

**Manitoba  
Sustainable Development  
Innovations Fund**

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**Annual Report  
2005-2006**

**Fonds des innovations de  
développement durable  
Manitoba**

**Rapport annuel  
2005-2006**



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MINISTER OF CONSERVATION

Legislative Building  
Winnipeg, Manitoba, CANADA  
R3C 0V8

The Honourable John Harvard, C.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, 2005 to March 31, 2006.

Yours sincerely,

Stan Struthers  
Minister of Conservation



The Honourable Stan Struthers  
Minister of Conservation  
330 Legislative Building  
Winnipeg MB R3C 0V8

Dear Sir:

It is my pleasure to present the Annual Report of the Sustainable Development Innovations Fund for the 2005/06 fiscal year.

During 2005/06, the Fund continued to support innovative projects, activities, research and developments that further the sustainability of Manitoba's environment, economy, human health and social well-being and support sustainable economic growth. As well, through targeted programs, provincial priorities continued to be addressed and government activities enhanced through collaboration with non-profit organizations.

Throughout the Province, Manitobans are doing their part to protect the environment and improve the quality of life within their communities. Approximately \$3.75 million was awarded to community organizations, businesses, educational institutions, youth groups, and others to assist them in this worthwhile work.

Respectfully submitted,

Laurie Streich  
Director

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# PREFACE

## Organization of Report

The format of the 2005/06 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 in the following categories and program areas:

### **SDIF Open Category Priority Program Areas:**

- Eco-tourism
- Ecosystem Conservation
- Environmental Technology Innovation and Demonstration
- Northern Community Development and Environmental Issues
- Sustainable Agricultural Practices
- Sustainable Community Development
- Understanding Our Environment
- Water
- Special Initiatives
  - Manitoba Product Stewardship Corporation School/Education Programs
  - Tire Stewardship Board

### **Targeted Broad Allocations under the Fund:**

- Environmental Youth Corps
- Manitoba Climate Change Action Fund
- Manitoba Forestry Association Woodlot Program
- Orphan Mine Site Assessment Program
- Bear Smart Program
- Water Stewardship Initiatives

## ***Purpose***

The Fund was created in October 1989 to provide financial assistance towards development, implementation and promotion of environmental innovation and sustainable development projects. The fund was continued under *The Sustainable Development Act*, proclaimed July 1, 1998.

The Fund provides support to research studies, demonstration of new technology, community enhancement and educational projects, which further the sustainability of Manitoba's economy, human health and social well-being, and help to protect Manitoba's environment. The Fund encourages the creation of sustainable communities and helps them meet their needs by providing grant funding to projects that demonstrate:

- Partnerships between groups and individuals;
- Pride in the community;
- Concern for the environment.

## Source of Revenue

The Fund does not generally result in any revenue generation for the provincial government. However, the existence of the SDIF is notionally linked to provincial revenues collected from an environmental protection tax on glass liquor bottles and disposable diapers.

## Communication

The Fund is promoted through the following activities:

Manitoba Conservation Web site – <http://www.gov.mb.ca/conservation/pollutionprevention>

- 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 the targeted Broad Allocations. This includes responding to inquiries, preparing documentation and reports, tracking expenditures, preparing cash flows, and reporting to Treasury Board.

The Branch also manages the Open Category of the SDIF with the cooperation of provincial government departments. Proposals submitted for funding consideration are evaluated by provincial staff against the SDIF criteria. The evaluations are compiled and summarized and then submitted for review to the SDIF Advisory Committee, which is 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. The Minister of Conservation 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 SDIF 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 be of benefit to Manitoba;
- has a clear, concrete plan for future use, sharing, or replication.

Ineligible applications and funding requests under the SDIF Open Category include:

- projects that will result in proprietary knowledge and being 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;
- initiatives that must be undertaken as a result of a government order, such as removal of petroleum distribution systems, investigations, and remediation.

The Environmental Youth Corps (EYC) Program, Manitoba Climate Change Action Fund (MCCAF), and the Waste Reduction and Pollution Prevention (WRAPP) Fund, use similar processes.

A total allocation of \$3.754 million was authorized to support the Fund in 2005/06. The Fund is comprised of the following allocations:

SDIF Open Category (SDIF)  
Environmental Youth Corps (EYC)  
Manitoba Climate Change Action Fund (MCCAF)  
Manitoba Forestry Association Woodlot Program  
Orphan Mine Site Assessment Program  
Waste Reduction and Pollution Prevention (WRAPP) Fund  
Bear Smart Program  
Water Stewardship Initiatives

The MCCAF is managed by Manitoba Energy, Science and Technology and the Water Stewardship Fund and Zebra Mussel Program are managed by Manitoba Water Stewardship. The remaining broad allocations are managed by Manitoba Conservation.

In total, approximately \$3.754 million was expended against a total of \$4.0 million that was authorized for expenditure. Sixty-four new projects plus two special initiatives were allocated funding from the SDIF Open Category in 2005/06, expending approximately \$2.07 million, while \$14,813.37 was expended on four projects carried over from previous fiscal years. New projects funded under the SDIF Open Category included ventures that focus on Aboriginal interests, youth programming, training initiatives and scientific analysis. The seven targeted broad allocations expended approximately \$1.67 million.

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



## **SDIF OPEN CATEGORY SUMMARY — PRIORITY PROGRAM AREAS**

### **Eco-tourism:**

A total of \$30,000.00 was expended in 2005/06 for two projects described in 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 \$120,800.00 was expended in 2005/06 for seven projects in 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 \$100,000.00 was expended in 2005/06 for two projects in the environmental technology innovation and demonstration category. Projects that fall 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 \$26,565.00 was expended during the 2005/06 fiscal year for three projects funded in the northern community development and environmental issues category. Projects in 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 \$62,385.00 was expended during the 2005/06 fiscal year for five projects in the sustainable agricultural practices category. Projects that fall within this category include research, demonstration projects, and feasibility studies on agricultural practices that protect the environment and that will assist in diversifying Manitoba's agricultural sector.

### **Sustainable Community Development:**

A total of \$150,185.00 was expended during the 2005/06 fiscal year for fourteen projects in 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 \$341,100.00 was expended during the 2005/06 fiscal year for twenty-three projects in the understanding our environment category. Projects that fit into this category help Manitobans make educated decisions and take action regarding the environment, such as education and awareness activities, training, research, seminars and forums.

### **Water:**

A total of \$144,210.00 was expended during the 2005/06 fiscal year for eight projects in the water category. Projects in this category include initiatives that address aquatic nuisance species, livestock stewardship, water quality protection, wise and efficient use of water resources, and scientific and technological innovation in the development, testing, and implementation of technologies that reduce water waste and conserve water.

## **Special Initiatives:**

### **Manitoba Product Stewardship Corporation School/Education Programs**

A total of \$585,000.00 was expended during the 2005/06 fiscal year to support the STAR, STAR Plus and Speaker's Bureau Program that was previously funded and delivered through the Manitoba Product Stewardship Corporation. Although the Corporation delivered these programs during the 2005/06 fiscal year, funding was provided through a Broad Allocation under the Sustainable Development Innovations Fund.

### **Manitoba Tire Stewardship Board**

A total of \$500,000.00 was expended during the 2005/06 fiscal year to support continuation of the Tire Stewardship Program, including payments to tire recyclers, providing limited Off the Road tire recycling and related operational activities. Funding support was provided by the Sustainable Development Innovations Fund and the Urban Development Initiative of Manitoba Intergovernmental Affairs and Trade.

## **BROAD ALLOCATIONS SUMMARY**

### **Environmental Youth Corps:**

A total of \$196,661.38 was expended during the 2005/06 fiscal year for eighty-four projects funded through the Environmental Youth Corps (EYC) and the administrative cost of managing the Fund. The EYC supports projects in the various regions of 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 \$392,455.00 was expended during the 2005/06 fiscal year for eleven 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.

### **Manitoba Forestry Association Woodlot Program**

A total of \$200,000.00 was expended during the 2005/06 fiscal year to maintain the Woodlot Program. This program was established to encourage private landowners in Manitoba to use Agro-forestry and woodlot management practices that diversify farm income and maintain wildlife habitat.

### **Orphan Mine Site Assessment Program**

A total of \$75,000.00 was expended by the Department of Conservation during the 2005/06 fiscal year as partial payment of a contract to undertake three independent assessments; a Closure Report and two Environmental Site Assessments.

### **Waste Reduction and Pollution Prevention (WRAPP) Fund:**

A total of \$496,293.02 was expended during the 2005/06 fiscal year for twenty-nine projects funded through the Waste Reduction and Pollution Prevention (WRAPP) Fund and WRAPP program development. 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.

### **Bear Smart Program:**

A total of \$49,777.49 was expended during the 2005/06 fiscal year to support the implementation of the *Bear Smart Program* in Manitoba. The *Bear Smart Program* was initiated to shift the focus from reactive resolution of human-bear conflicts to proactive prevention.

**Water Stewardship Fund and Zebra Mussel Program:**

A total of \$269,500.00 was expended during the 2005/06 for five projects under the Water Stewardship Fund and the Zebra Mussel 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.

**Table 1: Summary of SDIF Open Category and Broad Allocation Projects**

<b>Project Categories</b>	<b>Number of Projects Allocated Funding in 2005/06</b>	<b>Amount Expended</b>
<b>Open Category</b>		
Eco-tourism	2	\$ 30,000.00
Ecosystem Conservation	7	\$120,800.00
Environmental Technology Innovation and Demonstration	2	\$100,000.00
Northern Community Development and Environmental Issues	3	\$ 26,565.00
Sustainable Agricultural Practices	5	\$ 62,385.00
Sustainable Community Development	14	\$150,185.00
Understanding Our Environment	23	\$341,100.00
Water	8	\$144,210.00
Special Initiatives: - Manitoba Product Stewardship Corporation School/Education Programs <sup>1</sup>	1	\$585,000.00
- Tire Stewardship Board <sup>1</sup>	1	\$500,000.00
<b>Broad Allocations</b>		
Environmental Youth Corps (EYC)	84	\$196,661.38
Manitoba Climate Change Action Fund (MCCAF)	11	\$392,455.00
Manitoba Forestry Association Woodlot Program <sup>1</sup>	N/A	\$200,000.00
Orphan Mine Site Assessment Program <sup>1</sup>	N/A	\$ 75,000.00
Waste Reduction and Pollution Prevention (WRAPP) Fund	29	\$496,293.02
Bear Smart Program <sup>1</sup>	N/A	\$ 49,777.49
Water Stewardship Initiatives	5	\$269,500.00
<b>Total for Broad Allocations</b>	<b>119</b>	<b>\$1,679,686.89</b>
<b>Total for Open Category</b>	<b>66</b>	<b>\$2,060,245.00</b>
<b>Projects Carried Over into 2005/06</b>	<b>4</b>	<b>\$ 14,813.37</b>
<b>Total for SDIF</b>	<b>189</b>	<b>\$3,754,745.26</b>

<sup>1</sup> The Manitoba Forestry Association Woodlot Program, the Orphan Mine Site Assessment Program, the Bear Smart Program, Manitoba Product Stewardship School/Education Programs, and Manitoba Tire Stewardship Board support specific activities related to these issues and do not award grants to project proponents.

# PRÉFACE

## Structure du rapport

La structure du rapport annuel de 2005-2006 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 domaines de programmes et les catégories d'attribution des projets sont les suivants :

### **Domaines prioritaires de programmes :**

- Écotourisme
- Conservation des écosystèmes
- Innovation et démonstration de technologie environnementale
- Environnement et développement communautaire du Nord
- Pratiques agricoles durables
- Développement durable des collectivités
- Comprendre notre environnement
- Eau
- Initiatives spéciales
  - Programmes des écoles/d'éducation de la Manitoba Product Stewardship Corporation
  - Tire Stewardship Board (Programme de gestion des pneus hors d'usage)

### **Catégories d'attribution générales**

Brigade des jeunes environnementalistes

Fonds d'action pour le changement climatique du Manitoba;

Programme de protection des boisés de la Manitoba Forestry Association

Programme d'évaluation des mines abandonnées du Manitoba

Programme « Bear Smart »

Initiatives de gérance des eaux

### **Objectif**

Le Fonds des innovations de développement durable (FIDD) a été créé en octobre 1989 afin de fournir une aide financière pour la mise sur pied, la mise en œuvre et la promotion de projets d'innovation environnementale et de développement durable. Le fonds a été prorogé en vertu de la *Loi sur le développement durable*, promulguée le 1<sup>er</sup> juillet 1998.

Le Fonds soutient des recherches, la démonstration de nouvelles technologies et des projets d'amélioration communautaires et d'éducation pour améliorer la viabilité de l'économie, la santé humaine et le bien-être social au Manitoba et pour aider à protéger l'environnement de la province. Il encourage la création de collectivités viables et il les aide à répondre à leurs besoins en finançant, par subventions, des projets qui témoignent :

- de l'établissement de partenariats entre des groupes et des particuliers;
- de la fierté dans la collectivité;
- du souci de l'environnement.

