Fund's purpose is to contribute to Manitoba's environmental sustainability, while considering the economy, human health and social well-being. The Fund achieves its purpose through targeted funding initiatives and programs, implemented through an application or proposal process.

During 2009-2010, the SDIF provided grant funding for innovative projects and supported other significant initiatives that contributed to the province's environmental sustainability.

The Fund continues to support Manitoba communities, which benefit from research and studies, educational initiatives, technology development and application, environmental improvements, and resource conservation and protection.

Respectfully submitted,

"original signed by"

Fred Meier
Deputy Minister

Monsieur Bill Blaikie
Ministre de la Conservation
Palais législatif, bureau 330
Winnipeg (Manitoba) R3C 0V8

Monsieur le Ministre,

Je suis heureux de présenter le rapport annuel du Fonds des innovations de développement durable (FIDD) pour l'exercice 2009-2010.

En vertu de la *Loi sur le développement durable*, le Fonds a pour objectif de contribuer à la viabilité de l'environnement au Manitoba tout en tenant compte de l'économie, de la santé et du bien-être social. Le Fonds atteint son objectif au moyen d'initiatives et de programmes de financement ciblés, auxquels on peut accéder en présentant une demande ou en déposant une soumission.

En 2009-2010, le Fonds a versé des subventions à l'appui de projets innovateurs et a appuyé d'autres initiatives importantes qui ont contribué à la viabilité de l'environnement dans la province.

Le Fonds continue d'appuyer les collectivités manitobaines, qui bénéficient des éléments suivants : recherches, études, initiatives éducatives, avancées technologiques, application de la technologie, améliorations environnementales et conservation et protection des ressources.

Veillez agréer, Monsieur le Ministre, l'expression de mes sentiments les plus respectueux.

Le sous-ministre de la Conservation,

“original signé par”.

Fred Meier

TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE</u>
PREFACE	2
PRÉFACE	5
SDIF OPEN CATEGORY SUMMARY — PRIORITY PROGRAM AREAS	9
NEW PROJECTS APPROVED DURING THE 2009/2010 FISCAL YEAR SDIF OPEN FUND CATEGORY:	
ECO-TOURISM	12
ECOSYSTEM CONSERVATION	14
ENVIRONMENTAL TECHNOLOGY INNOVATION AND DEMONSTRATION	17
NORTHERN COMMUNITY DEVELOPMENT AND ENVIRONMENTAL ISSUES	21
SUSTAINABLE AGRICULTURAL PRACTICES	23
SUSTAINABLE COMMUNITY DEVELOPMENT	26
UNDERSTANDING OUR ENVIRONMENT	30
SPECIAL INITIATIVES	40
BROAD ALLOCATIONS CATEGORY:	
- ENVIRONMENTAL YOUTH CORPS (EYC)	46
- MANITOBA CLIMATE CHANGE ACTION FUND (MCCAF)	55
- WASTE REDUCTION AND POLLUTION PREVENTION (WRAPP) FUND	58
- WATER STEWARDSHIP FUND	66
- Zebra Mussel Program	71
- BEAR SMART INITIATIVE	72
- MANITOBA FORESTRY ASSOCIATION WOODLOT PROGRAM	74
APPENDIX I FIVE YEAR PROJECT SUMMARY	77

PREFACE

Organization of Report

The format of the 2009/2010 Sustainable Development Innovations Fund (SDIF) Annual Report is similar to previous Annual Reports in that funded projects are presented by category and program areas.

Projects are listed under the following categories:

SDIF Open Category:

- SDIF Open Category Priority Areas
- Special Initiatives

Broad Allocations Category:

Targeted Funding Initiatives are as follows:

- Environmental Youth Corps
- Manitoba Climate Change Action Fund
- Waste Reduction and Pollution Prevention Fund
- Water Stewardship Fund

Departmental and Government Strategic Priorities:

- Bear Smart Initiative
- Manitoba Forestry Association Woodlot Program

Purpose

In 1989, the provincial government created the Environmental Innovations Fund under *The Environment Act*. The Environmental Innovations Fund was repealed from the *Environment Act* in 1992/1993 and the Sustainable Development Innovations Fund (SDIF) was established under Section 17(1) of *The Sustainable Development Act*, which came into force on July 1, 1998.

As stated in *The Sustainable Development Act*, the purpose of the Fund, is to 'provide grants in support of innovative projects, activities, research and developments that further the sustainability of Manitoba's economy, environment, human health and social well-being and support environmentally sustainable economic growth; and support any other sustainable development innovation purpose that the Lieutenant Governor in Council considers necessary or advisable'.

The goal of the SDIF is to contribute to Manitoba's environmental sustainability. This approach indirectly takes into account the economy, human health and social well-being. The SDIF achieves its purpose through targeted funding initiatives and programs, implemented through an application or proposal process. The SDIF has two fund categories: an Open Fund Category and a Broad Allocations Category. Both categories and its designated programs align with Manitoba Conservation priorities, as well as other government initiatives. The SDIF supports Manitoba based projects or projects that will be of benefit to Manitoba and contribute to meeting the objectives of the SDIF:

1. To support and promote innovation in the environmental and sustainable development industries.
2. To encourage environmentally sound decisions and actions.
3. To promote research and demonstration of new initiatives not addressed by existing programs.
4. To stimulate economic development and diversification that will improve the quality of life, and strengthen community identity, throughout Manitoba.
5. To demonstrate new approaches to prevent waste and pollution, and conserve resources.
6. To support activities that may benefit both the global and local environment.

The two fund categories, SDIF Open Category and Broad Allocations Category, contribute towards the protection, enhancement, conservation, or rehabilitation of Manitoba's environment. Funding support is provided for the development, implementation and promotion of innovative environmentally sustainable projects delivered by local government and provincial government departments, business and industry, community and youth groups, Aboriginal organizations, First Nation communities and educational institutions.

As well as supporting special initiatives, the Open Category has established the following priority areas:

- environmental innovation and demonstration,
- ecosystem conservation,
- sustainable community development,
- northern community development and environmental issues,
- sustainable agricultural practices, and
- eco-tourism.

The Broad Allocations Category supports targeted funding initiatives and government strategic priorities, including:

- youth participation,
- waste reduction and prevention,
- climate change,
- water quality and conservation, and
- natural resource conservation.

Source of Revenue

The amount appropriated to the SDIF through the annual Estimates process is notionally linked to the anticipated revenues derived from Environmental Protection Taxes (EPT) on alcohol beverage containers and disposable diapers, from the Provincial Sales Tax (PST) on the Environmental Handling Charges (EHC) imposed by the Lubricating Products Industry, and from the Retail Sales Tax (RST) collected on levies applied to the sale of non-deposit beverage containers and tires.

Communication

The Fund is promoted through the following activities:

- Manitoba Conservation website
- Community events, trade shows, exhibitions, and speaking engagements
- Ministerial news releases
- Acknowledgement in publications, printed material, and signage of funded projects
- Listings in various funding directories
- Provincial government offices and staff
- Word of mouth.

Process and Fund Management

The Pollution Prevention Branch of Manitoba Conservation is designated as the administrating branch for the Fund under *The Sustainable Development Act* and provides overall administrative support to the Fund, including the Open Category and Broad Allocations Category. This includes responding to inquiries, preparing documentation and reports, tracking expenditures, preparing cash flows, and reporting to Treasury Board.

The Branch also manages the SDIF Open Fund Category and two of the targeted funding initiatives under the Broad Allocations Category—Environmental Youth Corps (EYC) and Waste Reduction and Pollution Prevention (WRAPP) Fund.

The Manitoba Climate Change Action Fund (MCCAF) is managed by Green Manitoba, a Special Operating Agency of Manitoba Energy, Science and Technology and the Water Stewardship Fund, which includes the Zebra Mussel and Other Aquatic Invasive Species Program, is managed by Manitoba Water Stewardship. The remaining allocations under the Broad Allocations Category are managed by other Manitoba Conservation branches.

The SDIF Open Category and Broad Allocation Categories, including the Environmental Youth Corps (EYC), Manitoba Climate Change Action Fund (MCCAF), Waste Reduction and Pollution Prevention (WRAPP) Fund, and Water Stewardship Fund use a similar application or proposal process. Applications or proposals submitted for funding consideration are evaluated by provincial staff against the funding program's criteria. The evaluations are compiled and summarized and then submitted for review to an Advisory Committee, comprised of representatives from provincial government departments.

The Advisory Committee reviews the proposals and the evaluations and makes funding recommendations to the Minister of Conservation or delegated Minister. The Minister has delegated approval authority for projects receiving funding of \$25,000 or less. Projects to be awarded funding in excess of \$25,000 are subject to Treasury Board approval.

Projects requesting support under the Open Category are assessed against the following criteria:

- addresses one or more of the priority areas;
- demonstrates measurable progress towards achieving one or more of the Fund's objectives;
- promotes a sustainable approach, has clear environmental benefits, and takes into account benefits to the community and the economy;
- involves youth;
- has written support and has identified other financial or in-kind project support;
- has a realistic budget and uses appropriate resources to conduct the project;
- has a distinct start and finish, and will be implemented in a timely fashion;
- will be conducted in Manitoba or benefit Manitoba;
- has a clear, concrete plan for future use, sharing, or replication.

Ineligible applications and funding requests under the Open Category include:

- projects that will result in proprietary knowledge which will be held exclusively by the grant recipient;
- applications for debt financing or cost recovery purposes;
- purchase of playground and recreational equipment;
- purchase of real property, including land, buildings or vehicles;
- ongoing administration and established operational budgets; and
- initiatives that must be undertaken as a result of a government order, such as removal of petroleum distribution systems, investigations and remediation.

Manitobans are major beneficiaries of the Fund with the intended direct impact of the funded projects being on the natural environment. By supporting environmentally sound and sustainable practices, the Fund assists with facilitating behavioral changes of individuals, households, businesses and institutions.

During 2009/2010, the SDIF supported projects and programs under the following categories:

SDIF Open Category

Broad Allocations Category

1. Targeted Funding Initiatives

- Environmental Youth Corps (EYC)
- Manitoba Climate Change Action Fund (MCCAF)
- Waste Reduction and Pollution Prevention (WRAPP) Fund
- Water Stewardship Fund

2. Departmental and Government Strategic Priorities

- Bear Smart Initiative
- Manitoba Forestry Association Woodlot Program

In 2009/2010, approximately \$2.93 million was expended. Forty-three new projects, three special initiatives and three projects carried over from previous fiscal years were allocated funding from the SDIF Open Category expending approximately \$1.4 million. Projects funded under the SDIF Open Category included ventures that focus on Aboriginal interests, youth programming, biodiversity and habitat protection, and scientific research and analysis. The six targeted broad allocations expended approximately \$1.5 million.

A summary of project expenditures under the Fund's Open Category and Broad Allocations Category is presented on the following pages.

PRÉFACE

Structure du rapport

La structure du rapport annuel de 2009-2010 du Fonds des innovations de développement durable est semblable à celle des rapports précédents, en ceci que les projets financés sont présentés par domaine de programmes et par catégorie d'attribution.

Les catégories d'attribution des projets sont les suivantes :

Catégorie ouverte du Fonds

- Domaines prioritaires
- Initiatives spéciales

Catégorie des attributions générales

Les initiatives de financement ciblées sont les suivantes :

- Brigade des jeunes environnementalistes;
- Fonds d'action sur le changement climatique du Manitoba;
- Fonds pour la réduction du volume des déchets et la prévention de la pollution;
- Fonds de gérance des eaux

Les priorités stratégiques du ministère et du gouvernement sont les suivantes :

- Initiative Gare aux ours
- Programme des boisés de la Manitoba Forestry Association

Objectif

En 1989, le gouvernement provincial a créé le Fonds des innovations environnementales en vertu de la *Loi sur l'environnement*. Après la révocation des dispositions de la *Loi* s'y rapportant en 1992-1993, on a créé le nouveau Fonds des innovations de développement durable en vertu du paragraphe 17(1) de la *Loi sur le développement durable*, qui est entrée en vigueur le 1^{er} juillet 1998.

Tel qu'énoncé dans la *Loi sur le développement durable*, le Fonds a pour objectif « de verser des subventions à l'appui de projets, d'activités, de programmes de recherche et de développement innovateurs qui améliorent le caractère durable de l'économie, de l'environnement, de la santé et du bien-être social au Manitoba et encouragent une croissance économique respectueuse de l'environnement; et de favoriser tout autre objectif en matière de développement durable innovateur que le lieutenant-gouverneur en conseil juge approprié ».

Le but du Fonds est de contribuer à la viabilité de l'environnement au Manitoba. Cette approche prend indirectement en compte l'économie, la santé et le bien-être social. Le Fonds atteint son but au moyen d'initiatives et de programmes de financement ciblés, auxquels on peut accéder en présentant une demande ou en déposant une soumission. Le Fonds propose deux catégories de financement : la catégorie ouverte et la catégorie des attributions générales. Ces deux catégories et leurs programmes désignés sont conformes aux priorités de Conservation Manitoba et aux autres initiatives du gouvernement. Le Fonds soutient les projets établis au Manitoba et les projets qui sont à l'avantage du Manitoba tout en contribuant à remplir les objectifs du Fonds :

7. appuyer et promouvoir l'innovation dans les secteurs de l'environnement et du développement durable;
8. encourager des prises de décision et l'adoption de mesures respectueuses de l'environnement;
9. promouvoir la recherche et la mise à l'essai de nouvelles initiatives ne faisant pas partie des programmes existants;
10. favoriser le développement et la diversification de l'économie afin d'améliorer la qualité de vie et de renforcer notre identité collective partout au Manitoba;
11. adopter de nouveaux moyens d'éviter le gaspillage et la pollution et de conserver les ressources;
12. soutenir les activités pouvant être avantageuses pour l'environnement à l'échelle mondiale et locale.

Les deux catégories du Fonds, soit la catégorie ouverte et la catégorie des attributions générales, contribuent à la protection, à l'amélioration, à la conservation ou à la remise en état de l'environnement au Manitoba. Un

soutien financier est accordé pour l'élaboration, la mise en œuvre et la promotion de projets novateurs écologiquement viables menés par les administrations municipales, les ministères du gouvernement, les entreprises et l'industrie, les groupes communautaires, les groupes de jeunes, les organismes autochtones, les collectivités des Premières nations et les établissements d'enseignement.

En plus d'appuyer des initiatives spéciales, la catégorie ouverte a établi les domaines prioritaires suivants :

- innovation et démonstration de technologies environnementales;
- conservation des écosystèmes;
- développement durable des collectivités;
- environnement et développement communautaire du Nord;
- pratiques agricoles durables;
- écotourisme.

La catégorie des attributions générales appuie les initiatives de financement ciblées ainsi que les priorités stratégiques du gouvernement que sont :

- la participation des jeunes;
- la réduction des déchets et la prévention;
- le changement climatique;
- la qualité et la conservation de l'eau;
- la conservation des ressources naturelles.

Source de revenus

Le montant alloué au Fonds dans le cadre des prévisions budgétaires annuelles est lié de manière notionnelle aux recettes prévues découlant des taxes destinées à la protection de l'environnement imposées sur les contenants de boissons alcoolisées et sur les couches jetables, de la taxe de vente provinciale (TVP) touchant les frais de manutention imposés par l'industrie des produits de lubrification, et de la taxe sur les ventes au détail s'appliquant à la vente de contenants de boisson non consignés et de pneus.

Communication

La promotion du Fonds est assurée par les activités suivantes :

- le site Web de Conservation Manitoba;
- activités communautaires, foires commerciales, expositions et conférences;
- communiqués de presse ministériels;
- remerciements dans les publications, documents imprimés, et annonce des projets financés;
- inscriptions dans les répertoires de sources de financement;
- bureaux et personnel du gouvernement provincial;
- bouche à oreille.

Processus et gestion du Fonds

La Direction de la prévention de la pollution de Conservation Manitoba gère le Fonds en vertu de la *Loi sur le développement durable* et elle lui fournit le soutien administratif général dont il a besoin, notamment à l'égard de la catégorie ouverte et de la catégorie des attributions générales. Elle s'occupe notamment de répondre aux demandes de renseignements, de préparer la documentation et les rapports, de contrôler les dépenses, de dresser les relevés des mouvements de trésorerie et de rendre compte au Conseil du Trésor.

La Direction assure aussi la gestion de la catégorie ouverte du Fonds et de deux des initiatives de financement ciblées de la catégorie des attributions générales, soit la Brigade des jeunes environnementalistes et le Fonds pour la réduction du volume des déchets et la prévention de la pollution.

Le Fonds d'action sur le changement climatique du Manitoba est géré par Manitoba vert, un organisme de service spécial d'Énergie, Sciences et Technologie Manitoba, le Fonds de gérance des eaux, qui comprend le Programme de lutte contre la moule zébrée et le Programme des autres espèces aquatiques envahissantes, et Gestion des ressources hydriques Manitoba. Les autres attributions générales sont gérées par d'autres directions du ministère de la Conservation.

La catégorie ouverte et la catégorie des attributions générales, dont relèvent la Brigade des jeunes environnementalistes, le Fonds d'action sur le changement climatique du Manitoba, le Fonds pour la réduction du volume des déchets et la prévention de la pollution et le Fonds de gérance des eaux, emploient des processus semblables en ce qui a trait aux demandes et aux propositions.

Le Comité examine les projets et les évaluations, puis il formule des recommandations au ministre de la Conservation en ce qui concerne le financement. Le ministre a délégué le pouvoir d'approuver les projets bénéficiant d'un financement maximal de 25 000 \$. Les projets devant recevoir plus de 25 000 \$ doivent être approuvés par le Conseil du Trésor.

Les projets demandant un soutien dans la catégorie générale sont évalués en fonction des critères suivants :

- ils portent sur au moins un des domaines prioritaires;
- ils font état de progrès mesurables vers la réalisation d'un ou de plusieurs des objectifs du Fonds;
- ils préconisent une démarche viable, présentent des avantages manifestes pour l'environnement et tiennent compte des avantages pour la collectivité et l'économie;
- ils font appel aux jeunes;
- ils ont obtenu par écrit des appuis et ils ont trouvé d'autres sources de soutien financier et non financier;
- ils ont un budget réaliste et recourent à des ressources appropriées pour se concrétiser;
- les dates du début et de la fin de chaque projet sont bien définies, et les projets sont mis en œuvre à temps;
- ils sont menés au Manitoba ou profiteront à la province;
- ils s'assortissent d'un plan clair et concret quant à leur utilisation, à leur diffusion ou à leur répétition dans l'avenir.

Les demandes d'inscription et de financement non admissibles à la catégorie générale comprennent :

- les projets aboutissant à l'acquisition d'un savoir-faire privatif détenu exclusivement par le bénéficiaire de la subvention;
- les demandes formulées à des fins de remboursement d'emprunt ou de recouvrement de coûts;
- l'achat d'équipement récréatif ou destiné à des terrains de jeux;
- l'achat de biens immobiliers (terrains, bâtiments) ou de véhicules;
- les frais d'administration permanents et les budgets d'exploitation établis;
- les projets qui doivent être mis en œuvre par suite d'une ordonnance du gouvernement (p. ex., élimination de réseaux de distribution de pétrole, études et travaux de remise en état).

Les Manitobains sont les principaux bénéficiaires du Fonds, qui veille à ce que les projets financés aient un impact direct sur le milieu naturel. En appuyant des pratiques respectueuses de l'environnement ayant un effet durable, le Fonds aide à promouvoir des changements de comportement, aussi bien au niveau de l'individu, que des ménages, des entreprises et des établissements.

Pendant l'exercice 2009-2010, le Fonds des innovations de développement a pu soutenir les projets et programmes suivants :

Catégorie ouverte du Fonds

Catégorie des attributions générales

1. Initiatives de financement ciblées

- Brigade des jeunes environnementalistes
- Fonds d'action sur le changement climatique du Manitoba
- Fonds pour la réduction du volume des déchets et la prévention de la pollution
- Fonds de gérance des eaux

2. Priorités stratégiques du ministère et du gouvernement

- Initiative Gare aux ours
- Programme des boisés de la Manitoba Forestry Association

En 2009/2010, environ 2,93 millions de dollars ont été dépensés. Quarante-trois nouveaux projets, trois initiatives spéciales et trois projets reportés de l'année financière précédente ont reçu des fonds dans la catégorie ouverte du Fonds, pour un total dépensé d'environ 1,4 million de dollars. Les projets financés dans cette catégorie comprenaient des initiatives axées sur les intérêts des Autochtones, les programmes destinés aux jeunes, la biodiversité et la protection de l'habitat ainsi que la recherche et l'analyse et la recherche scientifiques. On a consacré environ 1,5 million de dollars à des projets s'inscrivant dans les six volets de la catégorie des attributions générales.

SDIF OPEN CATEGORY SUMMARY — PRIORITY PROGRAM AREAS

Eco-tourism:

A total of \$25,000.00 was expended in 2009/2010 for one project under the eco-tourism category. The projects approved under this category are initiatives that address ecosystem preservation, public education and economic opportunities through tourism with a priority on rural and northern communities.

Ecosystem Conservation:

A total of \$66,500.00 was expended in 2009/2010 for three projects under the ecosystem category. The objectives of this category are to conserve resources, preserve and maintain urban forests and ecosystems and rehabilitate and revitalize degraded areas.

Environmental Technology Innovation and Demonstration:

A total of \$87,330.00 was expended in 2009/2010 for six projects under the environmental technology innovation and demonstration category. Projects supported within this category include feasibility studies, research and development of new products and processes, environmental technology demonstrations, and special projects, such as strategic studies relating to industrial sectors.

Northern Community Development and Environmental Issues:

A total of \$50,000.00 was expended during the 2009/2010 fiscal year for two projects funded in the northern community development and environmental issues category. Projects under this category should reflect the enhancement of the environment and sustainable economic development activities of northern and remote communities, with a priority on Aboriginal communities.

Sustainable Agricultural Practices:

A total of \$44,000.00 was expended during the 2009/2010 fiscal year for five projects under the sustainable agricultural practices category. Projects supported within this category include research, demonstration, and feasibility studies on agricultural practices that protect the environment and assist in diversifying Manitoba's agricultural sector.

Sustainable Community Development:

A total of \$77,500.00 was expended during the 2009/2010 fiscal year for seven projects under the sustainable community development category. Sustainable community practices include eco-efficiency initiatives, environmental stewardship, capacity building mechanisms, and encouragement of inner city revitalization, with an emphasis on partnerships with Aboriginal people and youth.

Understanding Our Environment:

A total of \$316,272.71 was expended during the 2009/2010 fiscal year for 19 projects under the understanding our environment category. Projects under this category help Manitobans make educated decisions and take action regarding the environment, through education and awareness activities, training, research, seminars and forums.

Special Initiatives

Flin Flon Soil Improvement Project:

A total of \$105,000.00 was expended during the 2009/2010 fiscal year to continue the soil improvement project in Flin Flon, Manitoba. The City of Flin Flon will deliver the remaining outstanding soil improvement work on behalf of Manitoba Conservation, and will provide on-site organization, coordination and oversight related to landscape and related work for the delivery of soil improvement activities.

Manitoba Product Stewardship Corporation Phase Out and Transition to a New Producer Responsibility Organization, Multi Material Stewardship Manitoba:

A total of \$65,000.00 was expended during the 2009/2010 fiscal year to support the phase out of the Manitoba Product Stewardship Corporation and its final operational requirements, and to transition to a new producer responsibility organization, Multi-Material Stewardship Manitoba.

Polar Bear Facilities Improvement at Assiniboine Park Zoo:

A total of \$500,000.00 was expended during the 2009/2010 fiscal year to support renovations of existing bear enclosures at the Assiniboine Park Zoo. Improvements are intended to meet provincial standards, and include increasing the size of the enclosure, enhancing security features, and creating enrichment experiences.

BROAD ALLOCATIONS CATEGORY SUMMARY

Targeted Funding Initiatives

Environmental Youth Corps:

A total of \$222,583.35 was expended during the 2009/2010 fiscal year for 114 projects funded through the Environmental Youth Corps (EYC) including program administrative costs. The EYC supports environment-related projects involving hands-on participation of youth throughout Manitoba that include water quality, waste minimization, protection of flora and fauna, rehabilitation and conservation of the natural environment, wildlife conservation and habitat preservation.

Manitoba Climate Change Action Fund:

A total of \$329,000.00 was expended during the 2009/2010 fiscal year for eight projects funded through the Manitoba Climate Change Action Fund (MCCAF). The priority areas within MCCAF include education and outreach, impacts and adaptation, technical innovation and energy efficiency.

Waste Reduction and Pollution Prevention (WRAPP) Fund:

A total of \$428,564.67 was expended during the 2009/2010 fiscal year for 17 projects funded through the Waste Reduction and Pollution Prevention (WRAPP) Fund, including WRAPP program development and two projects carried over from the previous fiscal year. The priority areas within the WRAPP Fund include composting, construction and demolition (C&D) waste management, green procurement, institutional waste reduction, integrated waste management, market development, pollution prevention, promotion and education and regional recycling.

Water Stewardship Fund:

A total of \$208,485.32 was expended during the 2009/2010 for 13 projects under the Water Stewardship Fund, including the Zebra Mussel and Other Aquatic Invasive Species Program. The priority areas for project funding, under the Water Stewardship Fund, include watershed management planning and implementation, water-related scientific research, education and capacity building, water conservation, water quality and economic development.

Departmental and Government Strategic Priorities

Bear Smart Initiative:

A total of \$124,365.74 was expended during the 2009/2010 fiscal year to support the implementation of the Bear Smart Initiative in Manitoba which will assist in preventing human-bear conflicts.

Manitoba Forestry Association Woodlot Program:

A total of \$200,000.00 was expended during the 2009/2010 fiscal year to support the Woodlot Program which encourages private landowners in Manitoba to use Agro-forestry and woodlot management practices to diversify farm income and maintain wildlife habitat.

Table 1: Summary of SDIF Open and Broad Allocation Projects

Project Categories	Number of Projects Allocated Funding in 2009/2010	Amount Expended
Open Fund Category		
Eco-tourism	1	\$25,000.00
Ecosystem Conservation	3	\$66,500.00
Environmental Technology Innovation and Demonstration	6	\$87,330.00
Northern Community Development and Environmental Issues	2	\$50,000.00
Sustainable Agricultural Practices	5	\$44,000.00
Sustainable Community Development	7	\$77,500.00
Understanding Our Environment	19	\$316,272.71
Special Initiatives	3	\$670,000.00
SDIF Open Category Projects Carried Over Into 2009-2010	3	\$82,521.78
Total for Open Category	49	\$1,419,124.49
Broad Allocations Category		
1. Targeted Funding Initiatives		
Environmental Youth Corps (EYC)	114	\$222,583.35
Manitoba Climate Change Action Fund (MCCAF)	8	\$329,000.00
Waste Reduction and Pollution Prevention (WRAPP) Fund	17	\$418,467.51
WRAPP Projects Carried Over Into 2009-2010	2	\$10,097.16
Water Stewardship Fund	13	\$208,485.32
2. Departmental and Government Strategic Priorities¹		
Bear Smart Initiative		\$124,365.74
Manitoba Forestry Association Woodlot Program		\$200,000.00
Total for Broad Allocations Category	154	\$1,512,999.08
Total for SDIF	203	\$2,932,123.57

¹ The Bear Smart Initiative and the Manitoba Forestry Association Woodlot Program activities are related to departmental and government priorities and do not award grants to project proponents.

ECO-TOURISM
PROJECTS ALLOCATED FUNDING
DURING THE 2009/2010 FISCAL YEAR
UNDER THE SDIF OPEN CATEGORY

Number of Projects: 1
Total Amount Expended: **\$25,000.00**

<u>Project Name</u>	<u>Total Expended</u>
Manitoba Eco-Guiding Enterprise	\$ 25,000.00

ECO-TOURISM

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2009/2010 FISCAL YEAR

MANITOBA ECO-GUIDING ENTERPRISE

Proponent:	SEED Winnipeg Inc.
Date Approved:	September 29, 2009
Total Amount Approved:	\$25,000.00
Total Amount Expended:	\$25,000.00

A grant of \$25,000.00 was approved to implement a pilot eco-guide training program for Aboriginal youth from the inner-city of Winnipeg and rural Manitoba over a period of one year. The program will focus on traditional knowledge and livelihood skills, ecotourism and adventure travel, and provide opportunities for participants to obtain professional certifications and internships with Manitoba Lodges and Outfitters. The Manitoba Tourism Education Council will provide assistance with designing and delivering specialized training, and provide a nationally certified curriculum for key areas of training. After program completion, participants will possess the required certifications and the necessary practical and business skills to successfully deliver sustainable tourism adventures and provide guiding services for hunting and fishing lodges, with the capacity to deliver services in a safe and professional manner. The program aims to provide graduating participants opportunities to earn quality wages, with the option of starting their own eco-tourism business and/or gain employment with the flexibility to further their education.

**ECOSYSTEM CONSERVATION
PROJECTS ALLOCATED FUNDING
DURING THE 2009/2010 FISCAL YEAR
UNDER THE SDIF OPEN CATEGORY**

Number of Projects: 3
Total Amount Expended: **\$66,500.00**

<u>Project Name</u>	<u>Total Expended</u>
Broadway Avenue Adopt-A-Tree	\$32,000.00
Comparative Growth, Resilience, and Biological Diversity of Plantations of Red and Jack Pine under New Climate Regimes in Manitoba	\$16,000.00
Grasslands for Biodiversity and Sustainability: Pursuing Innovative Benefits from Grassland Restoration	\$18,500.00

ECOSYSTEM CONSERVATION

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2009/2010 FISCAL YEAR

BROADWAY AVENUE ADOPT-A-TREE

Proponent:	Coalition to Save the Elms, Manitoba Inc.
Date Approved:	October 3, 2006
Total Amount Approved:	\$160,000.00
Total Amount Expended:	\$32,000.00
Total Amount Projected:	\$64,000.00 (FY 2010/2011 to 2011/2012)

A total grant of \$32,000.00 was approved for the third year of a multi-faceted project which includes an educational and awareness component to rescue, rejuvenate, enhance and maintain the shade trees along Broadway Avenue from Osborne to Main Street in Winnipeg. Main traffic arteries such as Broadway pose especially harsh conditions that are characterized by intense heat, drought and flooding, solar radiation and air pollution from traffic. The project will introduce, test and demonstrate recent technologies to improve the soil profile. The education component of the project includes presentations, advertising, publicity events and implementation of tree rejuvenating methods to highlight the degeneration of urban infrastructure, urban forest and individual trees and provide examples of alleviation and preservation techniques. The first two years of the five-year project will focus on monitoring for signs of Dutch Elm disease and other diseases while the final three years will focus on follow-up and remedial work.

COMPARATIVE GROWTH, RESILIENCE, AND BIOLOGICAL DIVERSITY OF PLANTATIONS OF RED AND JACK PINE UNDER NEW CLIMATE REGIMES IN MANITOBA

Proponent:	University of Winnipeg, Department of Biology
Date Approved:	September 29, 2009
Total Amount Approved:	\$16,000.00
Total Amount Expended:	\$16,000.00

A grant of \$16,000.00 was approved to conduct a study to compare the growth, resilience to climate change, and contribution of regional biodiversity of plantations and natural stands of Red and Jack Pine and White Spruce in southeast Manitoba. Cumulative volume increments of Red and Jack Pine and White Spruce stands across a chronosequence of stand ages will be compared and basic growth and yield models for Red and Jack Pine stands growing in southern Manitoba will be developed. Research will build on and refine existing data and volume calculations and will incorporate methods of determining climate change impacts on future growth of these species. In addition, current plant and animal diversity of plantations in comparison to surrounding natural forests will be explored, and findings will be linked to climate change predictions and environmental variables governing tree growth. Increased calls for Canadian investments in plantation forestry and intensive silviculture to meet global demands for commercial wood supply have brought increased focus on the ability of forest plantations to persist, especially in view of numerous risks affecting plantations, including fire, pests and drought, exacerbated by the uncertainties introduced by the prospects of global warming.

GRASSLANDS FOR BIODIVERSITY AND SUSTAINABILITY: PURSUING INNOVATIVE BENEFITS FROM GRASSLAND RESTORATION

Proponent:	City of Winnipeg, Naturalist Services Branch
Date Approved:	July 7, 2009
Total Amount Approved:	\$18,500.00
Total Amount Expended:	\$18,500.00

A grant of \$18,500.00 was approved to restore 7.5 hectares of degraded grassland in the south end of Winnipeg over a three-phase, three year period. The initial phase is to involve community capacity building, cost/benefit analysis of native grasslands and site establishment; the second phase will involve developing partnerships, installing educational and interpretative signage along a trail through the restoration site and seeding the grassland, and the third phase is to focus on site maintenance and monitoring. The restoration site will be in a highly visible location along Bishop Grandin Boulevard between Waverley Street and Pembina Highway, in a high traffic area where it will have maximum public exposure that will aid in increasing awareness of prairie conservation efforts. Currently, the site has low diversity, few native species, and is dominated by problematic invasive species. Advantages of grassland restoration will be highlighted and previously unexplored benefits will be examined. In addition, a cost comparison of native grassland management to conventional turf grass maintenance will be conducted. The project intends to set an example of a successful and high quality restoration and to engage the public in grassland conservation.

**ENVIRONMENTAL TECHNOLOGY
INNOVATION AND DEMONSTRATION**

PROJECTS ALLOCATED FUNDING

DURING THE 2009/2010 FISCAL YEAR

UNDER THE SDIF OPEN CATEGORY

Number of Projects: 6
 Total Amount Expended: \$87,330.00

<u>Project Name</u>	<u>Total Expended</u>
Clean Green Heat- An Investigation into the Use of Natural Areas in the City of Winnipeg to Produce Grass Biofuel to Heat Municipal Buildings	\$10,000.00
Remote Wind Energy and Hybrid Energy Systems	\$12,180.00
Spray Injection Performance of Vegetable Oil	\$15,150.00
Urbee: The Urban Efficient Car	\$25,000.00
Wind Drag Calculation of Trailers	\$5,000.00
Wireless Plug-in Car Metering	\$20,000.00

ENVIRONMENTAL TECHNOLOGY INNOVATION AND DEMONSTRATION

DETAILED LISTING OF PROJECTS ALLOCATED FUNDING DURING THE 2009/2010 FISCAL YEAR

CLEAN GREEN HEAT—AN INVESTIGATION INTO THE USE OF NATURAL AREAS IN THE CITY OF WINNIPEG TO PRODUCE GRASS BIOFUEL TO HEAT MUNICIPAL BUILDINGS

Proponent: City of Winnipeg, Naturalist Services Branch
Date Approved: July 7, 2009
Total Amount Approved: \$10,000.00
Total Amount Expended: \$10,000.00

A grant of \$10,000.00 was approved to conduct a study to assess the feasibility of converting low quality natural areas to native warm season grass, and convert the harvested grass to pellets and then utilize it as a fuel source to heat buildings. The study will assist in assessing which lands are suitable for restoration with native warm season grasses; in determining the requirements of harvesting and transporting the hay to a pellet processing plant, and in assessing retrofitting requirements of buildings to pellet boilers, furnaces or stoves as a green alternative to electric or natural gas heat. The use of the grass pellets will be demonstrated by installing a stove at the Living Prairie Museum and a boiler at the ice skating shack at St. Vital Park. These units, which initially will burn wood pellets, may switch to grass pellets once the City of Winnipeg has the capacity to harvest and have the hay processed. It is expected that this project will help the City of Winnipeg adopt an alternative and sustainable heating fuel source for some municipal buildings while simultaneously increase the quality of the natural areas in and around Winnipeg.

REMOTE WIND ENERGY AND HYBRID ENERGY SYSTEMS

Proponent: University of Manitoba, Department of Mechanical Engineering
Date Approved: July 7, 2009
Total Amount Approved: \$12,180.00
Total Amount Expended: \$12,180.00

A grant of \$12,180.00 was approved to continue a research and demonstration project to promote the use of wind energy as an alternative fuel source to fossil fuels with the installation of a 5 kW wind energy system at the University of Manitoba's Eco-Village. The project intends to demonstrate the system as a remote community wind turbine working in a grid isolated mode with the wind energy system generating electricity for on-grid applications and to provide power for the Eco-Village, a wind icing monitoring experiment, and a PHEV vehicle to study vehicle to grid interactions. Wind energy parameters critical to on-grid applications that require tracking will be identified and data logging equipment will be installed to track wind systems performance. The results will be posted on a website and available for on-line monitoring purposes. The study seeks to promote the use of wind energy technology in hybrid energy systems in Manitoba, to increase the use of non fossil fuel electrical and heating sources, and to reduce the importation of natural gas for heating purposes, as well as to act as a demonstration project for educational purposes.

SPRAY INJECTION PERFORMANCE OF VEGETABLE OIL

Proponent: University of Manitoba, Department of Mechanical Engineering
Date Approved: July 7, 2009
Total Amount Approved: \$15,150.00
Total Amount Expended: \$15,150.00

A grant of \$15,150.00 was approved to conduct a research project, in partnership with Western Turbo and Fuel Injection Ltd., to determine the characteristics of vegetable oil injection phenomenon using existing diesel fuel injectors. Diesel fuel injectors play a role in determining engine performance and emissions, and the study will determine if diesel fuel injectors are suitable for straight vegetable oil (SVO) injection. Spray pattern (e.g. general shape, spray angle development, penetration) and atomization characteristics (e.g. droplet size and range, speed, distribution) of the liquid as it comes out of the injector will be studied, and two types of oils will be tested, namely the standard testing fluid and straight vegetable oil. Several other influencing parameters, such as the oil properties and the environment conditions in which the liquid discharges will be studied to help determine the characteristics of vegetable oil injection system. In addition, two types of measuring equipment will be used to acquire data: a high-speed imaging system, and a laser-based velocity and droplet size measurement system. Measurements will be carried out for several types of liquids including diesel fuel, vegetable oil, and bio-diesel. The data will help to determine the differences in performance characteristics between the various fuel types.

URBEE: THE URBAN EFFICIENT CAR

Proponent: KOR Ecologic, Inc.
Date Approved: July 7, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

KOR Ecologic Inc. intends to develop an innovative, ultra low energy plug-in hybrid electric vehicle designed to run on electricity and ethanol. The vehicle, called the Urbee, will be designed to meet the minimum criteria of and to compete in the alternative vehicle category of the Progressive Automotive X Prize Competition in May to August 2010 or, as an alternate, to show the vehicle at SEMA in Los Vegas, USA in November 2010, or at a similar venue with similar exposure. A product development plan has been created to develop the vehicle from a modeling phase to a fully tested and operational prototype in time for the competition. Development teams have been organized to address the various vehicle components, including design, assembly and testing, final physical design, fabrication and assembly. It is proposed that the vehicle will eventually be developed into a marketable passenger vehicle that emits significantly less carbon than current day passenger vehicles on the market. The vehicle is intended to be a personal commuter car, capable of providing the necessary comforts for travel in cold climates, including providing heat to passengers and dealing with snow and icy road conditions, as well as significantly reducing fossil fuel consumption.