## **Source de revenus**

Le Fonds ne produit en général aucun revenu pour le gouvernement provincial. Cependant, son existence est liée en théorie aux recettes provinciales perçues par le biais d'une taxe destinée à la protection de l'environnement et imposée sur les bouteilles d'alcool en verre et sur les couches jetables.

## **Communications**

La promotion du Fonds est assurée par les activités suivantes :

- activités communautaires, foires commerciales, expositions et conférences;
- communiqués de presse ministériels;
- remerciements dans les publications, documents imprimés, et annonce des projets financés;
- inscription 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, y compris en ce qui concerne les projets des domaines prioritaires de programmes et ceux des catégories d'attribution 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 gère aussi les domaines prioritaires de programmes du Fonds en coopération avec d'autres ministères provinciaux. Le personnel de la Province évalue les demandes de financement de projets en fonction des critères du Fonds. Les évaluations sont compilées et résumées avant d'être présentées au comité consultatif d'examen du Fonds, qui est composé de représentants des ministères provinciaux. Ce 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 de la Conservation a reçu 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 des domaines prioritaires de programmes 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 dans les domaines prioritaires de programmes du Fonds 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 (ex. : élimination de réseaux de distribution de pétrole, études et travaux de remise en état).

La Brigade des jeunes environnementalistes, le Fonds d'action pour le changement climatique du Manitoba et le Fonds pour la réduction du volume des déchets et la prévention de la pollution emploient des processus semblables.

En tout, l'affectation de crédits de 3,754 millions de dollars a été autorisée pour soutenir le Fonds en 2005-2006. Le Fonds comprend les catégories d'attribution suivantes :

Domaines prioritaires de programmes du Fonds  
 Brigades des jeunes environnementalistes  
 Fonds d'action pour le changement climatique du Manitoba  
 Programme de protection des boisés de la Manitoba Forestry Association  
 Programme d'évaluation des mines abandonnées du Manitoba  
 Fonds pour la réduction du volume des déchets et la prévention de la pollution  
 Programme « Bear Smart »  
 Initiatives de gérance des eaux.

Le Fonds d'action pour le changement climatique du Manitoba est géré par le ministère de l'Énergie, des Sciences et de la Technologie, et le Programme de lutte contre la moule zébrée, par Gestion des ressources hydriques Manitoba. Les autres catégories d'attribution générales sont gérées par le ministère de la Conservation.

En tout, environ 3,754 millions de dollars ont été dépensés sur un total du même montant. Soixante-quatre nouveaux projets et deux initiatives spéciales ont reçu des fonds d'à peu près 2,07 millions, dans les domaines prioritaires de programmes, en 2005-2006; un total de 14 813,37 \$ a été affecté à quatre projets reportés des années financières antérieures. Les nouveaux projets financés dans la même catégorie ont compris des initiatives centrées sur les intérêts des Autochtones, sur les programmes destinés aux jeunes, sur la formation et sur l'analyse scientifique. On a consacré environ 1,67 million de dollars à des projets s'inscrivant dans les sept catégories d'attribution générales.

Un résumé des dépenses des projets dans les domaines prioritaires de programmes et dans les catégories d'attribution générales est présenté dans les pages qui suivent.

## **CATÉGORIES – DOMAINES PRIORITAIRES DE PROGRAMMES : RÉSUMÉ**

### **Écotourisme :**

En 2005-2006, un total de 30 000 \$ a été consacré à deux projets inscrits dans la catégorie de l'écotourisme. Il s'agissait d'initiatives ayant trait à la préservation des écosystèmes, à l'éducation du public et aux débouchés économiques créés par le tourisme, la priorité ayant été accordée aux collectivités rurales et du Nord.

### **Conservation des écosystèmes :**

En 2005-2006, une somme totale de 120 800 \$ a été affectée à sept projets dans la catégorie de la conservation des écosystèmes. Les objectifs sont ici de conserver les ressources, de préserver et d'entretenir les forêts et les écosystèmes urbains et de remettre en état et de revitaliser les zones dégradées.

### **Innovation et démonstration de technologies environnementales :**

En tout, 100 000 \$ ont été affectés à deux projets en 2005-2006 dans la catégorie de l'innovation et de la démonstration de technologies environnementales. Dans cette catégorie, on trouve les projets suivants, entre autres : les études de faisabilité, les travaux de recherche-développement sur de nouveaux produits et procédés, les démonstrations de technologies environnementales et les projets spéciaux tels que des études stratégiques concernant des secteurs industriels.

### **Environnement et développement communautaire du Nord :**

Au cours de l'exercice 2005-2006, la somme totale de 26 565 \$ a été consacrée à trois projets appartenant à la catégorie de l'environnement et du développement communautaire du Nord. Les projets de cette catégorie doivent être axés sur la mise en valeur de l'environnement et sur les activités de développement économique durable des collectivités du Nord et des localités éloignées, la priorité étant accordée aux collectivités autochtones.

### **Pratiques agricoles durables :**

Au cours de l'année financière 2005-2006, la somme totale de 62 385 \$ a été affectée à cinq projets de la catégorie des pratiques agricoles durables. Les projets de cette catégorie comprennent des recherches, des projets de démonstration et des études de faisabilité sur les pratiques agricoles qui protègent l'environnement et qui contribueront à diversifier le secteur agricole du Manitoba.

### **Développement durable des collectivités :**

Au cours de l'exercice 2005-2006, la somme totale de 150 185 \$ a été consacrée à 14 projets de la catégorie du développement durable des collectivités, catégorie qui comprend les initiatives concernant l'éco-efficacité, la bonne gestion de l'environnement, les mécanismes de renforcement des capacités et la réhabilitation des centres-villes, l'accent étant mis sur les partenariats avec les peuples autochtones et les jeunes.

### **Comprendre notre environnement :**

Au cours de l'exercice 2005-2006, la somme de 341 100 \$ a été consacrée à 23 projets dans la catégorie « Comprendre notre environnement ». Les projets de cette catégorie sont axés sur des activités d'éducation et de sensibilisation, de formation ou de recherche et sur l'organisation de



colloques et de forums visant à aider les Manitobains et les Manitobaines à prendre des décisions éclairées et à agir dans l'intérêt de l'environnement.

## **Eau**

Au cours de l'année financière 2005-2006, la somme totale de 144 210 \$ a été consacrée à huit projets dans la catégorie de l'eau. Il s'agissait, entre autres, d'initiatives concernant la lutte contre les espèces aquatiques nuisibles, la bonne gestion du bétail, la protection de la qualité de l'eau, la promotion d'une consommation efficiente et intelligente des ressources hydriques et l'innovation scientifique et technique dans la mise au point, la mise à l'essai et la mise en œuvre de technologies visant à réduire les déchets dans l'eau et à économiser l'eau.

## **Initiatives spéciales :**

### **Programmes des écoles/d'éducation de la Manitoba Product Stewardship Corporation**

Au cours de l'exercice 2005-2006, une somme totale de 585 000 \$ a servi à soutenir les Programmes STAR et STAR Plus et celui du Bureau des conférenciers qui étaient auparavant financés et présentés par l'intermédiaire de la Manitoba Product Stewardship Corporation. Bien que la Corporation ait mis ces programmes en œuvre pendant l'exercice 2005-2006, les fonds ont été fournis par le biais d'une attribution générale du Fonds des innovations de développement durable.

### **Manitoba Tire Stewardship Board (Programme de gestion des pneus hors d'usage)**

Au cours de l'exercice 2005-2006, un montant total de 500 000 \$ a servi à soutenir la continuation du Programme de gestion des pneus hors d'usage; les fonds ont notamment été utilisés pour payer les recycleurs de pneus, fournir un programme limité de recyclage des pneus usés et mener des activités opérationnelles connexes. Les sommes ont été versées par le Fonds des innovations de développement durable et par l'Initiative de développement urbain.

## **CATÉGORIES D'ATTRIBUTION GÉNÉRALES – RÉSUMÉ**

### **Brigade des jeunes environnementalistes :**

Au cours de l'exercice 2005-2006, la somme de 196 661,38 \$ a été consacrée à 84 projets relevant de la Brigade des jeunes environnementalistes et elle a aussi servi à payer les frais d'administration dus à la gestion du Fonds. La Brigade est présente dans différentes régions du Manitoba et soutient des projets concernant la qualité de l'eau, la réduction des déchets, la protection de la flore et de la faune, la restauration et la conservation des milieux naturels et la conservation des espèces sauvages et des habitats naturels.

### **Fonds d'action pour le changement climatique du Manitoba :**

Au cours de l'exercice 2005-2006, la somme de 392 455 \$ a été consacrée à 11 projets relevant du Fonds d'action pour le changement climatique du Manitoba (FACCM). Les domaines prioritaires de ce Fonds sont l'éducation et la sensibilisation, les effets et l'adaptation, les innovations techniques et l'efficacité énergétique.

### **Programme de protection des boisés de la Manitoba Forestry Association**

Au cours de l'exercice 2005-2006, la somme de 200 000 \$ a été affectée au maintien du Programme de protection des boisés. Ce programme a été mis sur pied afin d'encourager les propriétaires fonciers privés du Manitoba à employer des pratiques de gestion agroforestière et de gestion des terrains boisés qui diversifient les revenus agricoles et qui préservent les habitats naturels.

### **Programme d'évaluation des mines abandonnées du Manitoba**

Au cours de l'exercice 2005-2006, Conservation Manitoba a versé 75 000 \$ pour payer en partie un contrat portant sur trois évaluations indépendantes : un rapport de fermeture et deux évaluations environnementales.

### **Fonds pour la réduction du volume des déchets et la prévention de la pollution**

Pour l'exercice financier 2005-2006, la somme de 496 293,02 \$ a été consacrée à 29 projets relevant du Fonds pour la réduction du volume des déchets et la prévention de la pollution et à l'élaboration de ses programmes. Les domaines prioritaires du Fonds sont le compostage, la gestion des déchets de construction et de démolition, l'approvisionnement écologique, la réduction du volume des déchets des établissements, la gestion intégrée des déchets, le développement des marchés, la prévention de la pollution, la promotion et l'éducation, et le recyclage à l'échelle régionale.

### **Programme « Bear Smart » :**

Au cours de l'exercice 2005-2006, une somme totale de 49 777,49 \$ a servi à soutenir la mise en œuvre du Programme « Bear Smart » au Manitoba. Le Programme a été lancé pour mettre l'accent sur la prévention proactive plutôt que sur le règlement réactionnel des conflits entre l'être humain et les ours.

### **Fonds de gérance des eaux et Programme de lutte contre la moule zébrée :**

Au cours de l'exercice 2005-2006, une somme totale de 269 500 \$ a été affectée à cinq projets relevant du Fonds de gérance des eaux et du Programme de lutte contre la moule zébrée. Dans le cadre du Fonds de gérance des eaux, les domaines primordiaux de financement sont la planification et la mise en œuvre des projets de gestion des bassins hydrographiques, la recherche scientifique sur les eaux, l'éducation et le renforcement des capacités, la qualité de l'eau et le développement économique.

**Tableau 1 : Résumé des projets financés par le FIDD, par catégorie d'attribution générale et par domaine prioritaire de programmes**

Catégories de projets	Nombre de projets financés en 2005-2006	Sommes attribuées
<b>Domaines prioritaires de programmes</b>		
Écotourisme	2	30 000,00 \$
Conservations des écosystèmes	7	120 800,00 \$
Innovation et démonstration de technologies environnementales	2	100 000,00 \$
Environnement et développement communautaire du Nord	3	26 565,00 \$
Pratiques agricoles durables	5	62 385,00 \$
Développement durable des collectivités	14	150 185,00 \$
Comprendre notre environnement	23	341 100,00 \$
Eau	8	144 210,00 \$
Initiatives spéciales :		
- Programmes des écoles/d'éducation de la Manitoba Product Stewardship Corporation <sup>1</sup>	1	585 000,00 \$
- Tire Stewardship Board <sup>1</sup>	1	500 000,00 \$
<b>Catégories d'attribution générales</b>		
Brigade des jeunes environnementalistes	84	196 661,38 \$
Fonds d'action pour le changement climatique du Manitoba	11	392 455,00 \$
Programme de protection des boisés de la Manitoba Forestry Association <sup>2</sup>	N/A	200 000,00 \$
Programme d'évaluation des mines abandonnées du Manitoba <sup>1</sup>	N/A	75 000,00 \$
Fonds pour la réduction du volume des déchets et la prévention de la pollution	29	496 293,02 \$
Programme « Bear Smart » <sup>1</sup>	N/A	49 777,49 \$
Initiatives de gérance des eaux	5	269 500,00 \$
<b>Total – Catégories d'attribution générales</b>	<b>119</b>	<b>1 679 686,89 \$</b>
<b>Total – Domaines prioritaires de programmes</b>	<b>66</b>	<b>2 060 245,00 \$</b>
<b>Projets reportés de l'exercice antérieur</b>	<b>4</b>	<b>14 813,37 \$</b>
<b>Total : FIDD</b>	<b>189</b>	<b>3 754 745,26 \$</b>

<sup>1</sup> Le Programme de protection des boisés de la Manitoba Forestry Association, le Programme d'évaluation des mines abandonnées du Manitoba, le Programme « Bear Smart », les Programmes des écoles/d'éducation de la Manitoba Product Stewardship et le Manitoba Tire Stewardship Board (Programme de gestion des pneus hors d'usage) soutiennent des initiatives particulières se rapportant à ces questions et n'accordent aucune subvention aux promoteurs de projets.

**ECO-TOURISM**  
**PROJECTS ALLOCATED FUNDING**  
**DURING THE 2005/06 FISCAL YEAR**

Number of Projects: 2  
Total Amount Expended: \$30,000.00

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<u>Project Name</u>	<u>Total Expended</u>
Manigotagan River Web-Based GIS	\$25,000.00
"Manitoba Walks" Revised & Expanded Edition	\$ 5,000.00

# ECO-TOURISM

## DETAILED LISTING OF PROJECTS ALLOCATED

### FUNDING DURING THE 2005/06 FISCAL YEAR

#### **MANIGOTAGAN RIVER WEB-BASED GIS**

**Proponent:** Manitoba Eco-Network  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

#### **Summary:**

A grant of \$25,000.00 was approved to promote environmentally-sensitive use of the Manigotagan River, Manitoba's newest provincial park, through production of an interactive web-based map and a waterproof map. The interactive web-based map and GIS as well as an updated waterproof map are intended to assist with trip planning and navigation and encourage a respectful attitude to the environment. The map will also provide information about the local area and raise awareness of its history, ecosystems and conservation. Environmental and water pollution issues will be a recurring theme throughout the web portal and the interactive map will include an environmental/educational layer that will include quiz questions and other environmental information. This tool will link geographic, written, audio and visual information.

#### **"MANITOBA WALKS" REVISED & EXPANDED**

**Proponent:** Prairie Pathfinders  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$5,000.00  
**Total Amount Expended:** \$5,000.00

#### **Summary:**

A grant of \$5,000.00 was approved to revise and publish a second edition of the book *Manitoba Walks* to promote Manitoba's countryside as a vibrant and exciting hiking and walking destination. The book will be updated with new material and additional routes and trails. The second edition will include the addition of a number of trails in northern Manitoba (Thompson and Flin Flon), along with a number of other trails including: wilderness trails, Wildlife Management Areas and Forest Reserve trails. With an expanded content, plus new photographs, an improved design of maps and points for GPS users, the revised book is intended to showcase Manitoba's undiscovered beauty and entice readers to explore a variety of terrain. For more information on Prairie Pathfinders visit their website at [www.prairiepathfinders.mb.ca](http://www.prairiepathfinders.mb.ca).

**ECOSYSTEM CONSERVATION  
PROJECTS ALLOCATED FUNDING  
DURING THE 2005/06 FISCAL YEAR**

Number of Projects: 7

Total Amount Expended: \$120,800.00

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<b><u>Project Name</u></b>	<b><u>Total Expended</u></b>
Environmental Effects of ATVs – Phase Two	\$21,500.00
Hillside Pool and Riffle Structures	\$25,000.00
La Salle River Restoration Project	\$12,800.00
Lower Assiniboine Watershed Project	\$25,000.00
Peregrine Falcon Chick Release	\$ 1,500.00
Pineridge Wildlife Park and Conservation Interpretive Centre	\$10,000.00
Summit Road Landfill Remediation	\$25,000.00

# ECOSYSTEM CONSERVATION

## DETAILED LISTING OF PROJECTS ALLOCATED

### FUNDING DURING THE 2005/06 FISCAL YEAR

#### ENVIRONMENTAL EFFECTS OF ATVS – PHASE TWO

**Proponent:** University of Manitoba, Department of Environment and Geography  
**Date Approved:** December 21, 2005  
**Total Amount Approved:** \$21,500.00  
**Total Amount Expended:** \$21,500.00

#### **Summary:**

A grant of \$21,500.00 was approved to continue conducting research on ATV use in the Duck Mountain Provincial Park. ATV use has been identified as an issue in the Duck Mountain Provincial Park management plan, as uncontrolled ATV use is affecting natural features including some ecologically sensitive areas. Information compiled will also be used towards community-based trail planning initiatives for the park. As a result, it is proposed that a strategy for managing ATV use in a manner that is user-based and environmentally-friendly will be developed. Specific ecological impacts occurring at sites and the development of scientifically based recommendations for academic and public consultation purposes will be identified. A predictive modeling tool will be created to assist in the design and management of ATV trails, which may be used as a template for other Manitoba parks.

#### HILLSIDE POOL AND RIFFLE STRUCTURES

**Proponent:** Cooks Creek Conservation District No. 5  
**Date Approved:** December 21, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

#### **Summary:**

A grant of \$25,000.00 was approved to improve water quality and overall ecosystem health of the Cooks Creek waterway by constructing five pool and riffle structures within one of the tributaries. The construction will provide sediment and erosion control during runoff and hillside drain flows into Cooks Creek, as well as improving fish spawning habitat. As a result, the project intends to demonstrate a method to remediate the effects of suspended particulate matter in a water course and lessen the nutrient load downstream into Lake Winnipeg. As part of the Conservation District's ongoing educational programming, the project will be promoted through various venues, tours will be scheduled to view the structures and guides will be produced explaining its purpose. As well, educational facilities will be contacted to further outdoor classroom learning opportunities.



## **LA SALLE RIVER RESTORATION PROJECT**

**Proponent:** La Salle Redboine Conservation District  
**Date Approved :** February 23, 2006  
**Total Amount Approved:** \$12,800.00  
**Total Amount Expended :** \$12,800.00

### **Summary :**

A grant of \$12,800.00 was approved to selectively harvest trees that are blocking the flow and fish passage of the La Salle River over a seven kilometer stretch, as a result of a severe wind storm. Where trees have been removed, bare root maple and bur oak trees will be planted to remediate the site. The project will be implemented during frozen ice conditions where a timber crew will remove above ground log debris that has fallen across the river and the debris below ice level will be left to facilitate in-channel fish habitat. It is proposed that only severely damaged and dead trees located within a few meters of the stream bank will be removed, leaving the remainder on the banks to facilitate riparian bank stabilization functions. Trees that are not diseased will be used for firewood by affected landowners and the remaining debris will be burnt onsite.

## **LOWER ASSINIBOINE WATERSHED PROJECT**

**Proponent:** Sturgeon Creek Association  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

### **Summary:**

Sturgeon Creek Association, Friends of Bruce Park and Friends of Omand's Creek formed a partnership known as the "Lower Assiniboine Watershed Project" with the goal of creating and incorporating a larger umbrella organization to preserve, protect and enhance the Lower Assiniboine Watershed. A grant of \$25,000.00 was approved to restore and enhance the riparian zones of the Lower Assiniboine Watershed by planting native trees and shrubs along Sturgeon, Truro and Omand's Creeks, as well as in Bruce Park. Other activities include fish sampling, expanding the "no-mow" buffer zone, bird monitoring and dragonfly sampling. The watershed will be improved along with the habitat for terrestrial flora and fauna by preserving and protecting the riparian zone and the aquatic habitat of the creeks and streams. It will also increase knowledge on various fish, dragonfly/damselfly and bird populations, as well as the water quality in the watershed. In undertaking this two year initiative, the community will be engaged to work towards a common goal to improve the aesthetics and environmental health of the community.

## **PEREGRINE FALCON CHICK RELEASE**

**Proponents:** Manitoba Conservation, Canadian Wildlife Service and Parkland Mews  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$1,500.00  
**Total Amount Expended:** \$1,500.00

### **Summary:**

Manitoba Conservation is responsible for the recovery of species at risk. The anatum peregrine falcon is an endangered species in Manitoba and is recognized as a threatened species in Canada. Manitoba participated in the development of a national recovery strategy, which resulted in a target recovery population of four sustainable breeding pairs in Manitoba. In the 1970's and 80's, Manitoba participated in a very successful urban release program in Winnipeg, Brandon and a few other locations resulting in the establishment of four breeding pairs in the province. As the urban Manitoba population of peregrines dropped to two breeding pairs, Manitoba initiated a partnership with the private Manitoba-based organization, Parkland Mews, to captive breed (under an Endangered Species Act permit) the anatum peregrine falcon, with Manitoba Conservation having the first option to purchase any young produced. Although Parkland Mews started the program in 1999, until 2005, there was no successful captive breeding. Four chicks were produced in 2005, two of which are being kept for breeding purposes while the other two were candidates for release in 2005. The Canadian Wildlife Service provided funding for the release of one male offspring and a grant of \$1,500.00 was approved under the Sustainable Development Innovations Fund for release of the other male offspring. Parkland Mews released the two male offspring at their hack site facility in La Barriere Park, south of Winnipeg. For more information on the Recovery Program, visit Parkland Mews website at [www.parklandmews.com](http://www.parklandmews.com).

## **PINERIDGE WILDLIFE PARK AND CONSERVATION INTERPRETIVE CENTRE**

**Proponent:** Cooks Creek Conservation District No. 5  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$10,000.00  
**Total Amount Expended:** \$10,000.00

### **Summary:**

A grant of \$10,000.00 was approved to undertake research and development of an interpretive program for 45 acres of land that has been designated as a wildlife site, as well as restore and extend two nature trails, the Tamarack trail (1.6 kilometers) and Blue Spruce trail (1.0 kilometer). It is intended that the trails will be used for birding, flora and fauna education, and water quality and quantity education. The trails will be built up and widened to allow for wheelchair access and will be kept short in length for guided tours. Native grasses, trees and shrubs will be planted to replace vegetation removed during the restoration process. Other additions to the site include a purple martin house, bat houses, hummingbird feeders, picnic tables and benches. The interpretive program will consist of guided tours, activities and signage that will identify rare flora and fauna species, such as the Alberta Arctic butterfly species. The signage will also focus on the relationship between the soil, water, flora and fauna. Brochures, pamphlets, advertisements and posters will be created to promote the site.

## **SUMMIT ROAD LANDFILL REMEDIATION**

<b>Proponent:</b>	City of Winnipeg, Naturalist Services Branch
<b>Date Approved:</b>	February 23, 2006
<b>Total Amount Approved:</b>	\$25,000.00
<b>Total Amount Expended:</b>	\$25,000.00

### **Summary:**

A grant of \$25,000.00 was approved to minimize environmental risk through urban restoration by establishing a vegetative cover of trembling aspen, poplar trees, and other native woody tree species to help decrease run-off from a refuse cell area of the Summit Road landfill, which was closed in 1998. The property, within the City of Winnipeg, has a refuse cell area encompassing 211 acres and has received an estimated six million metric tonnes of waste material over 30 years of operation. This project will examine the use of hardy, fast growing poplar species native to Manitoba. Currently, leachate from the landfill is collected and transported to the City of Winnipeg's North End Water Treatment Plant. Although the amount of leachate can be reduced by recycling it through the landfill, this increases leachate toxicity and the chance for groundwater pollution. By establishing a vegetative cover, the amount of water that percolates through a landfill can be reduced as precipitation will be absorbed by the roots before entering the cells and moving down through the landfill, decreasing the amount of leachate. This initiative has the potential to improve the aesthetics of the site, as well as create wildlife habitat, protect Sturgeon Creek's water quality and decrease the amount of contaminants moving through the soil to the underlying groundwater aquifer.

**ENVIRONMENTAL TECHNOLOGY  
INNOVATION AND DEMONSTRATION  
PROJECTS ALLOCATED FUNDING  
DURING THE 2005/06 FISCAL YEAR**

Number of Projects: 2

Total Amount Expended: \$100,000.00

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<b><u>Project Name</u></b>	<b><u>Total Expended</u></b>
Advanced Nitrogen Removal from Carbon-Deficient Sewage Utilizing Hydrogen Gas	\$25,000.00
Airport Site Redevelopment LEED Certification: Achieving Sustainability through Building Design	\$75,000.00

# ENVIRONMENTAL TECHNOLOGY INNOVATION AND DEMONSTRATION

## DETAILED LISTING OF PROJECTS ALLOCATED

### FUNDING DURING THE 2005/06 FISCAL YEAR

#### ADVANCED NITROGEN REMOVAL FROM CARBON-DEFICIENT SEWAGE UTILIZING HYDROGEN GAS

<b>Proponent:</b>	University of Manitoba, Department of Civil Engineering
<b>Date Approved:</b>	September 30, 2005
<b>Total Amount Approved:</b>	\$25,000.00
<b>Total Amount Expended:</b>	\$25,000.00

#### **Summary:**

A grant of \$25,000.00 was approved to conduct bench scale research on municipal effluent to develop a system that will enable nitrification and denitrification processes to take place with the minimum use of external chemicals. The experiments are intended to remove ammonia and nitrate without generating excess carbon in the effluent. Hydrogen will be used to initiate denitrification after exhausting indigenous carbon sources in the raw wastewater. The experiments will simulate advanced wastewater treatment. In order to use the most sustainable form of biological nutrient removal, nitrates that hinder the biological uptake of phosphorus in the process need to be removed. Should this research prove successful, its application to wastewater treatment centres may have positive environmental impacts on water quality and deceleration of the eutrophication of waters in the Lake Winnipeg drainage basin.