WIND DRAG CALCULATION OF TRAILERS

Proponent: Wawanesa School
Date Approved: September 29, 2009
Total Amount Approved: \$5,000.00
Total Amount Expended: \$5,000.00

A grant of \$5,000.00 was approved to expand the high school's drafting design program by incorporating real world projects for the students. As part of the program expansion, students will evaluate trailers for wind drag calculations. A partnership will be formed with a local trailer manufacturer who will build and evaluate scale models of trailers, and students will be tasked to produce documents suitable for release to the manufacturer's customers that compare fuel efficiency of various trailer configurations. It is intended that this partnership will provide students a unique opportunity to produce accurate information that will assist trailer manufacturers to make improvements to its current designs to reduce fuel consumption. Various testing of trailer models will be undertaken, including the effect of additional wind baffles used with truck and trailer combinations, and use of a virtual wind tunnel to measure and compare various models.

WIRELESS PLUG-IN CAR METERING

Proponent: Kraus Global Inc.
Date Approved: July 7, 2009
Total Amount Approved: \$20,000.00
Total Amount Expended: \$20,000.00

A grant of \$20,000.00 was approved to design a wireless car metering unit prototype that will focus on a new metering technology for use in parking lots equipped with electrical outlets for block heaters or plug-in electric hybrids. The proposed technology is based on a small, inexpensive "adapter" that can easily fit into existing parking lot power infrastructure to track power consumption of individual automobiles in a standard un-assigned parking lot. It is proposed that power will be activated at a smart power outlet by the vehicle owner with radio frequency identification (RFID) verification number. The smart power outlet would register the RFID customer number and dispense electrical energy while metering it. The information will be relayed to a central location where power consumption may be tracked. The proposed technology will aid parking lot owners in tracking energy consumption according to usage, as parking lot owners may bundle electricity costs into standard parking rates which makes it difficult to identify which user consumes what amount of electrical energy. It is intended that this method will foster energy efficiency, reduce power bills through market oriented conservation, and complement the advent of plug-in electric hybrids. A portable, wireless system may provide incentive for parking lot owners to make electrical outlets available for the purpose of recharging plug-in hybrids. The technology aims to contribute to GHG reductions, as well as foster economic development.

**NORTHERN COMMUNITY DEVELOPMENT
AND ENVIRONMENTAL ISSUES**

PROJECTS ALLOCATED FUNDING

DURING THE 2009/2010 FISCAL YEAR

UNDER THE SDIF OPEN CATEGORY

Number of Projects: 2

Total Amount Expended: \$50,000.00

<u>Project Name</u>	<u>Total Expended</u>
Northern Manitoba Rangers: Building Capacity for a Sustainable Future	\$25,000.00
Thompson Sustainable Community Plan	\$25,000.00

NORTHERN COMMUNITY DEVELOPMENT AND ENVIRONMENTAL ISSUES

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2009/2010 FISCAL YEAR

NORTHERN MANITOBA RANGERS: BUILDING CAPACITY FOR A SUSTAINABLE FUTURE

Proponent: Manitoba Aboriginal and Northern Affairs/Manitoba Keewatinowi Okimakanak
Date Approved: July 7, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

An allocation of \$25,000.00 was approved for the Manitoba Rangers Program, a seven week, live-in employment and training program for aboriginal youth, ages 16-18. Youth will be introduced to geosciences, mineral exploration, mine development, forest management operations, and environmental management through various training sessions and work experiences. These programs will be provided by Prospectors and Developers Association of Canada (PDAC) Mining Matters, Outland Inc. and Northern Manitoba Sector Council. Personal life skills training will be incorporated into the program with an emphasis on educational and career pathing. The program will prepare the emerging First Nations workforce to fulfill the requirement for technical expertise currently needed in the natural resource sectors of northern Manitoba, and aims to prepare the aboriginal population to manage these resources sustainably, while at the same time work toward the preservation of First Nation heritage and culture.

THOMPSON SUSTAINABLE COMMUNITY PLAN

Proponent: City of Thompson
Date Approved: September 29, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to develop a Sustainable Community Plan. The plan will identify a clear vision, goals and priorities for the future development and growth of the community and surrounding area, and will be grounded in the four pillars of sustainability: environment, economic, social, and cultural. A targeted action plan and implementation strategy to achieve the sustainable long-term vision, as well as a monitoring and follow-up program to track performance will be developed. An extensive public and stakeholder engagement process is proposed that will incorporate youth and aboriginal involvement. A key objective of the process is to provide an education and awareness component, raise the level of understanding of sustainable development and its importance to the community, and the role individuals play in building a sustainable and resilient community. The proposed process intends to encourage environmentally sound decisions and actions at the municipal and planning district level and by individuals through increased awareness of how their actions will contribute to a sustainable future. The outcomes of the plan will also assist in stimulating economic development and diversification to improve the quality of life and strengthen community identity.

SUSTAINABLE AGRICULTURAL PRACTICES

PROJECTS ALLOCATED FUNDING

DURING THE 2009/2010 FISCAL YEAR

UNDER THE SDIF OPEN CATEGORY

Number of Projects: 5

Total Amount Expended: \$44,000.00

<u>Project Name</u>	<u>Total Expended</u>
Manitoba Farm to Cafeteria Project	\$10,000.00
Manitoba Grazing School	\$2,000.00
Phosphorus Determination in Soil Extracts	\$25,000.00
Third Zero Till Production Manual	\$5,000.00
Western Canadian Holistic Management Conference	\$2,000.00

SUSTAINABLE AGRICULTURAL PRACTICES
DETAILED LISTING OF PROJECTS ALLOCATED
FUNDING DURING THE 2009/2010 FISCAL YEAR

MANITOBA FARM TO CAFETERIA PROJECT

Proponent: Food Matters Manitoba
Date Approved: March 23, 2010
Total Amount Approved: \$10,000.00
Total Amount Expended: \$10,000.00

A grant of \$10,000.00 was approved to conduct a study on increasing sustainable local food service provisions in Manitoba institutions, including educational institutions (high schools, universities, colleges and private schools) and provincial and municipal institutions (cafeterias, meeting catering ordering policies, etc.). The study will involve extensive surveying and consulting with institutions and all members of the food service supply chain. Education on local food systems through resource materials will be provided and a central local foods resource database will be developed in partnership with various organizations that provide information on food miles, urban agriculture, and agriculture in the classroom, cooking, gardening and composting information and farm visits. It is proposed that an enabling environmental policy for local foods in institutions will also be developed. An increase in demand for local products could lead to increased supply, further increases in consumption, with a resultant decrease in the distance food travels in Manitoba.

MANITOBA GRAZING SCHOOL

Proponent: Manitoba Forage Council
Date Approved: September 29, 2009
Total Amount Approved: \$2,000.00
Total Amount Expended: \$2,000.00

A grant of \$2,000.00 was approved to host a conference in Brandon, Manitoba in December 2009 on sustainable livestock management practices, with forage production and awareness of research and demonstration of agricultural practices as key priorities. The forum will provide presentations on grazing technology and opportunities for Manitoba forage producers and graziers to exchange ideas and experiences. Participants will be encouraged to engage in environmentally sound decision making processes and actions, new technology and initiatives that will benefit the local and global environment. The information exchanged may be used to promote forage and grassland for soil and water conservation, biodiversity, as well as ecological sustainability of disturbed and fragile soils.

PHOSPHORUS DETERMINATION IN SOIL EXTRACTS

Proponent: University of Manitoba, Department of Soil Science
Date Approved: May 8, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to conduct a study to establish and document relationships between phosphorus quantified by inductively coupled plasma (ICP) spectroscopy and colorimetry for different soil test phosphorus (STP) methods for manured and non-manured soils, so that phosphorus quantified by one method may be converted to the other. If no adjustment is made to correct for the difference in inductively ICP - phosphorus and colorimetric-phosphorus, this may lead to a potential excessive application or under application of fertilizer phosphorus. Excessive application may lead to a build up of soil phosphorus with a negative impact on the environment; whereas, under application of phosphorus may contribute to monetary crop losses. Research will provide valuable information when using soil test phosphorus as a basis for recommending fertilizer for crop production and for environmental regulations of soil phosphorus levels.

THIRD ZERO TILL PRODUCTION MANUAL

Proponent: Manitoba-North Dakota Zero Tillage Farmers Association
Date Approved: September 29, 2009
Total Amount Approved: \$5,000.00
Total Amount Expended: \$5,000.00

A grant of \$5,000.00 was approved to produce a manual on zero tillage production to address new challenges confronting agricultural producers. The manual will include updated information on long-term soil and water quality management; major equipment changes; new crop rotations; and new cropping system challenges. Many crops have been developed with agricultural biotechnology which reduces the need for tillage or plowing, allowing farmers to adopt conservation or no-till farming practices. The manual will focus on new no-till production practices learned since 1996, in addition to addressing sequestration of carbon and other greenhouse gasses through no-till cropping systems, perennial grasses produced for biofuel, cropping sequences and efficient incorporation of corn, soybeans, canola, winter wheat, perennial grasses, and other new crops into an effective no-till production system. It will also provide extensive information on soil biology and its utilization to reduce inorganic fertilizer, pesticide, and fuel requirements while improving productivity, sustainability and environmental conditions.

WESTERN CANADIAN HOLISTIC MANAGEMENT CONFERENCE

Proponent: Manitoba Forage Council
Date Approved: September 29, 2009
Total Amount Approved: \$2,000.00
Total Amount Expended: \$2,000.00

A grant of \$2,000.00 was approved to host the Western Canadian Holistic Management Conference in Russell, Manitoba in February 2010. The conference will promote holistic management of agricultural practices to enable food producers to manage resources that improve production, generate financial strength, build diversity and enhance the environment. The event will focus on education and awareness of farming practices to address ecosystem restoration and preservation, as well as to encourage environmentally sound decision making processes and actions, and promote sustainable agricultural practices. Participants will learn to create a decision making framework that establishes long-term goals with a detailed financial plan, a biological plan for the landscape, and a monitoring program to assess progress towards reaching established goals.

SUSTAINABLE COMMUNITY DEVELOPMENT

PROJECTS ALLOCATED FUNDING

DURING THE 2009/2010 FISCAL YEAR

UNDER THE SDIF OPEN CATEGORY

Number of Projects: 7
Total Amount Expended: \$77,500.00

<u>Project Name</u>	<u>Total Expended</u>
4th Annual Igniting the Fire Gathering	\$2,000.00
BNC Green Space Redevelopment Project	\$15,000.00
Mel Johnson School Gardening Project	\$25,000.00
Outdoor Education Curriculum Project	\$13,000.00
Sonics and Sojourns Fall Festival	\$2,500.00
The Ways of Our People Mentoring Program	\$10,000.00
West Central Active Transportation Project	\$10,000.00

SUSTAINABLE COMMUNITY DEVELOPMENT

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2009/2010 FISCAL YEAR

4TH ANNUAL IGNITING THE FIRE GATHERING

Proponent: Turtle Lodge
Date Approved: March 23, 2010
Total Amount Approved: \$2,000.00
Total Amount Expended: \$2,000.00

A grant of \$2,000.00 was approved to host the 4th Annual Igniting the Fire Gathering to bring forward Aboriginal perspectives on creating self-sustainable communities, based on principles of self-determination and connection to the land at Manitou Api in Whiteshell Provincial Park, an ancient traditional and sacred site for many First Nations. This annual gathering is initiated and led by Aboriginal people from many First Nation communities across Canada, and focuses on bringing people together to share knowledge, healing, medicines, ceremonies and prophecies. The event will focus on finding means to restore identity and well-being through cultural reclamation, and to relate to nature and respect the environment through traditional knowledge. With the attendance of hundreds of high school students in past gatherings, it is anticipated that youth involvement in the planning process, as well as with traditional land-based activities that promote earth restoration, will increase as the gathering progresses.

BNC GREEN SPACE REDEVELOPMENT PROJECT

Proponent: Broadway Neighbourhood Centre
Date Approved: March 23, 2010
Total Amount Approved: \$15,000.00
Total Amount Expended: \$15,000.00

A grant of \$15,000.00 was approved to redevelop one of the largest recreational areas in the West Broadway neighbourhood into green space by modernizing the recreational infrastructure and improving access to healthy recreational activities in the neighbourhood. The green space will be developed in three key areas: the existing park at the south end of the property will be transformed into a natural play place with a dry stream, wild flowers and native grasses; the existing hockey rink will be repaired and resized with the area supporting more community garden plots and fruit bearing trees; and new walking and cycling paths will be created to encourage alternative transportation, and the soccer field will be enhanced. The initiative proposes to increase community food security with more garden plots and fruit bearing trees, and to increase opportunities for physical activity by providing more natural play areas for families. This enhanced common green space will serve 85% of the population which dwell in apartments and rooming houses.

MEL JOHNSON SCHOOL GARDENING PROJECT

Proponent: Growing Local Productions
Date Approved: July 7, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to produce an educational documentary film on the Mel Johnson School gardening project in Wabowden, Manitoba. The documentary will follow teachers and their students throughout the gardening season, from planting to harvesting, and to feasting and preserving, as well as documenting the students' participation at an educational workshop at Fort Whyte Farms in Winnipeg, Manitoba. The intent of the documentary is to showcase the effects that gardening activities are having in the community. It is proposed that a 45 minute DVD will be produced and distributed to schools and educators through various agencies and libraries in Manitoba, across Canada and beyond. The initiative will assist in promoting health, environmental and social sustainability through education on healthy nutritive food production and consumption. Through the example of a northern community, it is intended this initiative will demonstrate and provide know-how on the variety of fresh vegetables that can be grown in a Northern climate and soil conditions, even by children.

OUTDOOR EDUCATION CURRICULUM PROJECT

Proponent: Park West School Division
Date Approved: July 7, 2009
Total Amount Approved: \$13,000.00
Total Amount Expended: \$13,000.00

A grant of \$13,000.00 was approved to design a multidisciplinary outdoor education curriculum for middle years featuring a 2.5 day program with hands-on experiential learning in and around Riding Mountain National Park. In partnership with the Riding Mountain National Park and the Riding Mountain Biosphere Reserve, the program will target students from grades 6 to 7 studying diversity of living things and interactions with ecosystems. Resources and activities developed are intended to be engaging, relevant, interdisciplinary, and enhance the Manitoba curriculum. Educational materials to be developed include pre-trip, post-trip and enrichment materials to prepare the students for the on-site experience and to continue their learning in the classroom and community. With the location of the program in a national park which is also part of a biosphere reserve, it is expected to provide a unique experience to students, and help instill a greater understanding and appreciation for their natural and cultural heritage and encourage them to become active stewards.

SONICS AND SOJOURNS FALL FESTIVAL

Proponent: Sonics and Sojourns
Date Approved: July 7, 2009
Total Amount Approved: \$2,500.00
Total Amount Expended: \$2,500.00

A grant of \$2,500.00 was approved to host the second annual Fall Festival in Onanole, Manitoba that will incorporate community-based environmental and cultural activities. The festival will provide information on packaging, marketing, and environmental sustainability issues and help to build environmental stewardship, capacity building, and skills training. Environmental workshops will be held on organic turf management, composting, fire management, and riparian habitat assessment. A two-day carbon neutral fair and exposition will display, demonstrate and promote environmentally friendly technologies and activities, such as biodiesel, organic gardening, hybrid vehicles, clean energy technology, and wind and environmentally friendly consumer products. It is proposed that the event will provide opportunities for participants to learn and share new ideas and will help them to become better stewards of their local environment.

THE WAYS OF OUR PEOPLE

Proponent: The Ways of Our People Mentoring Program
Date Approved: July 7, 2009
Total Amount Approved: \$10,000.00
Total Amount Expended: \$10,000.00

A grant of \$10,000.00 was approved to establish a mentorship and training program for Peguis First Nation youth. The program will focus on increasing awareness and knowledge of traditional practices as it relates to the environment and its inhabitants, and up to three groups of 14 or 15 youth will participate in various traditional skills, including hunting, harvesting, log building, and fruit and vegetable picking. Youth will also receive contemporary training in trapper education, hunter safety, canoe tripping, wilderness and remote first aid training, fishing skills, and GPS/GIS training. Sharing circles, presentations, projects, programming, special events, school talks, and feasts will also be part of the program's activities, with elders participating as mentors in the development and delivery of the program. It is proposed that the program will provide youth with an understanding of environmental issues through the various hands-on learning activities, learn traditional land skills, and be provided with opportunities to become role models or mentors for other community members through the sharing of knowledge gained.

WEST CENTRAL ACTIVE TRANSPORTATION PROJECT

Proponent: Daniel McIntyre/St. Matthews Community Association Inc.
Date Approved: March 23, 2010
Total Amount Approved: \$10,000.00
Total Amount Expended: \$10,000.00

A grant of \$10,000.00 was approved to promote and facilitate community participation in active transportation activities that have a positive environmental, economic and health outcomes for the West Central neighbourhoods in Winnipeg. Specific data on level of usage, route, patterns, and other active transportation activities will be gathered and utilized as the basis for prioritization and development of a community-based strategy and action plan that will help to address main active transportation concerns, such as creating safer streets, providing more supportive infrastructure, creating connected cycling/active transportation routes and networks that are well lit and maintained, and ensuring availability of bike parking at various businesses and destination locations. This initiative builds upon various greening and environmental activities the neighbourhood has been implementing under Manitoba's Community Led Emissions Reduction (CLER) Program.

UNDERSTANDING OUR ENVIRONMENT

PROJECTS ALLOCATED FUNDING

DURING THE 2008/2009 FISCAL YEAR

UNDER THE SDIF OPEN CATEGORY

Number of Projects: 19

Total Amount Expended: \$316,272.71

<u>Project Name</u>	<u>Total Expended</u>
13th North American Caribou Workshop	\$10,000.00
An Early Detection and Rapid Response Network for Invasive Species in Manitoba	\$25,000.00
Conservation Strategies for the Peregrine Falcon	\$25,000.00
Developing Beneficial Management Practices for Species at Risk Habitat at Lake Manitoba First Nation through Education, Planning, and Stewardship Actions	\$20,000.00
Field Incidence of Pathogens, Parasites, and Predators Attacking Mosquitoes in Southern Manitoba	\$15,000.00
Impact of Habitat Modification on Prairie Skinks, Year 2	\$22,000.00
Joint Meeting of the Entomological Society of Manitoba and the Entomological Society of Canada - Apiculture Symposium	\$8,272.71
Manitoba Chimney Swift Initiative, Year 2	\$25,000.00
Manitoba Golden-winged Warbler Project, Year 2	\$20,000.00
Manitoba Science Academy 2009 Summer Term	\$5,000.00
Monitoring the Potential Impacts of Forest Harvesting on the Owl Lake Woodland Caribou Range through an Experimental Harvest Scenario	\$10,000.00
Regional Aboriginal Women's Gatherings	\$5,000.00
Reintroduction and Recovery of the Burrowing Owls in Manitoba	\$25,000.00
Renewable Hydrogen National Symposium in Winnipeg	\$5,000.00
SEdA Seminar and Workshop	\$18,000.00
Sustainability Leadership Innovation Center - Emerging Leaders in Sustainability Program	\$10,000.00
Twice-over Grazing and Prairie Birds, Year 3	\$25,000.00
Wind Power and Migratory Bats, Year 3	\$18,000.00
Yellow Rails in Southern Manitoba	\$25,000.00

UNDERSTANDING OUR ENVIRONMENT

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2009/2010 FISCAL YEAR

13th NORTH AMERICAN CARIBOU WORKSHOP

Proponent: 13th North American Caribou Workshop Steering Committee/
Manitoba Model Forest
Date Approved: September 29, 2009
Total Amount Approved: \$10,000.00
Total Amount Expended: \$10,000.00

A grant of \$10,000.00 was approved to host the 13th North American Caribou Workshop, "Sustaining Caribou and their Landscapes: From Knowledge to Action". The workshop will engage a wide demographic of scientific, aboriginal, and socio-economic interests in the management of North America's caribou populations. The program includes plenary sessions, workshops, oral presentations, expert panel discussions, poster session and tour of caribou range in eastern Manitoba. The workshop will provide a forum for participants to consult on management issues affecting caribou populations, protection of caribou habitat, as well as to showcase examples of successful collaborative management activities that have advanced community and industry awareness of the need for interagency planning at large scales. Hosting the conference in Manitoba will provide an opportunity to profile the extensive work that has been completed in the province, in addition to serving as a national centralized venue to gather researchers and management practitioners to share the most current knowledge and experience available.