## **AIRPORT SITE REDEVELOPMENT LEED CERTIFICATION: ACHIEVING SUSTAINABILITY THROUGH BUILDING DESIGN**

**Proponent:** Winnipeg Airports Authority Inc.  
**Date Approved:** February 28, 2006  
**Total Amount Approved:** \$75,000.00  
**Total Amount Expended:** \$75,000.00

### **Summary:**

The Winnipeg Airports Authority intends to demonstrate the application of green terminal building design through the adoption of a sustainable development approach during their site redevelopment project. The new terminal building will incorporate sustainability in its design, construction and ongoing operations. A grant of \$75,000.00 was approved for the Winnipeg Airports Authority to hire a consultant to document, monitor and verify these initiatives, using the Canadian Green Council's LEED (Leadership in Energy and Environmental Design) rating system. This rating system requires rigorous documentation through the project, as well as certain preconditions (sustainable objectives) being met. For more information on the Winnipeg Airport Site Redevelopment, visit their website at [www.waa.ca](http://www.waa.ca).

**NORTHERN COMMUNITY DEVELOPMENT  
AND ENVIRONMENTAL ISSUES**

**PROJECTS ALLOCATED FUNDING**

**DURING THE 2005/06 FISCAL YEAR**

Number of Projects: 3  
Total Amount Expended: \$26,565.00

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<b><u>Project Name</u></b>	<b><u>Total Expended</u></b>
Environmental Capacity Development and Work Experience Program	\$10,000.00
Grade 8 Claymation Video Project	\$4,965.00
Thompson Environmental Project	\$11,600.00

# NORTHERN COMMUNITY DEVELOPMENT AND ENVIRONMENTAL ISSUES

## DETAILED LISTING OF PROJECTS ALLOCATED

### FUNDING DURING THE 2005/06 FISCAL YEAR

#### ENVIRONMENTAL CAPACITY DEVELOPMENT AND WORK EXPERIENCE PROGRAM

<b>Proponents:</b>	Shamattawa First Nation and Manitoba First Nations Internet School Inc.
<b>Date Approved:</b>	September 30, 2005
<b>Total Amount Approved:</b>	\$10,000.00
<b>Total Amount Expended:</b>	\$10,000.00

#### **Summary:**

A grant of \$10,000.00 was approved to establish an Environmental Capacity Development and Work Experience Program in the Shamattawa First Nation community. The program intends to involve youth from ages 16 to 30 years in community clean up activities and provide Elders with opportunities to speak to youth regarding traditional environmental knowledge. Youth from the community will be provided environmental work placements and will participate in community activities, including the development of school based recycling programs and construction of large animal resistant garbage containers. Youth will participate at Elder meetings where information on fur bearers, non-timber forest products and large ungulates, such as moose and caribou will be provided. This initiative is expected to build community capacity and environmental awareness by keeping the community clean, restoring the environmental integrity of local river banks and small streams, and enhancing local knowledge of conservation, recycling and sound environmental principles.



## **GRADE 8 CLAYMATION VIDEO PROJECT**

**Proponent:** School Division of Mystery Lake  
**Date Approved:** December 21, 2005  
**Total Amount Approved:** \$4,965.00  
**Total Amount Expended:** \$4,965.00

### **Summary:**

A grant of \$4,965.00 was approved to assist Mystery Lake School District, in partnership with Freeze Frame Manitoba, City of Thompson, Reel North Film Festival, and Shaw Cable, to enhance environmental and sustainable development activities by increasing awareness of sustainability issues with students, teachers, and the surrounding community. In undertaking this initiative, grade eight students will create animated short claymation videos in the classroom focusing on topics such as pollution prevention, environmental innovation, waste reduction and environmentally sustainable practices. The students will be required to research and process their understanding of sustainability issues in a multi-media context, appropriate to their grade level. The videos will be viewed publicly at various venues, as well as being entered into video competitions.

## **THOMPSON ENVIRONMENTAL PROJECT**

**Proponent:** Thompson Homelessness Project Inc.  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$11,600.00  
**Total Amount Expended:** \$11,600.00

### **Summary:**

Thompson Homelessness Project Inc., a committee of Thompson City Council, in partnership with the Salvation Army Corps of Thompson and Nanastowiho Wikamik (Shelter), intends to undertake the second year of an environmental pilot project. A grant of \$11,600.00 was approved to provide employment opportunities for homeless people in the City of Thompson whereby, persons hired will be trained to undertake various community enhancement, beautification and waste minimization activities. The benefits of recycling, cleaning up and beautifying the community will be demonstrated to homeless people, local organizations and the residents of Thompson and issues such as garbage versus recycling will be addressed through workshops and other educational activities.

# SUSTAINABLE AGRICULTURAL PRACTICES

## PROJECTS ALLOCATED FUNDING

### DURING THE 2005/06 FISCAL YEAR

Number of Projects: 5

Total Amount Expended: \$62,385.00

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<u>Project Name</u>	<u>Total Expended</u>
Organic Matters on the Prairies Conference	\$ 2,925.00
Quantifying brush encroachment on pasturelands	\$20,500.00
Solid Cattle Manure as a Nutrient Source in Annual and Forage Cropping Systems	\$25,000.00
Varroa Mite Control Workshop Using Organic Acids	\$ 2,960.00
Woodlots for Healthy Watersheds	\$11,000.00

**SUSTAINABLE AGRICULTURAL PRACTICES**  
**DETAILED LISTING OF PROJECTS ALLOCATED**  
**FUNDING DURING THE 2005/06 FISCAL YEAR**

**ORGANIC MATTERS ON THE PRAIRIES CONFERENCE**

<b>Proponent:</b>	Organic Food Council of Manitoba
<b>Date Approved:</b>	December 21, 2005
<b>Total Amount Approved:</b>	\$2,925.00
<b>Total Amount Expended:</b>	\$2,925.00

**Summary:**

A grant of \$2,925.00 was approved to assist the Organic Food Council of Manitoba (OFCM) in hosting a conference at Assiniboine Community College in Brandon that focused on composting, enhancing soil fertility and exploring the issue of “feeding the world with organic agriculture”. Consumers, organic farmers, and non-organic farmers participated and were provided with information on various organic agriculture issues, such as production, marketing, and increasing consumption of organic food. The OFCM also hosted a two-day workshop, “Gaining Ground” that provided practical “how to” information on converting conventional farms to organic ones and exploring ways to reduce tillage.

**QUANTIFYING BRUSH ENCROACHMENT ON PASTURELANDS**

<b>Proponent:</b>	University of Manitoba, Department of Environment and Geography
<b>Date Approved:</b>	February 23, 2006
<b>Total Amount Approved:</b>	\$20,500.00
<b>Total Amount Expended:</b>	\$20,500.00

**Summary:**

A grant of \$20,500.00 was approved to quantify the changes of perennial grassland and woody vegetation cover within the aspen parkland region. Currently, there is a federally funded initiative on public pastures in the aspen parkland, but funding does not include an assessment of pastureland that is privately held in areas adjacent to these public lands. The project will build upon the federal work by reconstructing the site history of private pasturelands in Manitoba adjacent to public pasture sites. Quantifying the amount of woody encroachment on pasturelands will show how much production has been lost and enable recommendations to be made for better management practices. Better management of pasturelands is expected to benefit local communities and provide both economic and biodiversity rewards. The long-term goal is to develop a GIS monitoring tool to detect future land cover change.

## **SOLID CATTLE MANURE AS A NUTRIENT SOURCE IN ANNUAL AND FORAGE CROPPING SYSTEMS**

**Proponents:** Manitoba Cattle Producers Association, University of Manitoba and Manitoba Livestock Manure Management Initiative Inc.  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

### **Summary:**

A grant of \$25,000.00 was approved to conduct research on cattle manure management. The intent of the research is to refine and validate assumptions used in managing the application of manure as a fertilizer to agricultural land. Manitoba cattle producers will be surveyed to characterize manure management practices used, which will assist in determining priorities, including: research, demonstration and extension activities. Field studies of nutrient release characteristics of cattle manure will also be undertaken, which will provide information on efficient use of cattle manures in annual crops and perennial forages, while preserving soil and water quality. The study will focus on nitrogen release; however, information on phosphorus status of soils treated with various rates of cattle manure may also be obtained. Findings generated will be shared with the agriculture production sector.

## **VARROA MITE CONTROL WORKSHOP USING ORGANIC ACIDS**

**Proponents:** Manitoba Beekeepers Association and Manitoba Agriculture, Food and Rural Initiatives  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$2,960.00  
**Total Amount Expended:** \$2,960.00

### **Summary:**

A grant of \$2,960.00 was approved to host workshops in Brandon and Winnipeg to educate beekeepers about alternative forms of controlling Varroa mites in honey bee colonies. Information on formic and oxalic acid as effective Varroa mite treatments as opposed to or in rotation with the conventional treatments of Apistan or CheckMite+ was discussed. Using formic and oxalic acids as an alternative will assist in breaking the chain of over-using current products which will then reduce the development of treatment-resistant mites. As well, using alternative “organic” treatments poses a lower risk for residue build up in wax and honey. In 2002, Manitoba documented its first case of Apistan-resistant mites and since 2002, food safety concerns have also put the Canadian Beekeepers industry on alert that the acaricide, CheckMite+, poses a significant risk of contaminating wax and honey if used in consecutive treatments (i.e. spring and fall). For more information on the Manitoba Beekeepers Association visit their website at [www.manitobabee.org](http://www.manitobabee.org).

## **WOODLOTS FOR HEALTHY WATERSHEDS**

**Proponent:** Little Saskatchewan River Conservation District  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$11,000.00  
**Total Amount Expended:** \$11,000.00

### **Summary:**

A grant of \$11,000.00 was approved to implement a pilot project for the sustainable management of timber stands within the municipalities of Strathclair, Harrison, Clanwilliam and Park South. The intent of the project is to ensure that the woodlot program is environmentally and financially beneficial; harvesting practices are ecologically sound; and that the health of woodlots and watershed, including regeneration initiatives are improved. Under the program, interested landowners will be provided with information and technical assistance. As well, seminars/workshops/tours on sustainable woodlot management practices will be provided.

# SUSTAINABLE COMMUNITY DEVELOPMENT

## PROJECTS ALLOCATED FUNDING

### DURING THE 2005/06 FISCAL YEAR

Number of Projects: 14

Total Amount Expended: \$150,185.00

<u>Project Name</u>	<u>Total Expended</u>
Alternative Energy Array (AEA)	\$ 5,000.00
Building Farm Community Resilience	\$10,000.00
Croatian Community Centre Greening Project	\$ 3,000.00
Gladstone Community Centre Green Roof	\$50,000.00
Green Corridor, Phase I	\$15,000.00
Green Space Outdoor Classroom	\$ 5,000.00
Implementing the Spence Green Plan	\$14,000.00
Livestock Facilitation Community Consultation (LFCC) Program	\$ 4,000.00
Maybank's 50 <sup>th</sup> Anniversary Beautification	\$ 800.00
Morris School Outdoor Classroom Project	\$ 5,000.00
Organic Garden at St. Paul's Collegiate	\$ 1,500.00
Patterson Lake Green Acres Park	\$ 6,385.00
Rejuvenating Rural Landscapes and Communities	\$ 5,500.00
Southern Hardwood Development Project	\$25,000.00

# **SUSTAINABLE COMMUNITY DEVELOPMENT**

## **DETAILED LISTING OF PROJECTS ALLOCATED**

### **FUNDING DURING THE 2005/06 FISCAL YEAR**

#### **ALTERNATIVE ENERGY ARRAY (AEA)**

**Proponent:** Vincent Massey Collegiate  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$5,000.00  
**Total Amount Expended:** \$5,000.00

#### **Summary:**

A grant of \$5,000.00 was approved to demonstrate that non-polluting, environmentally sustainable energy can be integrated into the power grid of an existing building (the school) through the use of an Alternative Energy Array (AEA). Initially, wind speed will be monitored and measured using a weather station. Once sufficient data has been obtained, an Alternative Energy Array (AEA) will be installed that will consist of a small scale wind turbine and an array of photovoltaic cells which will be used to power overhead projectors, computers, lights, etc. Data obtained from the AEA will be posted on the school website. To showcase the AEA, an open house will be held to demonstrate the viability of using alternative energy in a real practical way.