AN EARLY DETECTION AND RAPID RESPONSE NETWORK FOR INVASIVE SPECIES IN MANITOBA

Proponent: Invasive Species Council of Manitoba
Date Approved: May 8, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to establish a Manitoba Early Detection and Rapid Response (EDRR) network which will function to encourage communication, collaboration, and cooperation amongst stakeholders with respect to reporting new invaders or infestations. A Working Group for Manitoba will be established to determine an EDRR approach for invasive species, develop province-wide reporting capabilities, and increase cooperation and collaboration amongst stakeholders. Activities include the distribution of electronic newsletters to raise awareness of terrestrial and aquatic invasive species, which would function as an early warning system that will lead to early detection and rapid response of invasive species around the Province; developing best management practices for the rural areas to prevent the spread of invasive species; and developing a prairie region invasive noxious weed database and mapping display website to provide an online comprehensive, standardized and on-going inventory of all noxious weeds. The network is expected to have a significant impact on the prevention, early detection and rapid response to invasions, and to provide the foundation for the EDRR invasive species system for the Province to continue in the future.

CONSERVATION STRATEGIES FOR THE PEREGRINE FALCON

Proponent: University of Manitoba, Department of Environment and Geography
Date Approved: September 29, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to conduct year one of a study to assess the success rate of peregrine falcons produced at urban centres or from captive or managed sources. Satellite tracking technology will be used to assess factors affecting peregrine falcon survival and hacking success relative to first year survival upon release. Procedural variation in hacking protocol and dispersal of various categories of peregrine falcons may also be assessed relative to first year survival upon release, as studies have shown that more time spent at the hack site during the post-fledging season may provide for higher survival to the migratory period. Optimal release techniques will be developed to minimize mortality risks encountered by released falcons, as early mortality is currently the single biggest limiting factor impacting peregrine falcons in Manitoba. Identifying how to minimize these risks is crucial to achieving the long-term goal of establishing breeding peregrine falcons on human-altered landscapes in the province. Detailed information relating to various aspects of peregrine falcon ecology will be collected, including local habitat use, dispersal, migration, winter habitat use, and return to natal areas. Further, a detailed examination of mortality factors will be studied, including an experimental approach to identifying collision risks presented by transmission lines which occurs throughout the peregrine falcon range.

DEVELOPING BENEFICIAL MANAGEMENT PRACTICES FOR SPECIES AT RISK HABITAT AT LAKE MANITOBA FIRST NATION THROUGH EDUCATION, PLANNING, AND STEWARDSHIP ACTIONS

Proponent: Centre for Indigenous Environmental Resources
Date Approved: July 7, 2009
Total Amount Approved: \$20,000.00
Total Amount Expended: \$20,000.00

A grant of \$20,000.00 was approved to continue research on species at risk at Lake Manitoba First Nation, and build upon survey work previously completed with this community. In working collaboratively with community members of Lake Manitoba First Nation and other Interlake First Nations, it is proposed that awareness and knowledge of the existence and habitat needs of species at risk (SAR) on traditional lands will aid in strengthening on-going implementation of beneficial management practices for SAR, and increase participation and long-term engagement of community members to protect and recover SAR both within and outside their reserve lands. Initial research at Lake Manitoba First Nation determined that the least bittern was detected; however, additional monitoring is needed to determine if breeding pairs are returning to the marsh on an annual basis. Breeding pairs of red-headed woodpeckers are also present, and further study is needed to gain a full understanding of the extent and size of populations. Potentially suitable yellow rail habitat has also been located and will be targeted for study. Several potential threats to the marsh and woodland birds have been identified, and beneficial management practices will be developed and implemented to minimize threats.

FIELD INCIDENCE OF PATHOGENS, PARASITES, AND PREDATORS ATTACKING MOSQUITOES IN SOUTHERN MANITOBA

Proponent: University of Manitoba, Department of Entomology
Date Approved: September 29, 2009
Total Amount Approved: \$15,000.00
Total Amount Expended: \$15,000.00

A grant of \$15,000.00 was approved to conduct a study of native species of pathogens (bacteria, viruses, and fungi), parasites (nematodes and mites) and predators (phantom midges) attacking mosquitoes in southern Manitoba and the possibility of using beneficial natural enemies to control mosquitoes. Although it is known that natural enemies of the mosquito occur in the environment, knowledge of their identities, biology, and impact on mosquito populations in Manitoba is unknown or very limited. Research will provide information of the biology and roles in the ecosystem of natural enemies that may contribute towards the development of environmentally acceptable strategies to control mosquito populations. Baseline data collected will assist in developing strategies to avoid manipulation of various habitats by human activities (e.g. spraying insecticides and sustaining beneficial species in the environment). Mosquitoes are blood-feeding pests that represent a serious potential health risk as they can harbour a variety of pathogens and parasites, including viruses, bacteria, fungi, and protozoa. Insecticide application has been the main strategy to control mosquitoes in Canada; however, there are several problems associated with this approach, such as environmental pollution, potential toxicity to humans and animals, high cost, and lower efficacy over the long term.

IMPACT OF HABITAT MODIFICATION ON PRAIRIE SKINKS, YEAR 2

Proponent: Brandon University, Department of Biology
Date Approved: May 8, 2009
Total Amount Approved: \$22,000.00
Total Amount Expended: \$22,000.00

A grant of \$22,000.00 was approved to undertake the second year of a research study to identify the extent and impact of habitat modification on the endangered prairie skink populations inhabiting the mixed-grass prairie ecosystem in southwestern Manitoba. Research will be approached from two perspectives by identifying current and historic population distributions relative to land-use classifications in the mixed-grass prairie ecosystem in southwestern Manitoba, and by determining genetic diversity among populations in southwestern Manitoba. Loss of native mixed-grass prairie habitat is considered the most important factor affecting prairie skink populations in Manitoba. Activities likely leading to habitat loss of mixed-grass prairie include: fragmentation due to aspen encroachment, invasion of exotic species (e.g. leafy spurge), loss of native prairie to cultivation (e.g. potato cropping), and road construction at nearby skink sites. Both habitat succession and invasion of exotic species can directly impact skink populations by eliminating available habitat, and indirectly affect populations by isolating existing populations. Determining the impact on skinks from habitat alteration will assist with future management decisions regarding activities that may impact skink populations.

JOINT MEETING OF THE ENTOMOLOGICAL SOCIETY OF MANITOBA AND THE ENTOMOLOGICAL SOCIETY OF CANADA – APICULTURE SYMPOSIUM

Proponent: Entomological Society of Manitoba
Date Approved: September 29, 2009
Total Amount Approved: \$8,372.00
Total Amount Expended: \$8,272.71

A grant of \$8,372.00 was approved to host a joint meeting in Winnipeg, Manitoba that will provide opportunities for researchers to present current entomology research. In addition, an apiculture symposium for researchers, extension entomologists and beekeepers will be held to showcase cutting edge research in the field of bee virology. Leading bee virologists from the Middle East, Europe and North America will present research, as well as participate in developing a Honey Bee Virus factsheet. The beekeeping industry in Canada has been on a decline and of concern is the spread of the varroa mite, a parasitic mite implicated in virus transmission to honey bees. High levels of infection with acute paralysis virus, Kashmir bee virus and cloudy wing virus are found in honey bee colonies that are infested with varroa mites. These viruses and the newly found Israeli Acute Paralysis Virus are correlated to the presence of the colony collapse disorder in the United States. Recent studies show that various other stressors are also contributing to higher incidence of viral infections in honey bee colonies, including pesticide exposure, climate change, poor nutrition and genetic diversity. The symposium is intended as a response to these emerging issues and an opportunity to bring together many of the leading scientists in Bee Virus interactions.

MANITOBA CHIMNEY SWIFT INITIATIVE, YEAR 2

Proponent: Nature Manitoba
Date Approved: May 8, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to continue implementation of the Manitoba Chimney Swift Initiative to increase the knowledge on the status of Chimney Swift populations in Manitoba and to implement measures to reverse perceived declines. Activities to be undertaken include: video surveillance and temperature monitoring of select nesting chimneys throughout the nesting season; building and encouraging the building of more nesting and roosting habitat or towers; repairing and recovery of existing and/or former chimney nesting sites; and undertaking community outreach activities, such as live stream video images, school and public presentations, installation of signage at newly constructed towers, and updating of the Manitoba Chimney Swift Initiative brochure.

MANITOBA GOLDEN-WINGED WARBLER PROJECT, YEAR 2

Proponent: Bird Studies Canada
Date Approved: May 8, 2009
Total Amount Approved: \$20,000.00
Total Amount Expended: \$20,000.00

A grant of \$20,000.00 was approved to continue Golden-Winged Warbler (GWWA) surveys in Manitoba to obtain information on the species' distribution, population densities, habitat associations, and genetic diversity. Field work will be expanded to examine critical questions of population density and reproductivity. A combination of distribution survey with nest-searching will be undertaken to link breeding success with habitat type. This combined approach will produce detailed information on productivity. In addition, an avian inventory baseline data in early successional habitats within the aspen parkland, bur oak forest, and eastern deciduous forest ecosystems will be continued. Research will include designing a distributional survey for GWWA across southern Manitoba using point counts and playback of GWWA song to determine the full extent of the species' range; conducting repeat-visit survey and nest searching to calculate density and reproductivity per habitat type; and producing a full report including a distributional map based on 2008 and 2009 data and estimates of density and reproductivity per habitat type. Study findings are intended to improve current knowledge of GWWA population size and habitat associations, and provide a conservation assessment leading to the development of a management strategy.

MANITOBA SCIENCE ACADEMY 2009 SUMMER TERM

Proponent: Manitoba Science Academy
Date Approved: July 7, 2009
Total Amount Approved: \$5,000.00
Total Amount Expended: \$5,000.00

A grant of \$5,000.00 was approved to conduct a summer program for high school students in environmental and conservational science research, with findings to be incorporated into scientific reports and delivered in oral presentations. The program will focus on students undertaking research projects that address various issues, including wind turbine efficiency, natural wastewater treatment for a cold climate, effects of liming on vegetation, and studies to protect lake sturgeon. The purpose of the program is to produce scientific reports that provide sound data and address particular issues of environmental concern. It is anticipated that the results of all studies completed will result in data that will be used in future applications. Students participating in the program will be mentored by post-secondary student tutors, who will work under the guidance of the Manitoba Science Academy Principal. Students will participate in all aspects of the research from collection and analysis of data and in forming conclusions on the findings and making recommendations for future consideration with respect to the use of the information. Students successfully completing the program may be eligible to receive two grade 12 credits from the Whiteshell School Division.

MONITORING THE POTENTIAL IMPACTS OF FOREST HARVESTING ON THE OWL LAKE WOODLAND CARIBOU RANGE THROUGH AN EXPERIMENTAL HARVEST SCENARIO

Proponent: Manitoba Model Forest, Inc.
Date Approved: September 29, 2009
Total Amount Approved: \$10,000.00
Total Amount Expended: \$10,000.00

A grant of \$10,000.00 was approved to conduct a study on caribou response to an experimental forest harvest via the placement of GPS collars and subsequent analyses of animal location data. Research results will be integrated into the development of a range management plan for the Owl Lake caribou population that will guide how resource extraction will be carried out across the landscape in the future. The landscapes occupied by woodland caribou in eastern Manitoba are in increasing demand for industrial and recreational uses that pose threats to caribou habitat and survival through their potential effects on forest structure, composition and access. As part of the study, two forest harvest designs have been developed, with a multi-year monitoring protocol established to assess the effectiveness of the harvest prescriptions. Results will be reviewed in conjunction with pre-harvest GPS data on the Owl Lake caribou as well as with other vegetation and species monitoring results to assess if harvest objectives are being achieved and if not, to identify causes and adapt harvest and renewal prescriptions as required. Research results will also assist in developing mitigation plans for the Atiko and Bloodvein caribou herds affected by the increasing demand for timber resources on the east side of Lake Winnipeg

REGIONAL ABORIGINAL WOMEN'S GATHERINGS

Proponent: Manitoba Aboriginal and Northern Affairs
Date Approved: September 29, 2009
Total Amount Approved: \$5,000.00
Total Amount Expended: \$5,000.00

An allocation of \$5,000.00 was approved to support the second and third Regional Aboriginal Women's Gatherings in Thompson and Brandon, Manitoba in preparation for the National Aboriginal Women's Summit (NAWS) III that Manitoba will be co-hosting in 2010. In June 2008, Manitoba Aboriginal and Northern Affairs, in partnership with the Native Women's Transition Centre, hosted a day long roundtable with Aboriginal community women, in preparation for NWAS II. The meeting provided an opportunity for government and non-government organizations to highlight key activities occurring at the community level that affect Aboriginal women. It also looked towards the future, provided an opportunity for recommendations on what more needs to be done and how community and government programs could be streamlined. Manitoban Aboriginal women delegates recommended that more comprehensive gatherings needed to occur. As such Manitoba Aboriginal and Northern Affairs committed to three regional gatherings that support Manitoba's participation and reporting at NAWS III. It was also recommended that an additional fourth gathering be held to provide southern rural Aboriginal women the opportunity to participate.

REINTRODUCTION AND RECOVERY OF THE BURROWING OWLS IN MANITOBA

Proponent: University of Winnipeg, Department of Biology
Date Approved: May 8, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved for a study on burrowing owl populations, and to find ways to promote the re-establishment of a self-sustaining population. A reintroduction program to promote, stimulate and increase burrowing owl populations, which is listed as endangered both federally and provincially, is proposed. Captive bred birds will be reintroduced into the wild to stimulate and increase recovery of the burrowing owl populations. Data will be gathered on the species, including food habits (prey use), habitat use on breeding home ranges movement, and activity for both wild and captive bred birds. Critical habitat will be identified and factors such as dispersal phenology and return rates, brood size, nest fidelity, survival rates, and longevity will be documented and comparatively analyzed for wild and captive bred. Natural burrows will be examined early in the nesting season for suitability, while new sites will be established with artificial burrows, and breeding enclosures for captive birds will be built in cooperation with landowners. Prey use will be examined by identifying prey remains from pellets collected at burrow sites and dissection. Capture and banding of adult and owlets will provide weights, measurements, and survival rates, as well as provide information on dispersal and longevity after the study is completed. Radio telemetry will be used to assess home range size and composition, movements, and activity patterns.

RENEWABLE HYDROGEN NATIONAL SYMPOSIUM IN WINNIPEG

Proponent: University of Manitoba, Department of Biosystems Engineering
Date Approved: March 23, 2010
Total Amount Approved: \$5,000.00
Total Amount Expended: \$5,000.00

A grant of \$5,000.00 was approved to host a national symposium on renewable hydrogen production. The event will provide a national showcase of hydrogen research underway in Manitoba and expose Manitobans and Manitoba companies to leading-edge hydrogen research. In addition, new research and development for hydrogen fuel with zero emissions, and advance research on the production of zero carbon fuels for Manitoba to meet its climate change objectives, will be showcased.

SEdA SEMINAR AND WORKSHOP

Proponent: Sustainability and Education Academy, York University
Date Approved: September 29, 2009
Total Amount Approved: \$18,000.00
Total Amount Expended: \$18,000.00

A grant of \$18,000.00 was approved to host a SEdA Education Leader Seminar and create a post-seminar in-service workshop for senior education leaders to create a culture of sustainable development for integration into all aspects of the Manitoba K to 12 education system. The seminar and workshop intends to demonstrate the educational, social and operational relevance of Education for Sustainable Development (ESD) and empower educators to incorporate ESD into governance, curriculum, pedagogic methods, facilities and operations in their respective boards and school divisions. Currently 12 out of 36 Manitoba school divisions have participated in a SEdA seminar. To sustain the initiative, a second SEdA Seminar will be offered in October 2009 and a guide on how to run an effective in-service workshop on ESD will be developed and pilot-tested with staff of the Evergreen School Division. The guide will provide information needed for schools and other division facilities to operate in more eco-efficient fashion, reducing resource use, environmental impact and financial expenditures.

SUSTAINABILITY LEADERSHIP INNOVATION CENTER—EMERGING LEADERS IN SUSTAINABILITY PROGRAM

Proponent: International Institute for Sustainable Development
Date Approved: September 29, 2009
Total Amount Approved: \$10,000.00
Total Amount Expended: \$10,000.00

A grant of \$10,000.00 was approved to implement a sustainable development training program designed to enhance the ability of young professionals, age 20-35 with 1 to 5 years of experience in business, government or civil society, to be effective stewards of sustainability. This training program will be piloted through the Sustainability Leadership Innovation Centre. Potential young leader participants will be provided opportunities to form a peer network to address existing complex sustainable development issues, strengthen skills in collaborative multi-stakeholder processes, systems approaches, communication and leadership, and enhance their capacity to implement policy solutions that balance environmental, economic and social equity objectives as Winnipeg's future leaders. A three-leveled approach will be adopted to impart the sustainability leadership skills: intergenerational mentorship, experiential learning and capacity development, and networking and communications. The program will employ a facilitative approach to support the young professionals' engagement in an iterative learning cycle built on action and reflection. The curriculum will be delivered through a combination of experiential and on-line training, with participants having access to leadership experience across all sectors in Winnipeg.

TWICE-OVER GRAZING AND PRAIRIE BIRDS, YEAR 2

Proponent: University of Manitoba, Natural Resources Institute
Date Approved: May 8, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to conduct year two of a research study to determine the environmental effects of cattle grazing on prairie bird communities under a variety of conditions, environments, and spatial scales, as the loss and degradation of prairies has been a leading cause of the dramatic declines observed in most species of prairie birds. Impacts associated with conserving prairie species, as well as the agricultural way of life for communities in Manitoba will be determined by comparing the differences in prairie bird communities among twice-over rotationally grazed, continuously grazed, and ungrazed prairies. Research will be continued to determine if cattle grazing influences vegetation structure and composition and thus affect diversity of bird communities, and how levels of effect may vary with grazing intensity, soil type, and juxtaposition with other habitats. The extent to which twice-over rotational grazing systems influence prairie bird communities is not known. Several avian species at risk either tolerate (e.g. Sprague's pipit) or benefit from (e.g. Baird's sparrow) well-managed grazing programs on native prairies, therefore, understanding effects of grazing systems on birds may allow the development of economically and environmentally sustainable management practices. Prairie conservation is needed as the prairie biome has undergone the most habitat conversion and the mixed-grass prairie has undergone significant declines throughout its range, particularly in Manitoba.

WIND POWER AND MIGRATORY BATS, YEAR 3

Proponent: University of Winnipeg, Centre for Forest Interdisciplinary Research
Date Approved: May 8, 2009
Total Amount Approved: \$18,000.00
Total Amount Expended: \$18,000.00

A grant of \$18,000.00 was approved to conduct the third year of a three year study to determine potential impacts of wind power on forest bat populations in Manitoba by quantifying mortality at operational wind plants. In addition, baseline pre-construction data will be collected to determine if bats are attracted to wind turbines, taking into account influence of season, weather and proximity to forest roosting habitat at proposed wind plants. Recommendations to mitigate the impact of wind facilities on migratory bats in Manitoba will be developed. Bats provide essential ecosystem services in forest and agricultural systems by cycling nutrients in their guano and consuming large numbers of herbivorous insects, many of which may be pest species. Three bats species are being studied, hoary, eastern red and silver-haired, and all suffer high rates of mortality at wind farms in other parts of North America and require trees for roosting. In terms of controlling insects and nutrient recycling, these species are important components of Manitoba's boreal ecosystems. High rates of adult mortality can quickly become unsustainable for bat populations. No population-size estimates exist for migratory bats in Manitoba. Earlier results have identified the presence of local breeding populations of migratory bats in the vicinity of wind plants, and of bat mortalities in the area. Further study will be conducted to determine how geography and site selection may influence mortality impacts, and project mortality survey protocol will be modified to quantify the relationship more precisely.