#### **BUILDING FARM COMMUNITY RESILIENCE**

**Proponent:** University of Manitoba, Faculty of Environment, Earth and Resources  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$10,000.00  
**Total Amount Expended:** \$10,000.00

#### **Summary:**

A grant of \$10,000.00 was approved to utilize a three phase research approach to explore the role of "Holistic Management", as an innovative stewardship approach for promoting environmentally, socially, and economically sound decisions and actions on the farm. Phase one will explore the benefits and struggles that Holistic Management practitioners have experienced with this management approach. Farms that have used Holistic Management as a tool for planned grazing will be approached and interviewed. It is proposed that through transect walks with landowners observations will be made to characterize the intensity, timing, and duration of livestock grazing. Observed changes in the environment, impacts of rotational grazing on plant species composition and diversity, as well as, environmental and management factors will be recorded and assessed. In Phase two, Holistic Management practitioners in Manitoba will be surveyed. Phase three involves interviews with focus groups.

## **CROATIAN COMMUNITY CENTRE GREENING PROJECT**

**Proponent:** Croatian Community Centre  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$3,000.00  
**Total Amount Expended:** \$3,000.00

### **Summary:**

A grant of \$3,000.00 was approved to increase the Croatian community's awareness on the importance of sustainable development by creating a sheltered trail system and garden areas. The garden areas will be constructed with small patios for seating and will consist of planters containing annuals, prairie grasses, shrubs and perennials. A winding trail system throughout the gardens will be established and mature trees planted. The gardens are intended to provide a meeting place for community members.

## **GLADSTONE COMMUNITY CENTRE GREEN ROOF**

**Proponent:** Town of Gladstone  
**Date Approved:** March 21, 2006  
**Total Amount Approved:** \$50,000.00  
**Total Amount Expended:** \$50,000.00

### **Summary:**

A grant of \$50,000.00 was approved to install a 10,000 square foot accessible, sustainable green roof for Gladstone's new community complex that will meet LEED Silver certification rating and C-2000 standard. The green roof will integrate all aspects of the building's sustainable design ranging from reduction of urban air and heat pollution to energy and water conservation and pollution prevention. Rain water will be collected in basement storage tanks for use in the irrigation system and once established, the vegetation consisting of prairie plants and grasses, shrubs and trees will help to reduce the "Urban Heat Island" effect by absorbing the sun's rays through photosynthesis, as well it will help to improve urban air quality by absorbing carbon dioxide, airborne particulates and other air pollutants. Also, the roof is being designed to "sweat" which will generate evaporative cooling and eliminate the need for conventional cooling. A weather station will be installed to measure and record temperature, rainfall and wind speed to determine the variability of rain water collected and used. Also, plant health, weed infiltration, soil chemistry and physical characteristics will be regularly monitored. For more information on this new facility, visit the Town of Gladstone website at [www.town.gladstone.mb.ca](http://www.town.gladstone.mb.ca).



## **GREEN CORRIDOR, PHASE I**

**Proponent:** Fort Whyte Centre  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$15,000.00  
**Total Amount Expended:** \$15,000.00

### **Summary:**

As part of the Green Corridor Master Plan, it is intended that the green corridor will link the Assiniboine Forest and Park, Trans Canada Trail, Whyte Ridge and in the future Waverley West and the Red River through Fort Whyte Centre's property. A grant of \$15,000.00 was approved to construct the first portion of a three-kilometre trail as part of its green corridor through Fort Whyte's Millennium Aspen Forest with interpretive signage and landscaping for the Carbon Bluff interpretive hills and rest stop. The green corridor will be used as an interpretive tool focusing on sustainable transportation; building upon the success of the centre's 'Zero Emission = Free Admission' program that encourages non-polluting transportation choices; reducing carbon dioxide emissions through promotion of the trail network; and encouraging "green" commuting and recreational choices such as electric shuttle carts, walking, snowshoeing and bicycling. For more information on Fort Whyte Centre, visit their website at [www.fortwhyte.org](http://www.fortwhyte.org).

## **GREEN SPACE OUTDOOR CLASSROOM**

**Proponent:** Dr. George Johnson Middle School  
**Date Approved:** December 21, 2005  
**Total Amount Approved:** \$5,000.00  
**Total Amount Expended:** \$5,000.00

### **Summary:**

A grant of \$5,000.00 was approved to rehabilitate a concrete area into a green space within the school grounds by creating an outdoor classroom as an alternate educational setting, community planter and outdoor fitness circuit. The outdoor classroom will consist of an indoor/outdoor viewing area, pathway, sod area, circular seating, weather station, sun dial podium and interpretive signage. Students will participate in many aspects of this initiative, such as planting seeds and harvesting produce grown for the local food bank and providing for the long-term maintenance of the green space in partnership with community residents. It is anticipated that the community will obtain a greater appreciation of Manitoba's native environment by learning and observing native flora and fauna. As well, it will provide an opportunity for students to partner with local garden clubs and area residents in caring for the environment. This three-phase project was supported by a legacy from the 2006 Western Premiers' Conference held in Gimli.

## **IMPLEMENTING THE SPENCE GREEN PLAN**

**Proponent:** Spence Neighbourhood Association Inc.  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$14,000.00  
**Total Amount Expended:** \$14,000.00

### **Summary:**

The Spence Neighbourhood is an inner-city, low income, culturally diverse community within the City of Winnipeg, which has the lowest amount of green space per capita. The five-year green plan was presented to the City of Winnipeg in the fall of 2005. A grant of \$14,000.00 was approved to implement phase two of the Association's five-year green plan. Phase two includes developing agreements with the City of Winnipeg to retain some vacant lots that would normally be used for housing developments and create community gardens, green spaces, children's parks and walkways. To help improve the community's image, existing gardens will be enhanced and maintained and new community gardens created. The community will be consulted on designing and creating a new natural welcoming green space and an Aboriginal cultural garden with traditional plantings. Also, during phase 2, a community planning process for development of Sherbrook Park and community greenhouse will be initiated.

## **LIVESTOCK FACILITATION COMMUNITY CONSULTATION (LFCC) PROGRAM**

**Proponent:** Mediation Services  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$4,000.00  
**Total Amount Expended:** \$4,000.00

### **Summary:**

A grant of \$4,000.00 was approved to assist in conducting a two-year initiative entitled, "Livestock Facilitation Community Consultation (LFCC) Program". The program is intended to enable municipalities and producers to conduct a facilitated community consultation process for any proposed livestock application in their area. It is proposed that the program will be of benefit to Manitoba communities, as many municipal councils are finding decision-making on livestock applications overwhelming and difficult as they attempt to address their communities' social, economic and environmental issues and objectives. The LFCC process includes a review and approval process whereby municipalities request program funding; the program administrator ensures the general eligibility criteria are met; the program administrator confirms funding in writing and upon receipt of program approval; the host municipality retains a professional facilitator of their choice from a roster of pre-qualified facilitators. Upon completion of the LFCC process, the host municipality may claim for reimbursement of eligible costs. The results of a pilot project, through participant evaluations, indicated that the LFCC process helped participants learn factual information about the proponent and the proposed livestock operation; that as a result of the process, participants had improved their understanding of the local and provincial rules and regulations of livestock applications; and that they would recommend the LFCC process for other major livestock proposals.

## **MAYBANK'S 50<sup>TH</sup> ANNIVERSARY BEAUTIFICATION**

**Proponent:** Ralph Maybank School  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$800.00  
**Total Amount Expended:** \$800.00

### **Summary:**

A grant of \$800.00 was approved to educate students on sustainability issues, as well as involve students in various hands-on activities to improve and beautify the school grounds. Students will plan and plant an area to create a sustainable garden and once available, composted plant material from the community composter will be used in the gardens. Students will also be involved in creating memory paving blocks using cement and reclaimed tile pieces. The school will consult with youth justice organizations to involve at risk youth, present and past students in community garden projects to reduce future vandalism by instilling pride in their accomplishments and the community. To complete the transformation, Pembina Trails School Division will paint the front of the school and install signage under the direction of youth and students.

## **MORRIS SCHOOL OUTDOOR CLASSROOM PROJECT**

**Proponent:** Morris School  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$5,000.00  
**Total Amount Expended:** \$5,000.00

### **Summary:**

A grant of \$5,000.00 was approved for the creation of an outdoor classroom to increase environmental awareness and education and instill learning in an outdoor learning environment. . The green space will consist of a seating area with planters of prairie grasses, perennial, herb and vegetable gardens to attract butterflies and birds. A trail system will be created and trees planted for a shelterbelt. The outdoor classroom will also include a weather station, human sundial station and compass rose patio. Students will participate by conducting research on plants species, planting gardens and trees, monitoring plants and discussing results, as well as collecting daily weather data. The school's leadership team, K-4 staff and students will share in the maintenance of the outdoor classroom.

## **ORGANIC GARDEN AT ST. PAUL'S COLLEGIATE**

**Proponent:** St. Paul's Collegiate, Elie, Manitoba  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$1,500.00  
**Total Amount Expended:** \$1,500.00

### **Summary:**

A grant of \$1,500.00 was approved to create an outdoor classroom setting and redevelop an overgrown area at the back of the schoolyard into an organic garden. The newly created organic garden will be used as a resource to teach the students about healthier food choices and sustainability. The produce will be harvested for sale to the school cafeteria and home economics department to generate revenue and ensure the garden's sustainability. Students, teachers, parents and community members will be involved with creating and maintaining the garden in partnership with a local organic farmer, who will provide organic gardening expertise.

## **PATTERSON LAKE GREEN ACRES PARK**

**Proponent:** Rural Municipality of Rosburn  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$6,385.00  
**Total Amount Expended:** \$6,385.00

### **Summary:**

A grant of \$6,385.00 was approved to convert four acres of marginal agricultural land around Patterson Lake into a park-like setting. The natural environment and ecosystem will be enhanced by creating a green space with a well-treed parcel of land. It is also proposed that the area will be further developed with a rest stop and day camp for travelers and sports fishers. In partnership with the Fish and Lake Improvement Program for the Parkland Region and Manitoba Water Stewardship, Fisheries Branch, the municipality has initiated development of the area by stocking the lake with brown and lake trout and installing an aeration system. Overnight camping will be restricted in accordance with the *Resource Tourism Operators Act*, proclaimed March 1, 2004 and Campground Regulation (MR 89/88) under *The Environment Act*.

## **REJUVENATING RURAL LANDSCAPES AND COMMUNITIES**

**Proponents:** Harvest Moon Society and University of Manitoba  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$5,500.00  
**Total Amount Expended:** \$5,500.00

### **Summary:**

A grant of \$5,500.00 was approved to develop an educational, community-based resource guide in a website format highlighting rural rejuvenation projects in the town of Clearwater and the surrounding area. The website will provide a map of the projects, project information and community contacts, and will be interactive allowing members of other rural communities to post their own rural success stories. As a pilot project, it will serve as a model for similar initiatives to be undertaken in other regions of the province. The intent of the project is that Manitoba's rural communities will become revitalized and rejuvenated through a province-wide network of accessible community-based knowledge and resources.

## **SOUTHERN HARDWOOD DEVELOPMENT PROJECT**

**Proponent:** First Nation Forestry Limited Partnership  
**Date Approved:** December 21, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

### **Summary:**

A grant of \$25,000.00 was approved to facilitate the establishment of a forest stewardship management company that will manage the forest land base in the Interlake and southeast regions of Manitoba. First Nation Forestry Limited Partnership (FNFLP) will consult and secure partnerships with up to 14 First Nation communities to form the foundation of a business venture to establish a not-for-profit forest stewardship company, that is at minimum 50% First Nations owned. Once established, it is proposed that the forest stewardship management company will work in partnership with an established oriented strand board industry partner. Industry negotiations and discussions, meetings, and ongoing liaison with local communities will be undertaken to ensure sustainable social, environmental, economic benefits and traditional values for natural resource management issues are identified, addressed and implemented as part of the overall forest stewardship management component. The proposed business and stewardship management companies are intended to provide participating First Nations communities a new forest management model that respects social and environmental values, while providing a sustainable business opportunity, which includes training and employment.