YELLOW RAILS IN SOUTHERN MANITOBA

Proponent:	University of Manitoba, Natural Resources Institute
Date Approved:	July 7, 2009
Total Amount Approved:	\$25,000.00
Total Amount Expended:	\$25,000.00

A grant of \$25,000.00 was approved to conduct a two year study on the yellow rail, a prairie bird which has been listed as a species of special concern in Canada by COSEWIC due to significant population declines across its breeding range. Abundance estimates for this species are poor, likely due to the secretive nature of the species, and that it vocalizes at night. The species, therefore, has not been effectively surveyed by most avian sampling efforts. Loss of wetland habitat as a result of human activities is proposed to be one of the reasons for the observed population declines. Yellow rails are often associated with areas dominated by sedges and low water levels. This habitat is often characteristic of smaller wetlands or margins of larger wetlands, which are often destroyed or degraded. The effects of landscape fragmentation, surrounding land use, size of contiguous wetland habitat, and local habitat characteristics will be studied, and factors such as overall wetland size or the amount of surrounding agricultural land will be taken into consideration. As well, habitat selection at multiple spatial scales will be studied, so that appropriate management recommendations to protect and conserve yellow rails and their habitat may be provided.

SPECIAL INITIATIVES
ALLOCATED FUNDING
DURING THE 2009/2010 FISCAL YEAR
UNDER THE SDIF OPEN CATEGORY

Number of Projects: 3
Total Amount Expended: \$670,000.00

<u>Initiative</u>	<u>Total Expended</u>
Flin Flon Soil Improvement Project, Phase Two	\$105,000.00
Polar Bear Facilities Improvement at Assiniboine Park Zoo	\$500,000.00
Manitoba Product Stewardship Corporation Phase-Out and Transition to Producer Responsibility Organization	\$65,000.00

SPECIAL INITIATIVES
DETAILS OF PROJECTS ALLOCATED
FUNDING DURING THE 2009/2010 FISCAL YEAR

FLIN FLON SOIL IMPROVEMENT PROJECT, PHASE TWO

Administered by:	City of Flin Flon
Date Approved:	March 16, 2010
Total Amount Approved:	\$105,000.00
Total Amount Expended:	\$105,000.00

A grant of \$105,000 was approved to continue the soil improvement project underway in Flin Flon, Manitoba at ten publicly accessible locations identified by initial testing in 2006 to have levels of metals above Canadian Soil Quality Guidelines. Ten parks/playgrounds were identified for soil enhancement work as a precautionary measure to reduce risks to young children who may inadvertently consume soil containing elevated levels of metals while playing in public parks. Delivery of the Phase 1 two-site soil improvement program was started in 2008 and completed in 2009, along with a substantial portion of the planned Phase 2 improvement. The remaining park/playground sites are scheduled for soil and sod improvement during 2010-2011. The City of Flin Flon will deliver the remaining outstanding soil improvement work on behalf of Manitoba Conservation, and will provide on-site organization, coordination and oversight related to landscape and related work for the delivery of soil improvement activities.

POLAR BEAR FACILITIES IMPROVEMENT AT ASSINIBOINE PARK ZOO

Administered by:	Assiniboine Park Conservancy
Date Approved:	March 23, 2010
Total Amount Approved:	\$500,000.00
Total Amount Expended:	\$500,000.00

A grant of \$500,000.00 was approved to undertake the renovation of existing bear enclosures at the Assiniboine Park Zoo. The enclosures will be improved to meet provincial standards by increasing size, enhancing security features, and creating enrichment experiences, such as sand for bears to dig and a shade and climbing structure. An improved divide between humans and the bears is expected to enhance the bears' rehabilitation success. The renovation is intended to contribute to the renewal of a major Winnipeg attraction. This initiative is part of a provincial commitment directed towards three initiatives, which included renovations to existing bear enclosures, the establishment of an International Polar Bear Conservation Centre to conduct and coordinate research related to conservation of polar bears and to operate as a polar bear rescue centre, and the development of an Arctic Exhibit, to be located at the Assiniboine Park Zoo under the management of the Assiniboine Park Conservancy.

MANITOBA PRODUCT STEWARDSHIP CORPORATION PHASE-OUT AND TRANSITION TO PRODUCER RESPONSIBILITY ORGANIZATION

Administered by:	Manitoba Product Stewardship Corporation
Date Approved:	March 23, 2010
Total Amount Approved:	\$65,000.00
Total Amount Expended:	\$65,000.00

A grant of \$65,000.00 was approved to support the phase-out of the Manitoba Product Stewardship Corporation (MPSC) and its final operational requirements, and the transition to a new producer responsibility organization, Multi-Material Stewardship Manitoba. In transitioning to a new producer responsibility organization, MPSC will cease its operations and will no longer collect the two-cent WRAP levy on beverage containers. In closing the corporation, outstanding levies will be collected, municipal claims will be paid in full, a financial audit will be completed, a final annual report will be produced, assets will be disposed of, and appropriate records will be prepared for archiving.

**PROJECTS FROM PREVIOUS YEARS
PROJECTS ALLOCATED FUNDING
DURING THE 2009/2010 FISCAL YEAR
UNDER THE SDIF OPEN CATEGORY**

Number of Projects: 3
Total Amount Expended: \$82,521.78

<u>Project Name</u>	<u>Total Expended</u>
SUSTAINABLE COMMUNITY DEVELOPMENT	
Municipal Planning Guidelines for Wind Energy	\$2,000.00
UNDERSTANDING OUR ENVIRONMENT	
The Little Earth Charter	\$7,500.00
SPECIAL INITIATIVES	
Flin Flon Soil Improvement Project-Phase One	\$73,021.78

PROJECTS FROM PREVIOUS YEARS
DETAILED LISTING OF PROJECTS FROM PREVIOUS
YEARS WITH CARRYOVER AUTHORITY
DURING THE 2009/10 FISCAL YEAR

Projects listed below are those that were initially allocated funding from the Sustainable Development Innovations Fund in previous fiscal years, but had carryover authority for the 2009-2010 fiscal year.

Project descriptions have been provided in previous Annual Reports.

SUSTAINABLE COMMUNITY DEVELOPMENT

MUNICIPAL PLANNING GUIDELINES FOR WIND ENERGY

Administered by:	Intergovernmental Affairs
Date Approved:	September 28, 2007
Amount Expended in 2009/10:	\$2,000.00

UNDERSTANDING OUR ENVIRONMENT

THE LITTLE EARTH CHARTER

Administered by:	Little Animation Inc.
Date Approved:	September 28, 2007
Amount Expended in 2009/10:	\$7,500.00

SPECIAL INITIATIVES

FLIN FLON SOIL IMPROVEMENT PROJECT—PHASE ONE

Administered by:	Manitoba Conservation, Air Quality Section
Date Approved:	August 12, 2008
Amount Expended in 2009/10:	\$73,021.78

BROAD ALLOCATIONS CATEGORY
FUNDING ALLOCATIONS
DURING THE 2009/2010 FISCAL YEAR

Number of Broad Allocations: 6

Total Amount Expended: \$1,512,999.08

<u>Project Name</u>	<u>Total Expended</u>
Environmental Youth Corps (EYC)	\$222,583.35
Manitoba Climate Change Action Fund (MCCAF)	\$329,000.00
Waste Reduction and Pollution Prevention (WRAPP) Fund	\$428,564.67
Water Stewardship Fund (WSF)	\$208,485.32
Bear Smart Initiative	\$124,365.74
Manitoba Forestry Association Woodlot Program	\$200,000.00

BROAD ALLOCATIONS CATEGORY

DETAILED LISTING OF PROJECTS ALLOCATED

FUNDING DURING THE 2009/2010 FISCAL YEAR

ENVIRONMENTAL YOUTH CORPS

Proponent: Manitoba Conservation
Date Approved: 2009/2010 Treasury Board Estimates Review Process
Total Amount Approved: \$225,000.00
Total Amount Expended: \$222,583.35

The Environmental Youth Corps (EYC) provided Manitoba's young people with an opportunity to prepare for the environmental challenges of tomorrow by helping them gain valuable education and experience today. EYC encourages youth to volunteer within their community for projects to improve and protect Manitoba's environment. The EYC program allows youth the opportunity to be involved in a variety of environmental activities that may otherwise not occur. During the past 19 years, more than \$3.3 million has been provided to community-based projects involving over 96,900 youths. As a result, Manitoba youth have increased their appreciation and responsibility towards their environmental surroundings, as well as learned the importance of voluntary community involvement.

Environmental projects eligible for funding to a maximum of \$5,000.00 include, but not limited to: water quality, waste minimization (recycling, composting, etc.), protection of flora and fauna, rehabilitation and conservation of the natural environment, wildlife conservation and habitat preservation.

Total EYC 2009/2010 Allocation	\$225,000.00
Applications Processed	128
Applications Approved	114
Applications Declined	9
Applications Deferred	1
Applications Withdrawn	4
Number of Youth Involved	8,440
Total Amount of Grants Approved/Expended	\$216,151.23
Program Administration	\$6,432.12
Total Expended	\$222,583.35

Brief descriptions of the 114 projects approved under the EYC program during the 2009/2010 fiscal year are as follows:

CENTRAL REGION

Anola School Playground, Anola – received \$1,500 to involve 24 students in a school yard clean up and beautification project planting gardens, trees, and shrubs to create wildlife habitat and an outdoor classroom.

Arborg Bifrost Parks and Recreation, Arborg – received \$1,900 to involve 20 youth in a community clean up and beautification project planting trees, shrubs, and flowers.

Assiniboine Watershed Network, Winnipeg – received \$3,725 to involve 130 youth protecting, preserving, and enhancing the riparian habitat along the Assiniboine River and its tributaries with the planting of indigenous trees and vegetation. Youth will also clean up Bruce Park and participate in invasive plant species removal activities in partnership with the Invasive Species Council of Manitoba.

Balmoral Recreational Centre, Balmoral - received \$1,700 to involve nine youth in a community clean up project removing garbage and debris removal along the creek, plant and maintain flowerbeds, and create a green space at a vacant lot.

Boys and Girls Clubs of Winnipeg Inc., Freight House and Dufferin School – received \$3,503 to involve 88 youth in an urban agricultural and waste minimization project planting trees, maintaining gardens, establishing on-site composting, and participating in a community clean up.

Boys and Girls Clubs of Winnipeg Inc., Gilbert Park – received \$3,693 to involve 28 youth in community clean ups, community garden activities, and building community composters for backyard and vermicomposting systems.

Boys and Girls Clubs of Winnipeg Inc., Norquay Boys and Girls Club – received \$3,263 to involve 43 youth in a community clean up and beautification project planting and maintaining community gardens, recycling and establishing vermicomposting systems in partnership with the Point Douglas Residents Association and the Point Douglas Women’s Centre and gardening project.

Boys and Girls Clubs of Winnipeg Inc., Sister MacNamara Boys and Girls Club – received \$3,263 to involve 80 youth in a community clean up and gardening project planting vegetables and native vegetation to attract bees and butterflies, and establishing a composting system using both backyard and vermicomposting techniques.

Brock Corydon School, Winnipeg – received \$500 to involve 240 youth in an environmental and sustainable living project with each classroom selecting and planting a native tree, learning about native vegetation, identifying and planning locations for tree planting, and studying soil conditions.

Centennial School, Selkirk – received \$1,900 to involve 50 youth to beautify the school grounds with the planting of native shrubs, trees, and butterfly attractant perennials.

Collège Pierre-Elliott-Trudeau, Winnipeg – received \$2,000 to include 40 youth in a project that will help to reduce the students’ carbon footprint on the environment by installing alternative energy sources, such as wind turbines and solar cells at the school.

Community Family Resource Centre, Winnipeg – received \$2,100 to involve 10 youth in a neighbourhood beautification and clean up project planting and maintaining community vegetable gardens and assisting with community graffiti removal.

Crystal Spring School, Ste. Agathe – received \$720 to involve 36 youth in a community enhancement project planting and caring for trees, and participating in activities to promote chemical-free weed control within the community.

Dakota Plains Education Authority, Edwin – received \$1,500 to involve 50 youth in a community clean up, planting flowers and shrubs, and recycling.

Dakota Plains First Nation, Portage la Prairie – received \$2,613 to involve 40 youth in a community clean up, beautification and tree planting project.

Discovery Children’s Centre, Winnipeg – received \$2,340 to involve 100 youth in a school beautification and enhancement project planting a prairie garden, creating a garden path, planting shrubs and perennials, maintaining gardens, and participating in composting activities.

Earl Grey Parent Council, Winnipeg – received \$1,500 to involve 200 youth in developing a green space for an outdoor classroom, planting a vegetable garden and creating wildlife habitat.

École Robert H. Smith School, Winnipeg – received \$2,000 to involve 400 youth in a community and schoolyard clean up and greening project creating a community green space with a “Sharing Garden” to be planted with native vegetation and butterfly attractant perennials.

École St. Avila Home and School Association, Winnipeg – received \$1,500 to involve 650 youth planting indigenous trees and shrubs to create wildlife habitat, and a “bioretention system”, as well as planting “rain-gardens” to address drainage and water quality issues.

École St. Eustache Parent Advisory Committee, St. Eustache – received \$2,075 to involve 25 youth in a school beautification project planting shrubs along school grounds.

Ekfrid School, Plum Coulee – received \$1,500 to involve 15 youth planting trees and butterfly attractant perennials to create an outdoor classroom with wood chip walking paths.

Eriksdale School, Eriksdale – received \$1,264 to involve 150 youth in a school beautification project planting a crocus garden, tower poplars and lilacs.

Fisher River Human Resource Program, Koostatak – received \$2,380 to involve 27 youth in greening activities to increase youth and community knowledge of the environment, including community and riverbank clean up, recycling, and transplanting trees.

Friends of the Garden, St. Claude – received \$2,420 to involve 125 youth in a community beautification project planting community gardens with flowers, trees, and shrubs.

Grant Park High School, Winnipeg – received \$2,551 to involve 50 youth in conservation and protection efforts at the Boreal Woods Nature Centre and Assiniboine Forest assessing water quality, conducting soil studies, and performing an ecology analysis.

Indian Springs School, Swan Lake – received \$1,820 to involve 70 students in a school enhancement project planting apple trees, saskatoon shrubs, maintaining flower beds and installing garbage containers.

Inwood School, Inwood – received \$1,925 to involve 15 students to expand and enhance the school’s outdoor classroom and composting system, plant trees, and create flowerbeds and gardens.

Lord Nelson School, Winnipeg – received \$2,000 to involve 400 students in creating an outdoor classroom with a multifaceted theme containing five habitat categories: Boreal Forest, Butterfly Garden, Mixed Grass Prairie, Aspen Parkland, and Tall Grass Prairie. An Aboriginal medicine and Asiatic meditation garden will be incorporated, and the green space will be accented with bird houses, bird feeders, benches and waste receptacles.

Lubavitch Centre, Winnipeg – received \$820 to involve 75 youth in a community clean up and beautification project to increase youth environmental awareness and respect.

L.U.D. of Lundar, Lundar – received \$1,125 to involve 200 youth in a community beautification project building raised gardens, planting butterfly attractant perennials, participating in a community clean up, and promoting recycling.

Mallard Community Council, Waterhen – received \$1,700 to involve three youth in a community enhancement project promoting a beautiful yard contest, picking up litter and debris, maintaining

community gardens, as well as promoting environmental education on topics such as re-usable bags and energy efficiency.

Maples Youth Activity Centre, Winnipeg – received \$3,482 to involve 120 youth establishing an outdoor classroom building planters, and planting gardens with butterfly attractant perennials.

Matheson Island Community Council, Matheson Island – received \$2,025 to involve 25 youth in a community enhancement project by creating walking trails, butterfly gardens, and building bird feeders.

Matheson Island School, Matheson Island – received \$725 to involve 20 youth in a school yard beautification project planting trees and butterfly attractant perennials.

Meadow Portage Recreation Commission, Portage – received \$1,338 to involve 12 youth in a community clean up and beautification project planting flowers and trees.

Montrose School, Winnipeg – received \$1,579 to involve 89 youth in a community clean up and school yard beautification project planting butterfly attractant perennials and composting.

Murdoch MacKay Collegiate, Winnipeg – received \$1,000 to involve 50 youth in eco-friendly school yard greening activities such as greenhouse maintenance, community gardening, and composting.

Nature Manitoba, Winnipeg – received \$1,975 to involve 95 youth in the Assiniboine Park River bottom Forest Project restoring a 2.5 km strip of forest habitat along the south bank of the Assiniboine River in Assiniboine Park. Trees will be planted to help regenerate the river bottom forest from damaging events, and a brochure of the area will be developed.

Noël-Ritchot Student Association (Association Étudiante de Noël-Ritchot), Winnipeg – received \$400 to involve 20 youth planting trees and developing a school composting program.

North Point Douglas Women's Centre, Winnipeg – received \$1,175 to involve 20 youth from the Boys and Girls Club, Norquay Community Centre, and other local youth building and planting 25 garden boxes to encourage community gardening involvement and environmental enhancement.

Peguis First Nation Training and Employment, Peguis – received \$1,315 to involve 50 youth in a community enhancement and clean up project promoting the importance of proper waste disposal and recycling.

Pinaymootang First Nation Health, Fairford – received \$2,175 to involve 56 youth in a community tree planting project where each youth will plant a tree, name it, and learn about the species planted.

Point Douglas Residents Committee, Winnipeg – received \$2,745 to involve 25 youth planting a community garden and participating in a tree banding project to help prevent the spread of Dutch Elm disease.

Prairie Sky Child Care Centre, Elie – received \$1,150 to involve 30 youth in creating a community green space with raised garden beds, butterfly attractant perennials, and composters.

Red River Valley Junior Academy, Winnipeg – received \$2,470 to involve six youth to complete the Jennifer Pieper Memorial Garden planting native plants and trees, and establishing a school composting station.

River Elm School, Winnipeg – received \$1,000 to involve 10 youth in an Earth Club project participating in community clean ups, creating indoor and outdoor gardens, and participating in Youth Encouraging Sustainability activities such as renewable and alternative energy, wind energy and power production, water testing, quality of riparian zones, and effects of climate change on biodiversity.

RM of Eriksdale, Eriksdale – received \$974.77 to involve 187 youth in community recycling, clean up, and beautification project planting trees and flowers throughout the community.

RM of Winchester, Deloraine – received \$1,950 to involve five youth in a community clean up, recycling and green space development, and planting of native vegetation along Lake Metigoshe. Environment related information on the care and maintenance of “shoreslines and works near water”, water quality, and hazardous waste days will be shared with cottage owners.

Rock Ridge Youth Committee, Rock Ridge – received \$1,338 to involve 15 youth in a community clean up and beautification project planting flowers and trees.

Roseau Crossing Heritage Park, Dominion City – received \$885 to involve 17 youth in a community clean up and recycling project planting trees and shrubs, and pop bottle recycling program.

Ruth Hooker School, Selkirk – received \$1,800 to involve 160 students in a school beautification project planting shrubs and trees and creating a park like setting.

Salisbury Morse Place School, Winnipeg – received \$745 to involve 12 youth in a beautification project planting trees, perennials, and shrubs, and creating an enclosure for the garden area.

Selkirk Friendship Centre Inc., Selkirk – received \$1,975 to involve eight youth in a community beautification project planting flowers to create a green space with a park-like setting.