# UNDERSTANDING OUR ENVIRONMENT

## PROJECTS ALLOCATED FUNDING

### DURING THE 2005/06 FISCAL YEAR

Number of Projects: 23

Total Amount Expended: \$341,100.00

<u>Project Name</u>	<u>Total Expended</u>
Advanced Placement Environmental Science Project	\$10,000.00
Assessment of Urban Prairie Restorations	\$20,000.00
Building Green Education Project	\$ 9,300.00
Controls on Tallgrass Prairie Diversity	\$17,500.00
Eastern Manitoba Woodland Caribou Research and Management	\$25,000.00
Integrating Aboriginal People in Resource Management	\$ 5,000.00
Invasive Aquatic and Wetland Plants of Manitoba, Phase I	\$ 6,500.00
Livestock Impact on Crown Forested Lands	\$10,000.00
Mandatory Trapper Education Program	\$25,000.00
Manitoba IBA Volunteers Sharing Ideas	\$ 3,000.00
Northern Fisheries Traditional Knowledge Study	\$25,000.00
Rotary Classroom & Facility Enhancement Project	\$ 2,000.00
Salt Contaminated Soil Phytoremediation	\$30,000.00
Second Printing and Distribution of Biodiversity Perspectives, Manitoba Edition	\$10,000.00

<b><u>Project Name</u></b>	<b><u>Total Expended</u></b>
Striped Skunk Population Dynamics	\$23,600.00
Take Pride Winnipeg! Environmental Education	\$5,000.00
Temperature-moisture effect on C, N, and P mineralization	\$16,500.00
The Cottager's Green Guide	\$10,000.00
Using Enduring Features for Protected Areas Planning, Year Two	\$13,300.00
Utility of Science for Sustainability	\$20,500.00
Water Efficiency Tools for Manitoba Municipalities	\$20,000.00
Web Resources for GHG Reduction	\$15,000.00
Wetlands Learning Centre of Excellence	\$18,900.00

**UNDERSTANDING OUR ENVIRONMENT**  
**DETAILED LISTING OF PROJECTS ALLOCATED**  
**FUNDING DURING THE 2005/06 FISCAL YEAR**

**ADVANCED PLACEMENT ENVIRONMENTAL SCIENCE PROJECT**

<b>Proponent:</b>	Grant Park High School
<b>Date Approved:</b>	September 30, 2005
<b>Total Amount Approved:</b>	\$10,000.00
<b>Total Amount Expended:</b>	\$10,000.00

**Summary:**

A grant of \$10,000.00 was approved to implement an "Advanced Placement Environmental Science" program that will enable students to apply knowledge of chemistry and biology, as well as principles of experimental science to the study of the environment. The advanced course for high school students is intended to increase students' awareness of the science behind environmental issues. Students will participate in various course and field work activities, such as water quality analyses of local streams, rivers, holding ponds, marshes and lakes; soil analysis and profiling; collecting environmental data in accordance with protocols, and measuring weather data using Davis weather stations. The school has established a self-contained simulated freshwater pond ecosystem to provide year-round sampling and analysis which will assist students to document changes in measurements over time. Students will publish information on their project activities on the school's website, newsletter and on a bulletin board for display in the school.



## **ASSESSMENT OF URBAN PRAIRIE RESTORATIONS**

**Proponent:** University of Manitoba, Faculty of Environment, Earth and Resources  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$20,000.00  
**Total Amount Expended:** \$20,000.00

### **Summary:**

A grant of \$20,000.00 was approved to conduct a study that will characterize the vegetation and wildlife of urban prairie restorations in and around Winnipeg. The study will also determine the biophysical and human factors that have resulted in their current status. Manitobans living in urban environments have acted to reclaim lost habitat and have undertaken prairie restoration and rehabilitation projects. Although restoration of prairie habitat has been widely recognized as a worthwhile activity, virtually little is known about the extent and condition of tall grass prairie restoration in urban settings. It is proposed that 30 restoration sites comprised of private, corporate and public land will be selected in the urban and suburban areas of Winnipeg, with four of the selected sites being located at schools. Both high quality and low quality restorations will be examined to determine the factors that contribute to successful restoration. An ecological evaluation will be conducted, including species composition, density, and diversity; butterfly and avifauna use of restoration sites; number and diversity of insects such as dragonflies; and bird surveys. Along with the ecological evaluation, landowners and managers of these sites will be interviewed to determine information on vegetation grown, wildlife activity and management practices utilized (such as pesticide and fertilizer use, as well as watering and mowing practices). Two open public forums, at an urban and suburban site, will be conducted.

## **BUILDING GREEN EDUCATION PROJECT**

**Proponent:** University of Manitoba, Department of City Planning  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$9,300.00  
**Total Amount Expended:** \$9,300.00

### **Summary:**

A grant of \$9,300.00 was approved to research and produce a series of articles on green buildings and urban community planning for the general public. The intent is to build capacity and understanding of the various aspects of green buildings that support areas of climate change, energy and water efficiency, waste reduction and sustainability. The information produced is intended to raise awareness of green buildings, and what has been done in Manitoba and elsewhere. The fact-based articles will focus on information, such as: green buildings and sustainable planning; pros and cons of building and planning green; checklist for home and commercial builders; green buildings in Manitoba; leading practices and projects; rating systems for buildings and products; alternative development standards; and economics of commercial and residential green buildings. Information regarding this project can be accessed through the website, [www.arch.umanitoba.ca/buildinggreen](http://www.arch.umanitoba.ca/buildinggreen).

## **CONTROLS ON TALLGRASS PRAIRIE DIVERSITY**

**Proponent:** University of Manitoba, Department of Botany  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$17,500.00  
**Total Amount Expended:** \$17,500.00

### **Summary:**

A grant of \$17,500.00 was approved to conduct research to determine how interactions between plant and soil communities affect biodiversity and to develop methods to use these interactions in tallgrass prairie restoration efforts. Research will determine if soil pathogens are plant specific preferentially infecting Big Bluegrass. Big Bluegrass exists in large patches on the tallgrass prairie preserve within Oak Hammock Marsh and although it is the dominant species in terms of cover and is competitively superior to other plants, past research has shown that soil from Big Bluestem patches reduces its growth and increases its chance that it will become infected by a soil pathogen. In undertaking this project, a variety of tallgrass prairie species will be grown in soil collected beneath other plant species and growth and infection rates will be assessed to determine if pathogens act as an agent promoting plant diversity in tallgrass communities.

## **EASTERN MANITOBA WOODLAND CARIBOU RESEARCH AND MANAGEMENT**

**Proponent:** Manitoba Model Forest Inc.  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

### **Summary:**

A grant of \$25,000.00 was approved to maintain woodland caribou populations east of Lake Winnipeg at current population numbers within their contemporary ranges, recognizing the dynamics of forest succession and habitat changes that may occur through time. Proceeding with its sixth year of research, management and conservation activities, the 2005/06 project activities will focus on filling data gaps on the winter range of the Owl Lake herd. The Owl Lake Boreal Woodland Caribou herd strategy provides guidance for designing experimental forest harvest prescriptions on the winter range of this herd. To assess the success of these prescriptions, inventory and monitoring surveys for both pre and post-harvest will be conducted. Several monitoring, inventory and survey activities have also been planned to address the most urgent data gaps. Data collected will assist in assessing proposals for forest harvest operations within the winter range of this herd. Committee workshops and planning sessions will be held to consider and evaluate the data generated through inventory, survey and monitoring activities in eastern Manitoba, to modify committee-generated strategies as required, and to develop both site-level and landscape-based management applications for the Owl Lake woodland caribou range. As well, education, outreach and extension activities are planned. Visit the Manitoba Model Forest Inc. website at [www.manitobamodelforest.net](http://www.manitobamodelforest.net).

## **INTEGRATING ABORIGINAL PEOPLE IN RESOURCE MANAGEMENT**

**Proponent:** Manitoba Conservation, Aboriginal Relations Branch  
**Date Approved:** December 23, 2004  
**Total Amount Approved:** \$5,000.00  
**Total Amount Expended:** \$5,000.00

### **Summary:**

A grant of \$5,000.00 was approved to host the third bi-annual, inter-jurisdictional conference at the University of Manitoba from June 21 to 24, 2005. The main objective of the Conference was to provide a forum for natural resource managers and Aboriginal partners to share their best practices based on past successes and challenges. Since resource management affects us all, continuous planning and discussions need to take place in order that each other's opinions and values, particularly as they relate to blending traditional knowledge and new science information can be shared. The Conference achieved its expected outcomes in that delegates shared best practices to integrate Aboriginal people in resource management, explored how resource managers and Aboriginal people, communities and Nations can develop mutually empowering relationships, and considered ways to address some of the challenges raised by jurisdictional issues in resource management. One hundred and ninety-five people from across Canada participated in this Relationship Building Conference.

## **INVASIVE AQUATIC AND WETLAND PLANTS OF MANITOBA, PHASE I**

**Proponent:** Manitoba Purple Loosestrife Project  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$6,500.00  
**Total Amount Expended:** \$6,500.00

### **Summary:**

A grant of \$6,500.00 was approved to undertake a two-year project that will develop and implement an on-line educational outreach program on invasive aquatic and wetland plants, such as purple loosestrife and flowering rush, that are threatening Manitoba ecosystems. Introduced invasive species have a significant impact on the economy, ecosystems, native species and human health. Plants are important to aquatic ecosystems – providing food, shelter and habitat for fish and wildlife, contributing to biological diversity for nutrient and toxic waste removal and enhancing the aesthetic appeal of the aquatic environment. Most native species plants are beneficial, with sufficient natural controls to limit growth; however, a few aggressive species lack natural controls and may develop into large populations that overtake native plants and adversely impact aquatic systems. These species require ongoing management efforts to minimize environmental and economic impacts. Early identification and control of invasive plants can assist in reducing impacts.

## **LIVESTOCK IMPACT ON CROWN FORESTED LANDS**

**Proponent:** University of Winnipeg, Department of Biology and Centre for Interdisciplinary Forest Research (C-FIR)  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$10,000.00  
**Total Amount Expended:** \$10,000.00

### **Summary:**

A grant of \$10,000.00 was approved to conduct a three-year research project within the Louisiana Pacific Forest Management Area. The study area is located in a transition zone between the southern boreal forest and aspen parkland. An increased demand for aspen tree fibre has resulted in the forested rangeland and agriculture crown lease lands being harvested. Observations indicate that there is inadequate aspen regeneration and occurrences of health problems in seedlings and advanced regeneration when large areas of harvested land are grazed by cattle immediately after harvesting. The research results are expected to contribute to the development of sound agriculture/forestry practices and contribute to sustainable environmental management of multiple resources.

## **MANDATORY TRAPPER EDUCATION PROGRAM**

**Proponent:** Manitoba Trapper's Association  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

### **Summary:**

A grant of \$25,000.00 was approved to update the Trapper Education Program by amending the Manitoba Trapper Education manual and developing an instructor training and certification course. Trapping is a traditional activity and provides a source of income for northern and rural Manitoba residents, as well as providing food for families and/or individuals. Since 1991, it is mandatory for individuals to take the Trapper Education Program before qualifying to receive their first license. The education program teaches personal safety and survival, as well as respect for animals, environment and people. The manual will be revised to satisfy the requirements of provincial trapping regulations and International Humane Trap standards, as well as to include information on Humane Trapping methods, furbearer biology, ethics and responsibilities in the field, and a new section on Aboriginal History and Traditional Ecological Knowledge. The training program will certify and train new and existing instructors to deliver course materials at a community-based level.

## **MANITOBA IBA VOLUNTEERS SHARING IDEAS**

**Proponent:** Manitoba Important Bird Areas (IBA) Program  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$3,000.00  
**Total Amount Expended:** \$3,000.00

### **Summary:**

A grant of \$3,000.00 was approved to host a one-day workshop at Oak Hammock Marsh to promote and enhance volunteer-based bird conservation in Manitoba. Volunteer-led bird conservation initiatives protect threatened bird habitats and ecosystems, and enhance management activities. The Manitoba Important Bird Areas (IBA) Program, in conjunction with the Manitoba Naturalists Society, will host this workshop with the intent that IBA working groups will share conservation ideas, experiences and success stories to help guide and develop new conservation initiatives. Visit the Manitoba Important Bird Areas website at [www.manitobanature.ca/birder/iba\\_old.pdf](http://www.manitobanature.ca/birder/iba_old.pdf)

## **NORTHERN FISHERIES TRADITIONAL KNOWLEDGE STUDY**

**Proponent:** Swampy Cree Tribal Council  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

### **Summary:**

A grant of \$25,000.00 was approved to conduct a study that will preserve Traditional Ecological Knowledge of northern commercial fishers of the nine member communities of the Swampy Cree Tribal Council. The waters and commercial fisheries aspect of "traditional lands" will be the focus of the study. Round-table discussions with Elders and youth from each of the nine communities will be held to document information regarding high value fishing grounds used by each community. Community fishing grounds will be mapped and baseline data will be collected for use in developing a comprehensive feasibility study on northern fisheries that will enhance the long term sustainability of fisheries. To preserve the Elders' knowledge, a comprehensive manual will be produced and provided to schools and commercial fishers in the nine member communities. The manual is expected to assist in development of a long-term sustainable northern commercial fisheries policy and plan.

## **ROTARY CLASSROOM & FACILITY ENHANCEMENT**

**Proponent:** Living Prairie Museum  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$2,000.00  
**Total Amount Expended:** \$2,000.00

### **Summary:**

A grant of \$2,000.00 was approved to update exhibits, improve access to the Interpretive Centre and create a four-season, multi-use environmental education classroom. The classroom will be accessible to the public, have computers with internet capabilities, and provide a secure location for the Museum's specialized library and herbarium samples. In undertaking this initiative, new programming for environmental education will be developed. The creation of new public accessible space will provide program participants with an enhanced prairie experience. For more information on the Living Prairie Museum, visit the City of Winnipeg, Public Works website at [www.winnipeg.ca/publicworks/naturalist/livingprairie](http://www.winnipeg.ca/publicworks/naturalist/livingprairie).