Seven Oaks Child Day Care Centre Inc., Winnipeg – received \$350 to involve 72 youth in a community vegetable gardening and composting project planting.

Seven Oaks Neighbourhood Network: Community Garden Committee, Winnipeg – received \$596 to involve 15 youth in a community beautification project building compost bins, maintaining gardens, and distributing educational materials on responsible environmental practices.

Silverwinds School, Sperling – received \$1,175 to involve 30 youth in a beautification project to restore the school’s shelterbelt by planting trees, shrubs, grasses, and flowerbeds.

Skownan First Nation Health Centre, Skownan – received \$2,020 to involve five youth in a community enhancement and clean up project promoting recycling and community activities with an “Environmental Friendly, Beautiful Yard, and Beautiful Garden” contest.

Spence Neighbourhood Association, Winnipeg – received \$2,569 to involve 150 youth to enhance and expand neighbourhood green spaces and urban community gardens using organic methods.

Treherne Elementary School and Treherne Collegiate, Treherne – received \$3,250 to involve 85 youth in a variety of community greening activities including building compost and recycling bins, making and distributing reusable grocery bags, planting vegetation to create green spaces, and installing a bike rack to encourage youth participation in community eco-friendly transportation activities.

Waterhen Community Council, Waterhen – received \$1,720 to involve 90 youth in a community clean up, gardening, and recycling project.

Waterhen School, Waterhen – received \$2,350 to involve 94 youth in creating an outdoor classroom, green space, and wildlife habitat by planting raised garden beds, native trees, shrubs, and flowers. Bird houses, bat houses, and bird feeders will be built and walking trail created to create a park-like setting.

West Broadway Development, Winnipeg – received \$4,000 to involve 60 youth in creating community green spaces, restoring habitat with native vegetation, planting organic vegetable gardens, and composting activities.

Winkler Elementary School, Winkler – received \$1,627 to involve 600 youth in schoolyard and community green space sustainability activities planting gardens, vermicomposting, and recycling.

Winnipeg Mennonite Elementary Schools Inc., Winnipeg – received \$1,000 to involve 20 students in a school yard beautification project by transforming a barren school yard into an interactive green space with trees, vines, and flowers.

Woodland Community, Poplar Point – received \$1,050 to involve 38 youth in a community beautification and rehabilitation project planting trees.

Zoological Society of Manitoba, Winnipeg – received \$3,500 to involve 450 youth in an environmental education project to promote the reduction of carbon emissions and to incorporate this theme into tours, talks, and camps. To reduce individual emissions youth will receive a “carbon footprint tool kits” to take home.

Zoological Society of Manitoba, Winnipeg – received \$2,000 to involve 75 youth in an educational animal conservation awareness campaign at the Assiniboine Park Zoo, as part of the summer camp programming and Zoo Ambassador Program. Fun fact educational cards and posters of animals and their habitats will be created and distributed to school and youth groups and zoo visitors.

EASTERN REGION

Bloodvein First Nation, Bloodvein – received \$2,060 to involve eight youth in a traditional land use management and forest rehabilitation project transplanting trees to public areas, researching indigenous trees and interviewing elders for traditional tree uses, as well as gathering information to create a pamphlet for conservation efforts and to advise the community of the importance of sustaining local forests.

Brighter Futures Bloodvein First Nation, Bloodvein – received \$1,806 to involve two youth promoting and participating in recycling activities as part of the Youth Connection Program.

Manigotagan Community Council, Manigotagan – received \$2,886 to involve 31 youth in a community clean up and gardening project promoting conservation practices and the importance of vegetable and flower gardening.

Springwell School, Lac du Bonnet – received \$500 to involve 30 youth in a school yard beautification and clean up project with “NoMowGrass” being planted to reduce the use and need of fertilizers and watering.

Wanipigow School, Wanipigow – received \$2,380 to involve 350 youth to create an outdoor classroom, green space and wildlife habitat planting raised garden beds, native trees, shrubs and flowers. Bird houses, bat houses, and bird feeders will be built to create a park-like setting.

NORTHEAST

Disbrowe Island Youth, Red Sucker Lake – received \$2,200 to involve three youth in a community beautification project cleaning up public grounds and organizing waste for recycling.

God’s Lake Narrows Community Council, God’s Lake Narrows – received \$1,360 to involve 11 youth in a community beautification project cleaning beaches, building garbage and recycling bins, and tree planting.

Jack River School, Norway House – received \$2,330 to involve 375 youth to create an outdoor classroom, green space, and wildlife habitat planting raised garden beds, native trees, shrubs, and flowers. Bird houses, bat houses, and bird feeders will be built to create a park-like setting.

Leaf Rapids Education Centre, by Leaf Rapids – received \$2,250 to involve 80 youth to create an outdoor classroom, green space, and wild life habitat planting raised garden beds, native trees, shrubs and flowers. Bird houses, bat houses, and bird feeders will be built to create a park-like setting.

Norway House Cree Nation Youth Development, Norway House – received \$1,450 to involve 129 youth in a community clean up and beautification project.

O-Pipon-Na-Piwin Cree Nation, South Indian Lake – received \$2,300 to involve six youth to create a community green space planting trees and shrubs.

Poplar River First Nation, Poplar River – received \$2,175 to involve one youth in a community beautification and enhancement project cleaning the community and recreational areas, and clearing trails. Activities will contribute towards the First Nation land use and area management plan for the traditional territory known as Poplar/Nanowin protected area.

Poplar River School, Poplar River First Nation – received \$1,406 to involve 10 youth in a school and community recycling project collecting and sorting recyclable materials.

Town of Churchill – received \$1,964 to involve 12 youth in recycling, composting, and community clean up activities while learning about the impacts of climate change to the community and wildlife at the Churchill Northern Studies Centre.

Town of Leaf Rapids – received \$3,175 to involve 12 youth in a community beautification and rehabilitation project adding soil, mulch, and seed along shorelines to promote re-growth of native vegetation and prevent erosion. Trees are also being planted in vacant lots to help re-establish the natural state of the area.

NORTHWEST

Cormorant Community Council, Cormorant – received \$1,700 to involve 40 youth in a community beautification and community clean up project along the lakeshore.

Frontier Collegiate Institute, by Cranberry Portage – received \$2,395 to involve 200 youth to create an outdoor classroom, green space, and wild life habitat by planting raised garden beds, native trees, shrubs and flowers. Bird houses, bat houses, and bird feeders will be built to create a park-like setting.

Scott Bateman Middle School, The Pas – received \$500 to involve 25 youth in a riverbank clean up project.

Town of Grand Rapids – received \$1,775 to involve four youth in a clean up and tree planting project at four historical sites: St. John's Anglican Church, Historical Park, Tramway Park, and Lovers Point Park.

Town of Snow Lake – received \$3,685 to involve nine youth in a variety of greening activities including a community clean up, and planting flowers, shrubs, and trees.

WESTERN

Boundary Lane School, Elkhorn – received \$1,125 to involve 18 youth in preparing and weeding a site for the planting of fruit bearing trees to create an orchard.

Camperville Community Council, Camperville – received \$2,515 to involve 11 youth in a community beautification project building and planting flowerbeds, planting and maintaining trees and shrubs, and building waste receptacles.

Crane River Recreation Committee, Crane River – received \$1,338 to involve 15 youth in a community clean up and beautification project planting trees and flowers.

Crocus Plains School, Brandon – received \$775 to involve 15 students to expand the school recycling program by cleaning, repairing, and replacing recycling bins.

Decker Colony School, Decker – received \$650 to involve 30 youth in a school yard gardening and composting project where garden plots were assigned to each grade level for care and maintenance.

Earl Oxford School, Brandon – received \$1,475 to involve 25 students in cleaning and greening activities planting a garden with butterfly attractant perennials, and implementing a composting program to minimize lunchroom waste and garden use.

Glenboro 4-H Variety Club, Glenboro – received \$1,186 to involve 20 youth in a school beautification and tree planting project at Glenboro School.

Hamiota Conservation Authority, Hamiota – received \$1,050 to involve five youth in a trail enhancement project and environmental awareness program incorporating GPS and geocaching activities along the trails.

Harvest Moon Society, Pilot Mound – received \$3,990 to involve 200 youth in building “a community of community gardens” across Western Manitoba and Winnipeg. Youth from three urban communities of Rockwood School, St. Mathews Community Association, and University of Manitoba campus in Winnipeg, and five rural communities of Clearwater, Crystal City, Pilot Mound, Swan Lake First Nation and Cypress River will plant and maintain their own community garden.

Keeseekoowenin School, Elphinstone – received \$1,175 to involve 60 youth in a community clean up and school yard beautification project planting flowers, trees, and shrubs.

L.U.D. of La Rivière, La Rivière – received \$2,475.46 to involve 11 youth to help establish a nature watch station along the Pembina River with interpretative signs and brochures to describe indigenous flora, fauna, and their habitat.

McCreary District Economic Development, McCreary – received \$2,930 to involve five youth in a town beautification and conservation project planting, maintaining, and educating others about the importance of indigenous flora.

Odanah School, Minnedosa – received \$2,300 to involve 30 youth in a greening project designing and planting four environmental pods (e-pods) throughout the community. E-pods consist of gardens planted with vegetables, flowers, shrubs, trees, and bird houses.

Pelican Rapids Community Council, Pelican Rapids – received \$1,710 to involve 20 youth in a community waste minimization project building waste disposal and recycling containers from harvested Diamond Willow obtained from a highway being widened.

Pelican Rapids Community Council, Pelican Rapids – received \$1,685 to involve 25 youth in a community enhancement project designing, cultivating, seeding, and harvesting a garden for the community.

Roblin and District Chamber of Commerce, Roblin – received \$2,355 to involve 24 youth in a community clean up and beautification project maintaining flowerbeds, adding planters, and planting perennials.

Rosburn Elementary School, Rosburn – received \$2,375 to involve 116 youth in a community greening and gardening project creating stepping stones and signs, building bat houses, bird houses and butterfly houses, and planting native plants and vegetables.

Rural Municipality of Woodworth, Kenton – received \$3,495 to involve 12 youth in a community beautification and enhancement project constructing recycling bins, designing reusable grocery bags, undertaking a community clean up, building birdhouses, birdfeeders, and benches, and planting perennials at the Woodworth Millennium Museum.

The Seton Centre, Carberry – received \$4,973 to involve 34 youth in designing, planting and developing a green space and habitat for wildlife.

Souris School, Souris – received \$1,735 to involve 120 youth in a school ground beautification project planting trees and other vegetation suitable for longevity and durability.

Spence Lake Recreation Committee, Spence Lake – received \$1,338.00 to involve six youth in a community clean up and beautification project planting flowers and trees.

Swan Valley Food Bank with the Girl Guides of Canada, Swan River – received \$695 to involve 30 youth in a community gardening project planting and harvesting vegetables for donation.

Town of Neepawa – received \$1,455 to involve 10 youth in a community clean up project revitalizing Touchwood Park with trees, shrubs, and flowers.

Town of Neepawa – received \$1,050 to involve six youth in a town beautification project replacing and installing new planters and waste bins, as well as planting flowers and trees.

Trembowla Cross of Freedom Site, Dauphin – received \$2,300 to involve five youth in a beautification and enhancement project cleaning the historical site, museum, and park area, as well as planting trees, shrubs, grass and flowers.

Waywayseecappo First Nation, Waywayseecappo – received \$2,975 to involve 30 youth in a community clean up and beautification project planting flowers and trees.

Whistling Wind School, Glenboro – received \$500 to involve 10 youth in a community beautification and enhancement project planting trees.

MANITOBA CLIMATE CHANGE ACTION FUND

Administering Department: Manitoba Science, Technology, Energy and Mines – Green Manitoba (Special Operating Agency)
Date Approved: 2009/2010 Treasury Board Estimates Review Process
Total Amount Approved: \$400,000.00
Total Amount Expended: \$329,000.00

The Manitoba Climate Change Action Fund (MCCAF) continued to provide cost-effective opportunities for the Province to reduce greenhouse gas (GHG) emissions in targeted sectors in keeping with the Government's climate change commitments and consistent with the goals outlined in both *Green and Growing*, Manitoba's strategic environmental framework, and *Beyond Kyoto*, Manitoba's climate change action plan.

In 2009/2010, a range of practical, Manitoba-based actions that responded to the issue of climate change were assisted with MCCAF grants. MCCAF is effective in supporting projects addressing GHG emissions in high-emitting sectors, such as transportation and agriculture, in addition to supporting province-wide climate change public education and outreach programming, northern initiatives, and providing support for individual climate change projects.

The MCCAF was administered by Green Manitoba, a special operating agency (SOA) of the Manitoba Government, in the 2009/2010 fiscal year.

Total Allocation for 2009/2010	\$400,000.00
Applications Processed	9
Applications Approved	8
Applications Deferred	1
Applications Declined	0
Applications Withdrawn	0
Total Amount Expended	\$329,000.00

Brief descriptions of the eight projects approved under the MCCAF during the 2009/2010 fiscal year are as follows:

EDUCATION AND OUTREACH

CLIMATE CHANGE CONNECTION PHASE VIII

Proponent: Manitoba Eco-Network Inc.
Date Approved: June 5, 2007
Total Amount Approved: \$300,000.00
Total Amount Expended: \$100,000.00

A grant of \$100,000.00 was approved annually over three fiscal years beginning in 2007 for the Manitoba Eco-Network to continue in its role as host to Manitoba's climate change public education and outreach hub, the Climate Change Connection. Climate Change Connection acts as a clearinghouse of climate change information, coordinates climate change outreach, builds awareness and promotes individual and community actions to reduce greenhouse gas (GHG) emissions and promotes changes necessary to live more sustainable and climate-friendly lifestyles. The Climate Change Connection was originally established as part of a national network of hubs responsible for climate change public education and outreach coordination.

2009 MANITOBA ENVIROTHON

Proponent: Manitoba Forestry Association
Date Approved: April 15, 2008
Total Amount Approved: \$4,000.00
Total Amount Expended: \$4,000.00

A grant of \$4,000.00 was approved to organize and host Manitoba Envirothon 2009, an annual environmental education competition for high schools. The content and focus of the event differs each year; however, it remains focused on current environmental themes. Teams of five students study curriculum-based environmental resource material with their teacher/advisors and compete in a provincial championship. The winning team represents Manitoba at the North American "environmental academic Olympics", the Canon Envirothon. Over 30 teams compete annually in Manitoba and it is estimated that over 500,000 students participate each year throughout North America at the Provincial and State level.

YOUTH MEDIA FOR CLIMATE SOLUTIONS

Proponent: Manitoba Eco-Network (Manitoba Environmental Youth Network and Climate Change Connection)
Date Approved: September 10, 2009
Total Amount Approved: \$2,500.00
Total Amount Expended: \$2,500.00

A grant of \$2,500 was approved to develop and promote six youth-focused, climate change podcasts to help young people in Manitoba and elsewhere expand their knowledge and awareness of climate change impacts and solutions. Since youth crave new media to view on the internet, cell phones, and personal digital assistants (PDAs), this project is anticipated to have rapid and extensive outreach. The podcasts will be posted on YouTube and the corresponding links will be made available via the MB Environmental Youth Network (MEYN), Climate Change Facebook page, Climate Change Connection (CCC) website, CCC e-bulletin, as well as at CCC conferences, workshops, and presentations. The development and promotion of the podcasts will serve as a valuable tool to educate and empower youth on climate change issues.

IMPACTS AND ADAPTATION

GHG REDUCTION THROUGH ACTIVE, SUSTAINABLE TRANSPORTATION

Proponent: Resource Conservation Manitoba
Date Approved: June 5, 2007
Total Amount Approved: \$300,000.00
Total Amount Expended: \$100,000.00

A grant of \$100,000.00 was approved annually over three fiscal years beginning in 2007 to support strategic urban transportation related greenhouse gas (GHG) reduction initiatives. Building upon previous successes in community-based transportation initiatives with programs such as the Commuter Challenge and the Active and Safe Routes to School (ASRTS), Resource Conservation Manitoba (RCM) will identify and recruit champion workplaces for their urban trip reduction programming. RCM will also look to increase the number of Manitobans who participate in these programs by creating promotional materials and education resources for the Commuter Challenge, Workplace Transportation Demand Management (WTDM), Manitoba Student Transportation Network (MSTN), and the ASRTS programs. In addition, RCM will be expanding efforts to include more schools and communities throughout Manitoba.

NORTHERN MANITOBA FOOD SELF-SUFFICIENCY PROJECTS

Proponent: Manitoba Aboriginal and Northern Affairs
Date Approved: June 5, 2007
Total Amount Approved: \$225,000.00
Total Amount Expended: \$75,000.00

An allocation of \$75,000.00 was approved annually over three fiscal years beginning in 2007 to support the development of a broad range of food self-sufficiency projects in remote communities to effectively decrease dependence on air freight shipments of food, thereby reducing greenhouse gas (GHG) emissions. Projects included construction of northern-appropriate greenhouses, vermicomposting workshops, and Energy Efficient Freezer Program for storage of preserved food.

MANITOBA ORGANIC TRANSITION PROGRAM

Proponent: Manitoba Agriculture, Food and Rural Initiatives
Date Approved: June 5, 2007
Total Amount Approved: \$150,000.00
Total Amount Expended: \$5,000.00

An allocation of \$5,000.00 was approved to provide financial incentives for Manitoba farmers and processors considering converting their cropland, pasture, livestock and/or processing to certified organic status. The incentives will provide a portion of the certification costs for the producer or processor during the three-year transition period. An increase in organic production reduces energy use relative to conventional production; converting to organic production can reduce CO₂ output two to two and a half times more and reduce by 2.2 to 2.8 times the energy required by conventional agricultural practices. The Manitoba Organic Transition Program was approved for \$50,000.00 annually over three fiscal years beginning in 2007.

PRAIRIE REGIONAL ADAPTATION COLLABORATIVE (PRAC)

Proponent: Green Manitoba and Climate Change and Green Strategy Branch, Manitoba Conservation
Date Approved: March 31, 2010
Total Amount Approved: \$24,500.00
Total Amount Expended: \$24,500.00

An allocation of \$24,500.00 was approved to support a multi-year Prairie-wide initiative to 2012 to support agri-environmental initiatives consistent with and related to current agricultural programs in Manitoba. Water resources management, drought, excessive moisture and terrestrial grassland work of the PRAC will help to enable greater adaptive capacity within Manitoba's agricultural sector and is expected to assist in adaptive decision making on climate change impacts on the agricultural sector in Manitoba and to encourage appropriate adaptation responses in Manitoba and across the Prairies.

TECHNICAL INNOVATION

MICRO-GASIFICATION DEMONSTRATION BUSINESS PLAN

Proponent: Aboriginal Cogeneration Corporation
Date Approved: July 31, 2009
Total Amount Approved: \$18,000.00
Total Amount Expended: \$18,000.00

A grant of \$18,000.00 was approved to conduct a feasibility study of a small-footprint micro-gasification energy unit intended to displace coal use through the conversion of a wide range of agricultural biomass residue to combustible gas for use as heat and/or production of electricity. The study will focus on using gasification technology solutions for Manitoba's Hutterite Colonies and other agricultural entities.

WASTE REDUCTION AND POLLUTION PREVENTION (WRAPP) FUND

Proponent: Manitoba Conservation, Pollution Prevention Branch
Date Approved: 2009/2010 Treasury Board Estimates Review Process
Total Amount Approved: \$550,000.00
Total Amount Expended: \$428,564.67

The WRAPP Fund continued to be an integral program for supporting waste reduction and pollution prevention activities in Manitoba, as municipalities, businesses and community and other organizations continue to seek alternative ways to manage waste materials and protect the environment.

The WRAPP Fund supports projects in the following priority areas: construction and demolition waste management, composting, institutional waste reduction, market development, pollution prevention, integrated waste management system development and planning, promotion and education, regional recycling, and green procurement. Financial partnerships are encouraged.