## **SALT CONTAMINATED SOIL PHYTOREMEDIATION**

**Proponent:** ERIN Consulting Ltd.  
**Date Approved:** October 11, 2005  
**Total Amount Approved:** \$30,000.00  
**Total Amount Expended:** \$30,000.00

### **Summary:**

A grant of \$30,000.00 was approved to conduct a two-year research project as follow-up to laboratory work completed at the University of Manitoba. The preliminary work yielded useful results and identified an opportunity to move to the next phase of field testing and application of the experimental technology. The follow-up research will be carried out at two contaminated sites around Lulu Lake in Turtle Mountain Provincial Park. The research goals include: determining if plants showing salt hyper-accumulation capabilities can be successfully propagated and grown in situ at the contaminated site; understanding the potential amount and speed of bio-accumulation in various halophytic species at the contaminated site compared to controlled conditions in the lab; and developing the most effective and efficient processes and techniques for planting, growing and harvesting the halophytic plant species. The University of Manitoba, Manitoba Industry, Economic Development and Mines, Manitoba Conservation, Turtle Mountain Provincial Park, Anadarko Canada Corporation and Prairie Mountain Nursery are participating in this project.

## **SECOND PRINTING AND DISTRIBUTION OF BIODIVERSITY PERSPECTIVES, MANITOBA EDITION**

**Proponent:** Manitoba Conservation and Keewatin Publications  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$10,000.00  
**Total Amount Expended:** \$10,000.00

### **Summary:**

A grant of \$10,000.00 was approved to update, reprint, and distribute 25,000 copies of the popular publication: Biodiversity Perspectives, Manitoba Edition. The updated publication will be placed on Keewatin Publication's website. To view this publication, visit the website at [www.keewatin.ca/KeeBioPersp.html](http://www.keewatin.ca/KeeBioPersp.html).

## **STRIPED SKUNK POPULATION DYNAMICS**

**Proponent:** University of Saskatchewan  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$23,600.00  
**Total Amount Expended:** \$23,600.00

### **Summary:**

A grant of \$23,600.00 was approved to conduct research to determine skunk population dynamics based on nutrient intake composition. A study site southeast of Minnedosa, Manitoba has been selected and will be used for field research to understand the underlying mechanisms that influence striped skunk populations. A waste management facility, Evergreen Waste, situated near the study site will also be evaluated for impact, by comparing pre and post construction data. Skunks are considered unwanted nuisances, can carry rabies and little is known as to why the numbers of skunks vary from year to year. Identification of preferred food sources could be used to manage, predict and possibly prevent adverse conditions from developing.

## **TAKE PRIDE WINNIPEG! ENVIRONMENTAL EDUCATION**

**Proponent:** Take Pride Winnipeg!  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$5,000.00  
**Total Amount Expended:** \$5,000.00

### **Summary:**

A grant of \$5,000.00 was approved to continue Take Pride Winnipeg's Environmental Education programming for students from Kindergarten to Grade 12. Students learn about the environment, litter, graffiti control and taking pride in their city through four program areas: Mentor Program, Teens Pro Winnipeg, Take Pride in Reading and the Pride Club. For more information on Take Pride Winnipeg, visit their website at [www.takepride.mb.ca](http://www.takepride.mb.ca).

## **TEMPERATURE-MOISTURE EFFECT ON C, N AND P MINERALIZATION**

**Proponent:** University of Manitoba, Department of Soil Science  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$16,500.00  
**Total Amount Expended:** \$16,500.00

### **Summary:**

A grant of \$16,500.00 was approved to conduct a study over three years to determine the rate of manure nutrient mineralization, which will assist in determining manure nutrient availability to plants and the appropriate rate of manure application to soil. Nutrient mineralization is a relatively slow microbial process that is affected by factors such as amendment composition, soil type, temperature, pH, aeration and moisture. The study will determine the potential to mineralize carbon, nitrogen and phosphorus fractions of different organic amendments.

## **THE COTTAGER'S GREEN GUIDE**

**Proponent:** Canadian Parks and Wilderness Society, Manitoba Chapter and  
Manitoba Consumer's Association  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$10,000.00  
**Total Amount Expended:** \$10,000.00

### **Summary:**

A grant of \$10,000.00 was approved to produce an educational resource entitled, "The Cottager's Green Guide". The Guide will identify various environmental impacts as a result of development and cottager owner activities, such as removing vegetation from waterfront properties, choice of building materials or construction methods, waste disposal options, and use of chemical fertilizers and pesticides. The Guide will also offer an overview of environmentally friendly options, along with how to obtain products and services. The guide will be free of charge and will be available in print and electronic format on the CPAWS website at [www.cpaws.org](http://www.cpaws.org).



## **USING ENDURING FEATURES FOR PROTECTED AREAS PLANNING, YEAR TWO**

**Proponent:** University of Manitoba, Department of Botany  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$13,300.00  
**Total Amount Expended:** \$13,300.00

### **Summary:**

A grant of \$13,300.00 was approved to conduct the second year of an empirical research study within Chitek Park Reserve to determine the effectiveness of enduring features analysis for park planning. The research will test whether enduring features analysis, based upon soil and landform characteristics, is adequate for protecting biological communities. A survey on the comparison of plant communities found in different enduring features will be undertaken, as well as a survey to determine enduring features that are the same but located in different natural regions will be completed. Within each sample site, soil analysis will be undertaken to account for any error on the border location between enduring features and to ensure that the enduring features noted for the area actually corresponds to what exists there.

## **UTILITY OF SCIENCE FOR SUSTAINABILITY**

**Proponent:** University of Manitoba CRYSTAL (Centre for Research in Youth, Science Teaching and Learning)  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$20,500.00  
**Total Amount Expended:** \$20,500.00

### **Summary:**

A grant of \$20,500.00 was approved to conduct research that focuses on increasing resiliency and optimizing success in science and mathematics. Through collaboration with Manitoba Education, Citizenship and Youth (MEC&Y), the project will focus on development of curriculum and resources for middle and senior years' teachers that are intended to empower students to become strategic thinkers, decision makers and initiate actions that create a more sustainable world.

## **WATER EFFICIENCY TOOLS FOR MANITOBA MUNICIPALITIES**

**Proponent:** University of Manitoba, Department of City Planning  
**Date Approved:** November 30, 2005  
**Total Amount Approved:** \$20,000.00  
**Total Amount Expended:** \$20,000.00

### **Summary:**

A grant of \$20,000.00 was approved to enable Manitoba municipalities to implement water efficiency programs in their communities, using a tool that employs proven community-based social marketing techniques. Through direct interaction with the municipality, the project will provide tools to help modify attitudes and behaviours. Municipalities will then be able to promote water efficiency using a strategy that has been specifically developed for their community.

## **WEB RESOURCES FOR GHG REDUCTION**

**Proponent:** Resource Conservation Manitoba  
**Date Approved:** December 21, 2005  
**Total Amount Approved:** \$15,000.00  
**Total Amount Expended:** \$15,000.00

### **Summary:**

A grant of \$15,000.00 was approved to develop and produce interactive web-based trip reduction and Transportation Demand Management (TDM) resources for Manitoba workplaces. The transportation sector accounts for more than 30% of greenhouse gas (GHG) emissions. Transportation Demand Management aims to increase transportation efficiencies and to reduce greenhouse gas (GHG) emissions by encouraging alternatives to the use of single-occupant vehicles for commuter travel. For more information on Resource Conservation Manitoba, visit their website at [www.resourceconservation.mb.ca](http://www.resourceconservation.mb.ca).

## **WETLANDS LEARNING CENTRE OF EXCELLENCE**

**Proponent:** Kelburn Farm  
**Date Approved:** February 23, 2006  
**Total Amount Approved:** \$18,900.00  
**Total Amount Expended:** \$18,900.00

### **Summary:**

Kelburn Farm is an agricultural research, demonstration and educational centre, owned by James Richardson International. A grant of \$18,900.00 was approved to restore a wetland and educate students, educators and the public about the importance of sustaining healthy wetlands in agricultural landscapes. Both an existing wetland and a rehabilitated wetland will be used to convey the message of protecting water quality in the Red River watershed. Education and awareness elements of the project will focus on sustainable agricultural practices and conservation of healthy wetlands and waterways. For more information on Kelburn Farm, visit their website at [www.kelburnfarm.jri.ca](http://www.kelburnfarm.jri.ca).

# WATER

## PROJECTS ALLOCATED FUNDING

### DURING THE 2005/06 FISCAL YEAR

Number of Projects: 8

Total Amount Expended: \$144,210.00

<u>Project Name</u>	<u>Total Expended</u>
Improving Water Quality in Lake Winnipeg through Netley-Libau Marsh	\$23,000.00
Livestock effects on farm pond water quality in south-central Manitoba, Year Two	\$32,000.00
Managing <i>Escherichia coli</i> in Gimli Beach Sand	\$24,610.00
Water Quality at Arctic Treeline	\$13,300.00
Water Quality in Lake Manitoba, Year Two	\$32,000.00
Water Quality on the East Side of Lake Winnipeg, Year Two	\$11,500.00
Whitemouth River Water Quality Monitoring	\$ 4,600.00
Winkler Aquifer Demonstration Shelterbelt	\$ 3,200.00

# WATER

## DETAILED LISTING OF PROJECTS ALLOCATED

### FUNDING DURING THE 2005/06 FISCAL YEAR

#### IMPROVING WATER QUALITY IN LAKE WINNIPEG THROUGH NETLEY-LIBAU MARSH

**Proponent:** University of Manitoba, Department of Biosystems Engineering  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$23,000.00  
**Total Amount Expended:** \$23,000.00

#### **Summary:**

A grant of \$23,000.00 was approved to conduct a four-year research study to examine how natural freshwater marshes can improve the quality of water flowing into Lake Winnipeg from a nutrient rich source such as the Red River. Goldeye Lake, a relatively small enclosed basin in the southwest corner of Netley-Libau Marsh, will be used as the study site to evaluate how the Marsh plant community can improve Red River water quality as it flows through this system. It is an area where the plant community and marsh basin is representative of the rest of the Marsh, but is relatively isolated from the main marsh. This study will assist in understanding how Netley-Libau Marsh can be used to potentially improve the quality of water flowing from the Red River into Lake Winnipeg, by retaining, removing and assimilating nutrients (i.e. Nitrogen and Phosphorus), suspended sediments, pathogens and contaminants.

#### LIVESTOCK EFFECTS ON FARM POND QUALITY IN SOUTH-CENTRAL MANITOBA, YEAR TWO

**Proponent:** University of Manitoba, Delta Marsh Field Station  
**Date Approved:** March 21, 2006  
**Total Amount Approved:** \$32,000.00  
**Total Amount Expended:** \$32,000.00

#### **Summary:**

A grant of \$32,000.00 was approved to conduct the second year of a study to determine the primary factors affecting rural water quality, including the nature of the surrounding landscape, the extent of agricultural activities, and in particular, the proximity and extent of livestock access. Previous studies, at sites on the Portage Plains, have shown that direct livestock access to ponds is correlated with increases in nutrients (nitrogen and phosphorus) and bacteria. The study will involve 100 farm ponds in an area of south-central Manitoba, including the Rural Municipalities of Cartier, Dufferin, Grey Macdonald, North Norfolk, Portage la Prairie, South Norfolk and Victoria.

## **MANAGING *ESCHERICHIA COLI* IN GIMLI BEACH SAND**

**Proponent:** Rural Municipality of Gimli  
**Date Approved:** October 8, 2004  
**Total Amount Approved:** \$24,610.00  
**Total Amount Expended:** \$24,610.00

### **Summary:**

A grant of \$24,610.00 was approved to study and make recommendations surrounding practical innovative solutions to either reduce *E. coli* populations in the wet beach sand at Gimli Beach or prevent their transfer to the nearby swimming area. The Municipality has contracted TetrES Consultants Inc. to conduct this study. Information on treatment options and costs will be gathered during spring of 2006 and a working document submitted to the R.M. of Gimli and the Healthy Beaches Program for comment. The finalized working document will then be placed on industry specific websites for comment and the document will then be edited to include the comments received during the review phase. The draft report, including a one-page summary suitable for community or media use, will be submitted to the R.M. of Gimli and the Healthy Beaches Program for final review. For more information on the R.M. of Gimli, visit their website at [www.rmgimli.com](http://www.rmgimli.com).

## **WATER QUALITY AT ARCTIC TREELINE**

**Proponent:** Churchill Northern Studies Centre  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$13,300.00  
**Total Amount Expended:** \$13,300.00

### **Summary:**

A grant of \$13,300.00 was approved to investigate the effects of climate change by monitoring a series of freshwater lakes and ponds across the northern tree line in the Churchill area from the Hudson Bay coast. Ecosystem responses from a changing climate are first seen in the arctic tree line transition zone. Therefore, differences in lakes and ponds across the transition zone, from northern boreal forest to arctic tundra will be monitored to provide temporal, as well as spatial and pond/lake comparisons. Annual temporal monitoring of these water bodies will assist in addressing knowledge gaps and identify key indicators of change. For information on Churchill Northern Studies Centre, visit their website at [www.churchillmb.net/~cnsc](http://www.churchillmb.net/~cnsc).