An annual budget within the WRAPP Fund allocation supports Fund administration, as well as activities related to the development and implementation of the branch's priority areas.

Total Allocation for 2009/2010	\$550,000.00
Applications Processed	35
Applications Approved	17
Applications Deferred	5
Applications Declined	12
Applications Withdrawn	1
Projects Carried Over Into 2009-2010	2
Total Amount for Grants Expended	\$337,097.16
Program Development	\$91,467.51
Total Expended	\$428,564.67

Brief descriptions of the 17 projects within the priority WRAPP Fund areas are as follows:

COMPOSTING AND ORGANIC WASTE MANAGEMENT

COMPOSTING AND RECYCLING WITH CHILDREN

Proponent: Discovery Children's Centre
Date Approved: November 3, 2009
Total Amount Approved: \$2,000.00
Total Amount Expended: \$2,000.00

A grant of \$2,000.00 was approved to undertake an initiative to encourage staff, children and parents to compost and recycle as part of their daily routine. A student will be employed to collect and sort compost and recyclable materials in the Centre, in addition to educating children and parents about the benefits of recycling and composting. The student will work with staff members of the Centre's "green team" to involve the children in various recycling and composting initiatives, promote the importance of waste reduction with the parents through articles shared in the Centre's semi-monthly newsletter, and provide opportunities to meet with interested parents to share information.

CURB SIDE COMPOST COLLECTION PROGRAM

Proponent:	City of Brandon
Date Approved:	March 23, 2010
Total Amount Approved:	\$50,000.00
Total Amount Expended:	\$50,000.00

A grant of \$50,000.00 was approved to implement an 18-month pilot project to divert organic waste from the landfill through a curbside compost pick-up service for Brandon residents. Existing automated refuse trucks will be used to collect the organic material and compost bins will be provided to residents. Collected organic material will be transported to the landfill and processed into quality compost. The public will be made aware of the project through local media using newspaper ads, radio and television broadcasts, a web page, and public service announcements. Public events will be held to bring awareness to the community and educational materials will be made available.

RED GOES GREEN: ESTABLISHING A POST-CONSUMER COMPOST PROGRAM

Proponent:	Red River College
Date Approved:	November 3, 2009
Total Amount Approved:	\$3,500.00
Total Amount Expended:	\$3,500.00

A grant of \$3,500.00 was approved to establish a vermicomposting display at Red River College's Princess Street Campus to promote waste diversion alternatives. The display will capture a small volume of organics, while promotional and educational materials will be provided to promote the benefits of, and options for waste reduction. The display is intended to introduce vermicomposting as an alternative waste diversion practice to students, most of whom are apartment-dwellers.

WASTE REDUCTION STRATEGY

Proponent:	Winnipeg Folk Festival
Date Approved:	July 9, 2009
Total Amount Approved:	\$5,000.00
Total Amount Expended:	\$5,000.00

A grant of \$5,000.00 was approved to support the post-consumer composting program introduced to the La Cuisine facility, where 2,200 volunteers, artists and guests eat during the Winnipeg Folk Festival. The project will include expanding the use of compostable cups in the Festival's three tavern areas and introducing a communication and visibility program to the general public.

REGIONAL RECYCLING

AUTOMATED WASTE COLLECTION

Proponent:	City of Dauphin
Date Approved:	July 9, 2009
Total Amount Approved:	\$10,000.00
Total Amount Expended:	\$10,000.00

A grant of \$10,000.00 was approved to review the City of Dauphin's existing garbage collection and disposal processes and develop recommendations to increase diversion of waste from landfill. The report will also examine current fees for waste disposal, and possible changes to the recycling program.

RECYCLING INITIATIVE

Proponent:	RM of South Norfolk
Date Approved:	September 14, 2009
Total Amount Approved:	\$5,000.00
Total Amount Expended:	\$5,000.00

A grant of \$3,800.00 was approved to assist in the construction of a recycling building at the transfer station outside of Rathwell, Manitoba. The building will be used as a drop-off depot to house recyclables until they are shipped to a recycling plant. Ratepayers will be provided with blue boxes to store and transport their recyclables to the depot.

INFORMATION AND EDUCATION

2009 CONFERENCE SPONSORSHIP

Proponent:	Solid Waste Association of North America (SWANA)
Date Approved:	May 26, 2009
Total Amount Approved:	\$10,000.00
Total Amount Expended:	\$10,000.00

A grant of \$10,000.00 was approved to support the 2009 SWANA conference in Winnipeg. The event will connect members with products, services, training, and technologies that advance the practice of environmentally and economically sound management of municipal solid waste in North America.

AMBASSADOR PROGRAM

Proponent:	Manitoba Association for Resource Recovery Corporation (MARRC)
Date Approved:	November 3, 2009
Total Amount Approved:	\$12,500.00
Total Amount Expended:	\$12,500.00

A grant of \$12,500.00 was approved to support hiring of two student "ambassadors" to help increase the recovery of used oil containers. The students will contact generators to help determine what is needed to increase the recovery of plastic containers and to maximize the diversion of used oil containers from the landfill. The students will interact with two main types of generators: the do it yourself, small farms and small rural non-farm accounts; and the industrial, commercial, and institutional accounts. The ambassadors will also engage the public through participation in workshops, conferences, festivals, fairs, parades and school forums.

ECO-CALENDAR 2009-2010

Proponent:	Green Manitoba
Date Approved:	September 14, 2009
Total Amount Approved:	\$10,000.00
Total Amount Expended:	\$10,000.00

An allocation of \$10,000.00 was approved to produce and distribute a calendar to promote a variety of sustainable behavioral practices, environmental programs, tips and ideas. Key dates and information related to climate change, energy and water efficiency, and waste minimization will be highlighted. The calendar is intended to support smaller initiatives on a broad scale for users who would like to reduce waste, conserve water and energy. It will be printed on text stock that is 50% recycled 25% post-consumer waste and Forest Standards Council certified, and will be distributed free of charge.

MANITOBA SOLID WASTE MANAGEMENT FACILITY SURVEY AND REGISTRY

Proponent: Green Manitoba
Date Approved: March 11, 2009
Total Amount Approved: \$10,000.00
Total Amount Expended: \$10,000.00

An allocation of \$10,000.00 was approved to develop a comprehensive database of waste management facilities and services in Manitoba through four avenues: the design of a survey instrument to collect data about regional waste management services in Manitoba; the development of an electronic database consisting of all active and closed municipal landfills in Manitoba; the collection of key service and facility information; and the improvement of the quality and completeness of the Manitoba waste management data by incorporating information bases and service mapping information. Collected information from key services and facilities will include those pertaining to composting, recycling systems, C&D waste, landfills, transfer stations, and others, such as burning and scales. The Manitoba waste management database is intended to serve as a comprehensive data source from various entities such as Manitoba Conservation and stewardship agencies which will include information on e-waste, household hazardous waste, landfill gas, and Waste Reduction and Recycling Support (WRARS) levy registration information.

RECYCLING INSPECTOR

Proponent: City of Brandon
Date Approved: July 9, 2009
Total Amount Approved: \$4,000.00
Total Amount Expended: \$4,000.00

A grant of \$4,000.00 was approved to support the employment of a Recycling Inspector to inspect recycling bins in the community and reduce contamination in the bins. Over the summer, bins will be inspected prior to pick up by the sanitation truck. The Recycling Inspector will work with residents to reduce the amount of contamination in bins by non-recyclable materials and to increase the amount of recyclables collected.

SHOWCASING THE “RS” IN ACTION

Proponent: Manitoba Association for Regional Recyclers (MARR)
Date Approved: September 14, 2009
Total Amount Approved: \$13,000.00
Total Amount Expended: \$13,000.00

A grant of \$13,000.00 was approved to undertake community-level programming that includes a course to promote and implement regional waste management best practices; municipal workshops and community programs to promote waste reduction, recycling, and backyard composting throughout the province; and an annual forum to provide information updates for members and industry stakeholders.

WASTE REDUCTION SERVICES

Proponent:	Resource Conservation Manitoba
Date Approved:	May 26, 2009
Total Amount Approved:	\$450,000.00
Total Amount Expended:	\$150,000.00

A grant of \$150,000.00 annually was approved for three fiscal years beginning in 2009 to support Waste Reduction Services, including Environmental Information Services, Compost Action Project, Environmental Speakers Bureau, and the coordination and promotion of Living Green, Living Well. The Compost Action Project will focus on residential waste, institutional and commercial waste, and target those who either produce or manage these waste streams by providing education, consultation, referral, and training. Environmental education support, through the Environmental Speakers Bureau will be provided to schools on sustainability issues which include educational materials and classroom presentations on waste minimization and pollution prevention, water conservation, climate change, energy, and other related topics. In addition, workplace and community presentations on sustainability topics will also be offered. An interactive Manitoba-focused web site will be developed that will offer topical information and practical tips for sustainable living, and Waste Reduction Week will be promoted.

GREENING PAN AM CLINIC

Proponent:	Pan Am Clinic
Date Approved:	September 14, 2009
Total Amount Approved:	\$2,000.00
Total Amount Expended:	\$2,000.00

A grant of \$2,000.00 was approved to assist Pan Am Clinic with sustainability planning for their facility. The Clinic aims to move toward sustainable practices in their daily operations through the implementation of effective energy, water and waste conservation measures. An environmental audit, educational component, and a feasibility assessment regarding water conservation and the use of energy efficient appliances will be undertaken. Opportunities to participate in green procurement and to implement a waste management program consisting of composting, e-waste collection, and hospital waste management will be explored.

PORCELAIN TOILET, SINK, GLASS AND AGGREGATE RECOVERY PROGRAM

Proponent:	Antex Western Ltd.
Date Approved:	July 9, 2009
Total Amount Approved:	\$25,000.00
Total Amount Expended:	\$25,000.00

A grant of \$25,000.00 was approved to determine the feasibility of using post-commercial/consumer waste material in the manufacturing of terrazzo flooring. The company intends to use mining by-products, crushed porcelain from toilets, sinks, windows, mirrors, glass bottles, and containers usually destined for the landfill. The project involves procuring equipment to grind the materials, producing test samples, and adapting other equipment to the requirements of this process.

SHOAL LAKE RECYCLING CENTRE

Proponent:	Town of Shoal Lake
Date Approved:	July 9, 2009
Total Amount Approved:	\$5,000.00
Total Amount Expended:	\$5,000.00

A grant of \$5,000.00 was approved to upgrade the Town's recycling centre by installing a debris containment fence. The town is a regional centre for composting, curb side pickup of blue box recyclables, seasonal e-waste collection, and has one of the highest per capita recycling rates in Manitoba.

TRACK RENOVATION PROJECT

Proponent:	Elmwood High School
Date Approved:	September 14, 2009
Total Amount Approved:	\$10,000.00
Total Amount Expended:	\$10,000.00

A grant of \$10,000.00 was approved to refurbish the school's outdoor track facility by upgrading the surface structure of the gravel track into an asphalt-rubberized structure, using recycled tire products. The school is working with Tire Stewardship Manitoba to integrate 22,000 lbs. of crumb rubber into the asphalt surface of the track—the equivalent of 1,000 passenger car tires. The goal is to create a facility that is wheelchair accessible and more inclusive of the community's special needs population.

PROGRAM DEVELOPMENT

An allocation was approved for WRAPP Program Development in fiscal year 2009/2010.

In 2009/2010, the WRAPP Fund expended \$91,467.51 supporting the following activities:

- Product Stewardship Program and Regulation Development
- Administration of the SDIF and WRAPP Funds
- Professional development and training
- Memberships and conferences

PROJECTS FROM PREVIOUS YEARS

PROJECTS ALLOCATED FUNDING

DURING THE 2009/2010 FISCAL YEAR

UNDER THE WRAPP FUND

Number of Projects: 2
Total Amount Expended: \$10,097.16

<u>Project Name</u>	<u>Total Expended</u>
PARKS RECYCLING	
Comprehensive Recycling Program at Birds Hill Provincial Park	\$7,360.00
Comprehensive Recycling Program at Grand Beach Provincial Park	\$2,737.16

PROJECTS FROM PREVIOUS YEARS
DETAILED LISTING OF PROJECTS FROM PREVIOUS
YEARS WITH CARRYOVER AUTHORITY
DURING THE 2009/10 FISCAL YEAR

Projects listed below are those that were allocated funding from the Waste Reduction and Pollution Prevention (WRAPP) Fund in 2008/09 fiscal year, but had carryover authority for the 2009/10 fiscal year.

Project descriptions have been provided in the 2008/2009 Annual Report.

PARKS RECYCLING

COMPREHENSIVE RECYCLING PROGRAM AT BIRDS HILL PROVINCIAL PARK

Proponent:	Birds Hill Provincial Park
Date Approved:	July 28, 2008
Amount Expended in 2009/10:	\$7,360.00

COMPREHENSIVE RECYCLING PROGRAM AT GRAND BEACH PROVINCIAL PARK

Proponent:	Grand Beach Provincial Park
Date Approved:	July 28, 2008
Amount Expended in 2009/10:	\$2,737.16

WATER STEWARDSHIP FUND

Managing Department:	Manitoba Water Stewardship
Date Approved:	2009/2010 Treasury Board Estimates Review Process
Total Amount Approved:	\$350,000.00
Total Amount Expended:	\$208,485.32

The Water Stewardship Fund (WSF) continues to be 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 diversification that will improve the quality of life and the environment in Manitoba. Water plays a critical role in Manitoba as it supports a healthy environment and affects the economic and social well-being of all Manitobans. Manitoba is committed to preserving Manitoba's rivers, lakes and wetlands and works to promote the importance of having quality water for people, the environment and the economy.

The WSF supports projects that contribute to maintaining the quality and quantity of water, wetlands, riparian areas and aquatic habitats in Manitoba and supports projects addressing 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. In addition, the WSF continued to support a sub-allocation of up to \$40,000.00 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 for 2009/2010	\$350,000.00
Applications Processed	15
Applications Approved	13
Total Amount for Grants Approved	\$174,830.00
Total Amount for Grants Expended	\$174,830.00
Zebra Mussel and Other Aquatic Invasive Species Program	\$33,655.32
Total Expended	\$208,485.32

Brief descriptions of the 13 projects within the priority WRAPP Fund areas are as follows:

WATERSHED MANAGEMENT PLANNING AND IMPLEMENTATION

WATERSHED HEALTH IMPROVEMENT – STREAM REACH PRIORITIZATION

Proponent:	East Interlake Conservation District
Date Approved:	June 11, 2009
Total Amount Approved:	\$25,000.00
Total Amount Expended:	\$25,000.00

A grant of \$25,000.00 was approved to continue monitoring at seven water quality stations throughout the East Interlake Conservation District and to further explore the individual watersheds through the creation of 10 new sampling sites at general land-use change points within each watershed (i.e. relatively natural, predominately cattle production and predominately annual crop production). Monitoring will be conducted for two years with the aim of establishing target zones for the implementation of beneficial management practices aimed at improving water quality.

WATER-RELATED SCIENTIFIC RESEARCH

NUTRIENT RETENTION OF DRAINED AND UNDRAINED WETLANDS – YEAR 2

Proponent: Ducks Unlimited Canada
Date Approved: June 11, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to assess the water quality and nutrient retention benefits of wetland retention as a beneficial management practice at a watershed scale in southern Manitoba. The study is being conducted in the Broughton's Creek watershed as this area is typical of the Manitoba prairie pothole region. This data will help develop modeling to evaluate the effects of wetland restoration on Lake Winnipeg water quality. The information will be disseminated widely to inform producers, government and the general public about the benefits of wetland retention and restoration.

EDUCATION AND CAPACITY BUILDING

BUILDING A COMMUNITY OF PRACTICE FOR WATER SOFT PATHS IN MANITOBA

Proponent: Friends of the Earth Canada
Date Approved: June 11, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to provide an opportunity for Manitoba Conservation Districts Program staff and Manitoba Water Stewardship staff to learn approaches to developing and conducting "Water Soft Path" workshops in the province, working with one of the expert originators of the Water Soft Path concept. The project will provide knowledge on innovative water conservation approaches to address water demand and supply issues working with municipalities in south central Manitoba.

INTERLAKE WATER DAYS - A CROSS CULTURAL EXCHANGE OF WATER KNOWLEDGE

Proponent: East Interlake Conservation District
Date Approved: June 11, 2009
Total Amount Approved: \$4,000.00
Total Amount Expended: \$4,000.00

A grant of \$4,000.00 was approved to fund the Interlake Water Days which are designed to foster a community interest in the health and conservation of the local watersheds and act as a cultural exchange between aboriginal communities and the other residents of the Interlake. Interlake Water Days will be held at Norris Lake Provincial Park. Students from Teulon Elementary, Inwood and Peguis Central schools will be invited to attend, as the event will consist of interactive learning stations for students and talks from First Nation Elders. The main goal of the day is to expose the Interlake communities to water information and heighten their awareness of water issues. By including both Aboriginal and non-Aboriginal speakers and activity stations it is intended that communities will be exposed to new information and to information from a different perspective.

FIRST NATIONS WATERSHED PLANNING: WORKING WITH FISHER RIVER CREE NATION

Proponent: Centre for Indigenous Environmental Resources (CIER)
Date Approved: June 11, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to build First Nations capacity to understand and engage in watershed management planning. The Centre for Indigenous Environmental Resources (CIER) will partner with the Fisher River Cree Nation to develop a watershed planning process that reflects their needs and interests. They will provide support focused on community engagement, including facilitation of community visioning and planning workshops, and will also conduct relevant background research to support the process. CIER will also document the process and lessons learned and will share generic tools and templates with other First Nation communities. Building First nation capacity to participate in watershed planning is important to ensure that resulting management directions respects the rights of First Nations and incorporates First Nations interests and perspectives.

PRAIRIE SPIRIT: WATER STEWARDSHIP RESEARCH PROJECT EXPANSION GRANT PROPOSAL

Proponent: Nellie McClung Collegiate
Date Approved: June 11, 2009
Total Amount Approved: \$10,000.00
Total Amount Expended: \$10,000.00

A grant of \$10,000.00 was approved to expand the River Watch program, which is designed to teach students, through their involvement in water-related scientific research, to explore various water related issues. There will now be seven complete kits to be used by six schools within the Pembina Valley, La Salle Redboine and Assiniboine Hills Conservation Districts. Students will work with local technicians from an early age, and will participate in internships during their senior high school years towards eco-environmental credits through the schools Career and Technology Studies program.

SEINE RIVER INVERTEBRATE MONITORING VOLUNTEER BASED PROJECT

Proponent: College Louis-Riel
Date Approved: June 11, 2009
Total Amount Approved: \$25,000.00
Total Amount Expended: \$25,000.00

A grant of \$25,000.00 was approved to develop a volunteer-based monitoring program for the Seine River using benthic indicators to assess stream ecosystem health. This is a long-term study and will be developed to examine the effects of particular point sources of pollution on the river, which have been determined by previous scientific studies. The school will use the Instructor's manual developed by the National Water Research Institute and Environment Canada. The benthic invertebrate community will be evaluated through collection of samples (5 replicates per site) at four sites on the river (total of 20 samples). Samples will be sorted and invertebrates will be identified at College Louis-Riel. The school will create a database that will be recognized as scientifically valid and post it on the internet. This information will provide an indication of the community composition, the presence/absence of sensitive taxa, and could provide information on spatial variability.

SONICS AND SOJOURNS FESTIVAL OF LEARNING AND MUSIC

Proponent: Sonics and Sojourns
Date Approved: June 11, 2009
Total Amount Approved: \$2,000.00
Total Amount Expended: \$2,000.00

A grant of \$2,000.00 was approved to hold a two day workshop and field work to educate students, local and area citizens, tourists and professionals to understand and participate in a riparian ecosystem assessment. An initial assessment data for Octopus Creek which can be shared with Riding Mountain National Park, the Mountain Estates Landowners' Association and other local community groups, to assist with water planning for the Clear Lake Watershed will also be developed. Individuals will be encouraged to practice sustainable actions to protect, preserve, maintain and improve the water quality in the Clear Lake Watershed and associated watershed and waterways that supply drinking water and water-based recreational activities.

SOUTHWEST MANITOBA WATER FESTIVAL

Proponent: Turtle Mountain, West Souris River and Assiniboine Hills
Conservation Districts
Date Approved: June 22, 2009
Total Amount Approved: \$3,500.00
Total Amount Expended: \$3,500.00

A grant of \$3,500.00 was approved to host the fourth annual Southwest Manitoba Water Festival in Souris, Manitoba. Approximately 400 grade 5 & 6 students from 12 schools within the three conservation districts will be invited to attend the one-day event. Numerous activity stations with hands-on activities will be established to create a unique and fun learning environment. The festival's primary objective is to educate children about water and various water related issues as an important step in creating stewards of the resource.

WATER STEWARDSHIP

FENCING PROJECT – HABITAT COMPENSATION PLAN

Proponent: Rural Municipality of Ochre River
Date Approved: June 11, 2009
Total Amount Approved: \$2,000.00
Total Amount Expended: \$2,000.00

A grant of \$2,000.00 was approved to improve the water quality of Dauphin Lake and reduce contaminants and prevent unwanted nutrients from entering the lake by installing a fence to keep cattle from grazing and watering near the shoreline. The project will help to restore the lakeshore along the north side of part of the NW and NE 30-24-16W in the RM of Ochre River. The fence will be 100m back from the lakeshore and the landowner will monitor the fence line to ensure the fence is maintained and in good repair. There is a growing cottage industry in the municipality and by trying to improve the water quality, the Rural Municipality of Ochre River hopes to address the needs of the cottage owners and encourage tourism and recreational activities in the Dauphin Lake and Parkland Region.

PATTERSON LAKE RIPARIAN ENHANCEMENT

Proponent: Upper Assiniboine River Conservation District
Date Approved: June 11, 2009
Total Amount Approved: \$7,600.00
Total Amount Expended: \$7,600.00

A grant of \$7,600.00 was approved to create a healthy riparian area at the north end of Patterson Lake by restricting access of livestock to open water. By fencing the livestock out of the open water it will help prevent the amount of waste contaminants reaching the water and degrading the water quality. The rehabilitated riparian area will help filter any erosion or runoff of sediments before it reaches the water. Exclusion fencing will prevent further soil degradation, bank erosion and increasing the water quantity/quality. It will also increase the vegetation along shorelines, which reduces erosion and increases fish/wildlife habitat and food source.

STEPHENFIELD LAKE FENCING PROJECT – PHASE II

Proponent: La Salle Redboine Conservation district
Date Approved: June 11, 2009
Total Amount Approved: \$10,730.00
Total Amount Expended: \$10,730.00

A grant of \$10,730.00 was approved to improve the state of source water protection for Stephenfield Lake water users and to reduce impacts on water quality and shoreline erosion. Three properties will be selected to install three off-site watering systems and approximately two kilometres of high tensile electric fence. This project will have a positive impact on the environment and supports the goals and objectives of the Water Protection Act. Stephenfield reservoir is an important source for the Pembina Valley Water Coop which supplies more than 10,000 southern Manitoba residents with clean, safe, potable water.

ECONOMIC DEVELOPMENT

RED RIVER OPERATION CLEAN-UP

Proponent: Red River Operation Clean-Up (RROC)
Date Approved: May 28, 2009
Total Amount Approved: \$10,000.000
Total Amount Expended: \$10,000.00

A grant of \$10,000.00 was approved to clean up the refuse in and along the shores of the Red River from Lockport north to Netley Creek. Three workers will be employed to clean up and remove refuse from the shorelines of the Red River and to place 45 gallon drums for waste disposal. The initiative will be extended closer to Winnipeg and include river clean up by boat in the fall as water levels decline. Promotional and educational efforts will be undertaken through media releases on the importance of taking pride in the Red River and to continue looking for more project partners to increase their coalition. Red River Operation Clean-up has encouraged sustainable community development, and with support from both private business and citizens alike, the community understands the importance of a clean Red River not only to the community but also to visitors.

Zebra Mussels and Other Aquatic Invasive Species Program

Zebra mussels are small clam-like organisms that are not native to North America. They were discovered in Lake St. Claire in 1988. It is generally believed that they were transported to North America in the ballast water of an ocean going vessel and that this ballast water was then discharged into the Great Lakes system in approximately 1986. Zebra mussels have spread quickly to all of the Great Lakes, the St. Lawrence and Ottawa rivers, Trent-Severn and Rideau Canal systems, Mississippi River from St. Paul Minnesota to the Gulf of Mexico delta including its major tributaries. More recently, zebra mussels were discovered in Pelican Lake, Minnesota, which drains into the Red River.

Manitoba remains vulnerable to invasion by zebra mussels and other aquatic invasive species (AIS). Although not presently found in Manitoba waters, this costly foreign species is close to Manitoba's watershed boundaries. Trailered watercraft is recognized as a key vector of zebra mussel dispersion by North American agencies responsible for AIS prevention and management. Movement of zebra mussels from infected bodies of water to other, isolated bodies of water is due to accidental transport on water-based equipment including boats, trailers, motors, as well as in live wells and bait buckets.

Water quality data indicate that numerous lakes and rivers in Manitoba would support populations of zebra mussels. Trailered watercraft with attached zebra mussels has resulted in dispersion to unconnected or isolated bodies of water throughout Michigan, Wisconsin, southern Ontario and, most recently, Pelican Lake, Minnesota. The likely route of entry of zebra mussels into Manitoba is by accidental introduction from trailered recreational watercraft originating from the Great Lakes area of Ontario and from northeast and central US. The Manitoba / US border offers a convenient inspection location of recreational watercraft trailered from US locations. The international border crossings also offer an opportunity for visiting fishers and recreational boaters to be informed and surveyed about zebra mussels and other AIS.

Goal and Objectives:

The primary goal of this program is to prevent accidental introduction of zebra mussels and other aquatic invasive species (AIS) into Manitoba by visitors transporting water-based equipment across our borders. This goal also provides a message to heighten public awareness to the issues of zebra mussels and other AIS in Manitoba. This goal will be achieved by the following objectives:

1. To inspect and survey visitors transporting water-based equipment at various international border crossings in eastern Manitoba. Whiteshell Provincial Park is also a popular recreational destination for visitors. As such, inspections of boats and trailers will be conducted where practical (boat launches, Travel Manitoba Info Centre, etc.)
2. To provide literature (brochure and gift of appreciation) to boating visitors about how to prevent accidental introduction of zebra mussels into Manitoba.
3. To supply information to appropriate Manitoba Government regional offices (brochures, fact sheets, boat-ramp signage) for distribution and posting.
4. To target the boating audience with the clear message of preventing accidental zebra mussel introduction into Manitoba (information provided to registrants of fishing derbies, booth at the Mid-Canada Boat Show, advertisement in the Manitoba Angler's Guide and written articles).
5. To employ students under the Student Temporary Employment Program (STEP) Initiative.

Program Results 2009/2010:

Manitoba Water Stewardship continued with its Aquatic Invasive Species Inspection Program to inspect water-based equipment at popular recreational areas. During the summer of 2009, 1,247 inspections of water-based equipment (trailers, boats) were conducted; 62 boaters trailering equipment were interviewed; and aquatic invasive species information was provided to participants of approximately 30 fishing derbies.

BEAR SMART INITIATIVE

Managing Department:	Manitoba Conservation, Wildlife and Ecosystem Protection Branch
Date Approved:	2009/2010 Estimates Review Process
Total Amount Approved:	\$125,000.00
Total Amount Expended:	\$124,365.74

The *Bear Smart* Initiative continued to support activities and programming that shifts the focus away from reactive resolution of conflicts with bears to proactive prevention. By practicing *Bear Smart* principles, the key being eliminating and/or securing of all attractants, bears learn to not associate people and dwellings with food. These actions are expected to enhance public safety, reduce property damage, lessen the frequency of human-black bear encounters and maximize resource efficiency.

As cottage and acreage development expands into bear habitat and bears re-occupy abandoned farmland, the frequency and intensity of negative human-bear interactions is expected to increase. Black bears sometimes cause damage to property, apiaries, leafcutter bees, crops, livestock, and private property. On rare occasions, they may also be a threat to human safety in areas such as parks, campgrounds, cottage developments, in and around communities, rural sub-divisions and remote areas. Minimizing conflict between humans and bears will result in fewer bears needlessly being destroyed as problem bears.

An estimated 27,000 to 33,000 black bears live in Manitoba. The population continues to be stable in most non-agricultural areas. However, in some agro-fringe areas, the population is increasing. The variability in human-bear conflict is largely influenced by density and recruitment of bears in response to natural food availability, along with the level of bear presence and nuisance activity that the public is willing to tolerate.

Nearly 1,500 problem black bear occurrences were reported to Manitoba Conservation district offices. Of these, 958 were investigated and 22.3% were associated with recreational areas, 33.3% rural agricultural areas, 40.3% rural residential areas, and 1.8% urban areas.

Bear Smart Initiative priorities include:

- education and awareness through public outreach programming, including highway, traffic and pedestrian signs, posters, handout materials, advertisements, website and workshops;
- identification of effective strategies to encourage *Bear Smart* behaviour over the long-term;
- showcasing positive outcomes to Manitoba communities, including the installation of necessary infrastructure for bear-proofing initiatives; and
- implementing bear-proofing initiatives in provincial parks.

Program Results 2009/2010

- Advertisements and printing of promotional and educational materials: Two advertisements were published in newspapers throughout the province to remind people on ways to reduce bear-human conflicts during the summer and the time of the year when bears were preparing for hibernation.
- *Bear Smart* workshops were provided by Parks and Natural Areas Branch interpreters who collectively delivered 67 individual presentations to 4,920 park visitors in the following Provincial Parks: Birds Hill, Grand Beach, Grindstone-Hecla Island, Paint Lake, St. Malo, Whiteshell-Rennie and Whiteshell-Nutimik Lake. Many of these contacts involved amphitheatre presentations, guided walks, family and school presentations and inspections in campgrounds at camp sites.
- *Bear Smart* display was exhibited at the Brandon Royal Winter Fair, Ag Days in Brandon with over 2,500 individual contacts made about being "Bear Smart".
- Several "Bear Smart Kits" containing various items for use when in bear country were developed. Each Kit contained: Be Bear Smart, Protect Yourself – Protect our Wildlife booklet, banger launchers and projectiles, bear spray, extreme rattler, critter getter "warning system"

and other sounding devices (siren), a fixed blade knife and a video “Living in Bear Country.” Kits were made available to Regional staff and others for demonstration purposes.

- Copies of three videos were distributed to Manitoba Conservation District offices in the Northwest region: Living in Bear Country, Working in Bear Country and Staying Safe in Bear Country.
- Replicas of black bear and polar bear skulls were purchased for use at public displays. These items plus tanned bear hides (black and polar bear) were extremely popular items with the public where the “Be Bear Smart” display was showcased.
- A student was employed to enter data for each District Occurrence Report (DOR) involving black bears, as well as assisting with *Bear Smart* workshops and public education and outreach, which assisted in measuring outcomes of the various messages and initiatives undertaken.
- Preliminary results of the data analysis shows that of the total 1,497 Black Bear District Occurrence Reports (DORs), 958 were investigated by staff. Of those investigated, 22.3 percent for recreational areas, 33.3 percent for rural agriculture areas and 40.3 percent for rural residential areas involved bears eating bird seed, garbage and compost for an overall total of 31.4 percent. These human-bear encounters could have been avoided through adopting *Bear Smart* procedures. Of these, total DORs 17 involved people deliberately feeding black bears: 6 in recreational areas, 7 in rural residential areas and 4 in rural residential. This data is absolutely critical in understanding black bear behavior in relationship to human activity and being able to focus initiatives toward key elements of human behavior in various settings: recreational or cottage country, rural agriculture and rural residential areas.
- A *Bear Smart* Waste Management initiative was implemented at Grand Beach Provincial Park. The initiative involved changing the traditional waste collection bins with semi-automated bear-proof containment bins and collection system. Twenty-four bear-proof waste bins were installed at seven drop-off locations. Waste is now collected by a retrofitted truck to pick-up the new bins. A brochure entitled “Be Bear Smart with Your Garbage” and two feature signs were developed to inform the public and cottage owners about the semi-automated system and to inform visitors to the park about being *Bear Smart* in bear country.
- Preliminary discussions for a broader “Be Wildlife Smart” initiative are underway as coyotes and other predators are becoming more common in urban areas and the development of an Emergency Response Protocol to employ in the event of wildlife – human direct contact is also being considered. This initiative would build upon the Be Bear Smart concept whereby education is the key to effect a change in human behavior and thereby conserve wildlife as fewer numbers of bears, coyotes and foxes would have to be removed.

MANITOBA FORESTRY ASSOCIATION WOODLOT PROGRAM

Managing Department:	Manitoba Conservation, Forestry Branch
Date Approved:	2009/2010 Treasury Board Estimates Review Process
Total Amount Approved:	\$200,000.00
Total Amount Expended:	\$200,000.00

The Woodlot Program continues to be delivered through the Manitoba Forestry Association (MFA) and has been effective in delivering services to private landowners in the Southeast, Interlake and Red River Valley regions of the province with an expanded presence in the Swan River Valley and surrounding area. Technical services and woodlot management plans continue to be provided to landowners through the assistance of a contract employee and speaking engagements are being provided to promote the Woodlot Program. Woodlot program staff work with representatives of Manitoba Agriculture, Food and Rural Initiatives, Manitoba Conservation, Town of Swan River, Rural Municipality of Swan River, surrounding municipalities and conservation districts, private landowners, and loggers in the area.

The objectives of the Woodlot Program are to promote land stewardship, and to help landowners realize the potential of their wooded property in meeting their personal goals. The program continues to evolve to better serve the target audiences in the region and to better address issues landowners are facing.

Program Results 2009/2010

MFA's Woodlot Program continues to be popular and in high demand. Training seminars were held and staff continued to work with Conservation Districts and rural municipalities to deliver the message, showcase successful landowners who have conducted sustainable woodlot management activities and introduced field days and bus tours. At the end of the 2009/2010 fiscal year, 14 landowners were on a waiting list for a management plan and a number of appointments were booked for walk 'n talks with interested landowners. Woodlot management objectives vary between landowners as they manage their woodlots for environmental benefits, timber and non-timber forest products. Small scale salvage harvesting of dead and dying larch is becoming more frequent as the eastern larch beetle continues to cause mortality in larch stands on private land.

Thirty-six return visits to management plan participants show the continued interest of landowners involved in sustainable woodlot management. These return visits have now become an integral part of the Manitoba Woodlot Program.

The program continues to promote sustainable woodlot management opportunities available to landowners across Manitoba. Through newsletters, field days, bus tours, seminars and general word of mouth, the program continues to help rural Manitobans manage their woodlots for economic, environmental and social benefits.

Woodlot Program Components

Components of the Woodlot Program include management plans, return visits, public education/extension, and partnerships. Achievements include:

1. Management Plans

The first component of the Woodlot program is an initial "onsite" visit that is offered to the landowner. Following the visit, a detailed Woodlot Management Plan based on the specific topics or objectives discussed during a "walk and talk" is prepared. The plan, inclusive of recommendations to be carried out is presented to the landowner.

A total of 57 woodlot management plans were completed. Of these, 17 were conducted in the expanded area of the Swan River Valley. Since 1992, 1,244 management plans have been completed on 101,995.68 forested acres throughout 57 municipalities across Manitoba.

2. Return Visits

The second component of the Woodlot Program is the return visit. A return visit complements the written woodlot management plan provided to the landowner and provides assistance to the landowner who wishes to proceed with timber harvesting, which may also include marketing assistance (Operational Return Visit) or has completed initial recommendations contained in the management plan and may want to carry out additional work in the woodlot (Technical Return Visit).

The demand for aspen continues to be poor, therefore, landowners in eastern Manitoba have not been as actively involved in small-scale timber harvests from their woodlots for economic benefits. Consequently, landowners involved in harvesting fuel wood for personal use and local sale have increased. In addition, the Eastern Larch Beetle has caused extensive mortality of large stands of larch; therefore, much of this larch is being salvaged for fuel wood purposes.

Many landowners involved in fuel wood harvesting activities received operational return visits. The estimated volume of saw logs/pulp/firewood from these activities is 1,843 m³ of hardwood and 1,000 m³ of softwood. The percentage of landowner interest in management activities and production of specialty products from private land includes:

- a) 18.0% - Traditional Tree Harvesting for Income, which includes harvesting for: the sale of saw logs and pulpwood; value-added products such as planing, kiln drying and grading lumber for market within the community; lumber for on site building materials; and fuel wood.
- b) 15% - Non-Traditional Forest Products, which includes Manitoba maple syrup, mushroom production, jams and jellies; Christmas trees and hybrid poplars for pulpwood; saw logs and future carbon sequestering benefits.
- c) 67% - Environmental Benefits, which includes recreation (e.g. trail construction for snowmobiling, bird watching, hiking and skiing); wildlife enhancement; eco-tourism; and tree planting (over 3.75 million seedlings planted by woodlot owners).

3. Public Education/Extension

The third component of the Woodlot Program includes public education/extension activities, which includes a variety of other woodlot activities such as education seminars, evening seminars, skills development seminars, bus tours, workshops and field days, as well as programming with groups and agencies supportive of woodlot management practices. The following were held:

- “Woodlot Series” included general woodlot management, Manitoba maple syrup, specialty mushrooms, and other non-timber forest products.
- Best Management Practices Seminars.
- ‘Woodlot Field Day’- Demonstrations included small scale logging equipment, portable sawmill operation, chainsaw care and maintenance and other woodlot related demonstrations.
- In partnership with Manitoba Agriculture, Food and Rural Initiatives-Interlake Region and Red River Community College, a “What’s Wrong with My Tree” insect and disease seminar was held in Arborg and Selkirk in April 2009.
- In partnership with the Manitoba Model Forest and the Woodlot Association of Manitoba, a “Law and Seedling Order” Bus Tour was held in July 2009.
- Attended the Manitoba Christmas Tree Growers Association Annual Meeting in October 2009 and 2009 Woodlot Program activities were presented at the MFA Annual General Meeting in April 2009.
- Over 50,000 seedling trees to approximately 120 landowners were distributed during the “A Day in the Pines” and Sandilands Forest Centre tour held in May 2009.
- Presentations on proper tree planting safe chainsaw use, insects and diseases of the woodlot, industrial tree planting, and basics of sawmilling and proper tree pruning were delivered.

4. Partnerships

- The Manitoba Christmas Tree Growers Association and the Woodlot Association of Manitoba delivered various woodlot related initiatives on behalf of the Woodlot Program. The Manitoba Christmas Tree Growers Association produced two issues of the “Knottie Times” newsletter that contained articles on evolving trends of Christmas tree markets, building and managing your Christmas tree business, and insects and diseases affecting plantations. The Woodlot Association of Manitoba produced six issues of “The Manitoba Woodlot” newsletter that included a variety of topics of interest to landowners.

**APPENDIX I -
Five Year Project Summary**

**Sustainable Development Innovations Fund
 Five Year Expenditure Summary (\$000)
 For years ending March 31, 2005 - March 31, 2010**

APPROPRIATION	Actual/Adjusted Expenditures				
	2005/06	2006/07	2007/08	2008/09	2009/10
Sustainable Development Innovations Fund	3,754.7	3,266.9	3,370.1	3,390.2	2,932.1
Total	3,754.7	3,266.9	3,370.1	3,390.2	2,932.1