## **WATER QUALITY IN LAKE MANITOBA, YEAR TWO**

**Proponent:** University of Manitoba, Delta Marsh Field Station  
**Date Approved:** March 14, 2006  
**Total Amount Approved:** \$32,000.00  
**Total Amount Expended:** \$32,000.00

### **Summary:**

A grant of \$32,000.00 was approved to conduct the second year of a two-year research project to study water quality in Lake Manitoba, which is undergoing many of the same changes as Lake Winnipeg. The second year of the study includes completing the historical analysis of water quality trends, analysis of the remote sensing data and continuation of water sampling and analysis. This study is expected to provide important information for evaluating future residential and agricultural development in the vicinity of Lake Manitoba, and background information for evaluating the effects of proposed lake level management by the Province of Manitoba.

## **WATER QUALITY ON THE EAST SIDE OF LAKE WINNIPEG, YEAR TWO**

**Proponent:** Manitoba Model Forest Inc.  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$11,500.00  
**Total Amount Expended:** \$11,500.00

### **Summary:**

A grant of \$11,500.00 was approved to continue with two studies that will help to increase the knowledge base of several lakes, rivers and streams on the east side of Lake Winnipeg. The intent of this project is to build upon previous years activities including studying the ecology of boreal lakes, rivers and streams in terms of the influence of landscape features and disturbances on water quality; to improve the integration of aquatic resource management in forest management planning; to facilitate the establishment of a long-term aquatics monitoring program; and to involve First Nation youth in monitoring and management of aquatic resources.

## **WHITEMOUTH RIVER WATER QUALITY MONITORING**

**Proponent:** Whitemouth Reynolds Soil and Water Conservation Association  
**Date Approved:** July 8, 2005  
**Total Amount Approved:** \$4,600.00  
**Total Amount Expended:** \$4,600.00

### **Summary:**

A grant of \$4,600.00 was approved to conduct water quality monitoring of the Whitemouth River to establish baseline water quality indicators. The Whitemouth River runs through an agricultural area that has a large amount of livestock and field crop production. Six locations along the Whitemouth River will be sampled eleven times per year. Tests will include an analysis of nutrients, general chemistry and microbiological characteristics. The Whitemouth River empties into the Winnipeg River, which empties into Lake Winnipeg, therefore, maintaining the quality of the river will have a positive benefit on the lake.

## **WINKLER AQUIFER DEMONSTRATION SHELTERBELT**

**Proponent:** Winkler Aquifer Management Plan Advisory Board  
**Date Approved:** September 30, 2005  
**Total Amount Approved:** \$3,200.00  
**Total Amount Expended:** \$3,200.00

### **Summary:**

A grant of \$3,200.00 was approved to establish a shelterbelt to enhance the recharge of the Winkler Aquifer through the spring capture of snow melt water and demonstrate snow trapping and its impact on aquifer recharge. Studies indicate that an increase in yield of the aquifer by about one third can be achieved by enhancing natural aquifer recharge through snow trapping over the aquifer's primary recharge area. This area is the largest single source of recharge to the aquifer.

**SPECIAL INITIATIVES**  
**ALLOCATED FUNDING**  
**DURING THE 2005/06 FISCAL YEAR**

Number of Projects: 2  
Total Amount Expended: \$1,085,000.00

<u>Initiative</u>	<u>Total Expended</u>
Manitoba Product Stewardship Corporation School/Education Programs	\$585,000.00
Manitoba Tire Stewardship Board	\$500,000.00



**SPECIAL INITIATIVES**  
**DETAILS OF PROJECTS ALLOCATED**  
**FUNDING DURING THE 2005/06 FISCAL YEAR**

**MANITOBA PRODUCT STEWARDSHIP CORPORATION**  
**SCHOOL/EDUCATION PROGRAMS**

<b>Administered by:</b>	Manitoba Conservation, Pollution Prevention Branch
<b>Date Approved:</b>	January 31, 2006
<b>Total Amount Approved:</b>	\$585,000.00
<b>Total Amount Expended:</b>	\$585,000.00

Additional funding of \$585,000 was authorized for the Sustainable Development Innovations Fund, to continue delivery of established Manitoba Product Stewardship Corporation (MPSC) school and youth programs, including Student Action for Recycling (STAR), Student Action for Recycling (STAR) Plus and Environmental Speakers Bureau and related activities for fiscal year 2005/06.

A Memorandum of Understanding regarding funding support for the Delivery of these programs was signed by the Minister of Conservation and the Chair of the Manitoba Product Stewardship Corporation. Manitoba Conservation Pollution Prevention Branch participated as a partner in this initiative with MPSC who will organize, coordinate and deliver the activities associated with the School/Education Programs.

Following are brief descriptions of these programs.

**EDUCATION AND PROMOTION MATERIALS**

A component of the MPSC's mandate was to develop and deliver promotional and educational materials regarding waste reduction to schools and school age children. Since its establishment, MPSC has spent approximately \$1.0 million on production and delivery of these materials.

**STUDENT ACTION FOR RECYCLING (STAR) PROGRAM**

The STAR program was implemented by the MPSC in 1997/98. The program provides an honorarium of \$500.00 to each school registered for the program. Schools may use this to set up recycling programs, contract for recycling services, or use the funds for other environmental programs. The majority of the schools use the funds to support recycling activities. A previous survey indicated that 38% of the schools use the funding for contracting with private recyclers, 47% of the school recycling programs are managed by staff, 10% of the schools use municipal recycling services provided to schools and 5% use other services.

## **ENVIRONMENTAL SPEAKERS BUREAU**

The Environmental Speakers Bureau was established in 1998/1999 in partnership with Resource Conservation Manitoba (RCM). Funding support is provided to RCM who coordinates the guest speaker visits to classrooms to promote waste reduction and appropriate environmental practices.

RCM has reached thousands of students through in-person classroom presentations on recycling, composting, water, climate change, stewardship, and the ecological footprint concept. RCM's "Ready, Set, Recycle" kit for rural schools has reached thousands more in every part of the province.

## **STUDENT ACTION FOR RECYCLING (STAR) PLUS**

Star Plus was established in 1999/2000. The program provides financial support to all post secondary institutions on the basis of \$2.50 per full time student equivalent. Over 570 tonnes of recyclable materials are recovered through the university/college programs.

## **MANITOBA TIRE STEWARDSHIP BOARD**

<b>Administered by:</b>	Manitoba Conservation, Pollution Prevention Branch
<b>Date Approved:</b>	March 21, 2006
<b>Total Amount Approved:</b>	\$500,000.00
<b>Total Amount Expended:</b>	\$500,000.00

Supplemental funding totaling \$500,000.00, (a grant of \$200,000.00 and a loan of \$300,000.00), from the Sustainable Development Innovations Fund, was approved to continue with the Tire Stewardship Program, including payments to tire recyclers, providing for a limited Off the Road (OTR) tire recycling program and related operational activities for fiscal year 2005/2006.

In 1992, the Manitoba Government established a tire levy of \$2.80 for every new tire intended for use on a licensed highway vehicle or trailer sold in Manitoba. The levy is collected from tire retailers or distributors and new vehicle dealers.

In 1995, A Tire Stewardship Regulation under *The Waste Reduction and Prevention (WRAP) Act* established the Tire Stewardship Board (TSB) as a statutory corporation to operate at arm's length from government. The Tire Stewardship Board's mandate was to recycle scrap tires, diverting them from the waste stream into useable products or material that can be sold and/or re-used. The majority of the payments made by the TSB are to two Manitoba-based recycling companies. Payments are based on established "credit amounts" per product produced. The TSB sets these credits based on the projected costs and revenues from the finished produce as well as the value added to Manitoba. The TSB has also supported research and development activities.

Initially, the stewardship program provided credits only for the recycling of car and light trucks. As a result, medium truck and off the road (OTR) tires were left in landfills. With a surplus account of over \$2 million in 2002, medium trucks and OTRs were included in the credit program as a pilot program. The inclusion of these tires in the program, without an accompanying revenue source, increased pressure on the program's financial resources.

For the past several years, funds raised through the levy are less than the credits paid to processors. This is mostly the result of funding the recycling of stockpiles of OTRs.

During the 2005/06 fiscal year, a new interim Board was directed to undertake a comprehensive review of the Tire Stewardship Program and the operations of the Tire Stewardship Board and to provide the Province with recommendations both for the long term (a sustainable model) and for the short term.

The interim Board recommended that the Tire Stewardship Program move to an extended producer responsibility model, similar to the existing successful industry-led model for oil recycling in the Province, managed by the Manitoba Association for Resource Recovery Corp. (MARRC).

To enhance Manitoba's tire stewardship program, a new Tire Stewardship Regulation under *The WRAP Act* was developed. This regulation will require the tire industry to develop a plan to manage all scrap tires in the province, on an environmentally and economically sustainable basis.

The Regulation underwent public consultation in spring 2006 and an industry working group was established to develop a plan for a new tire stewardship program. Following enactment of the Regulation, the plan will be submitted for approval to the Minister of Conservation. This plan will also be taken out for public consultation prior to approval.

**BROAD ALLOCATIONS  
ALLOCATED FUNDING  
DURING THE 2005/06 FISCAL YEAR**

Number of Broad Allocations: 9

Total Amount Expended: \$1,679,686.89

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<b><u>Project Name</u></b>	<b><u>Total Expended</u></b>
Environmental Youth Corps (EYC)	\$196,661.38
Manitoba Climate Change Action Fund	\$392,455.00
Manitoba Forestry Association Woodlot Program	\$200,000.00
Orphan Mine Site Assessment Program	\$ 75,000.00
Waste Reduction and Pollution Prevention (WRAPP) Fund	\$496,293.02
Bear Smart Program	\$ 49,777.49
Water Stewardship Initiative	\$269,500.00

# BROAD ALLOCATIONS

## DETAILED LISTING OF PROJECTS ALLOCATED

### FUNDING DURING THE 2005/06 FISCAL YEAR

#### ENVIRONMENTAL YOUTH CORPS

**Proponent:** Manitoba Conservation  
**Date Approved:** 2005/06 Treasury Board Estimates Review  
**Total Amount Approved:** \$200,000.00  
**Total Amount Expended:** \$196,661.38

#### **Summary:**

The Environmental Youth Corps (EYC) has 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. The EYC program has demonstrated the government's commitment of increasing the opportunities for young people to be involved in environment-related activities, and to further the commitment of environmental protection and education for youth.

Environmental projects eligible for funding to a maximum of \$5,000.00 include (but are not restricted 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.

#### EYC SUMMARY

<b>Total EYC 2005/06 Allocation</b>	<b>\$200,000.00</b>
Applications Processed	109
Applications Approved	84
Applications Declined	21
Applications Deferred	2
Applications Withdrawn	2
Number of Youth Involved	5,608
Total Amount of Grants Approved/Expended	\$164,380.39
Administration Costs (travel, printing, promotion, Coordinator's salary)	\$ 32,280.99
<b>Total Expended</b>	<b>\$196,661.38</b>

Brief descriptions of the eighty-four projects approved under the EYC program during the 2005/06 fiscal year are as follows:

## **RED RIVER REGION**

**Archwood School, Winnipeg,** received \$1,500.00 to involve 125 youth in a green space enhancement project. Youth will create a garden consisting of perennial flowers and shrubs.

**Arthur Day Middle School, Winnipeg,** received \$990.00 to involve 21 youth in a waste minimization project. Youth will clean and collect recyclable products and create educational videos addressing environmental issues such as recycling and reducing the electricity and water used in schools.

**Coalition to Save the Elms Manitoba Inc., Winnipeg,** received \$3,540.00 to involve 14 youth in a tree-banding campaign along Winnipeg's boulevards and riverbank corridors to protect the trees from cankerworm infestations. Youth will also plant trees and attend information workshops on the prevention and identification of Dutch Elm disease and other tree pests and diseases.

**Collège universitaire de Saint-Boniface (CUSB) — le comité environnemental, Winnipeg,** received \$759.00 to involve 20 youth in a community garden project. Youth will create raised garden beds and plant vegetables and herbs.

**Dakota Plains School** received \$1,880.00 to involve 20 youth in a recycling and beautification project by planting flowers, tending to the community garden, recycling and participating in community cleanups.

**Discovery Children's Centre Inc., Winnipeg,** received \$3,765.00 to involve 200 youth in a Return to Earth project by creating a flowerbed, planting fruit trees and participating in recycling and composting activities.

**École Crane, Winnipeg,** received \$968.00 to involve 25 youth in a Protect Our Grounds project. Youth will plant shrubs and native perennials, as well as, maintain the vegetation by weeding, watering and spreading mulch.

**École élémentaire Notre Dame de Lourdes** received \$3,000.00 to involve 120 youth in a schoolyard expansion and enhancement project by planting grass and a shelterbelt bordering the school.

**École Riverbend Community School, Winnipeg,** received \$566.02 to involve 7 youth in a community cleanup. Youth will pick up litter, as well as, weed and water flower beds to enhance and beautify the schoolyard.

**École Secondaire Kelvin, Winnipeg,** received \$290.00 to involve 24 youth in a project to organically plant and grow herbs and vegetables. All produce grown will be donated to Winnipeg Harvest.

**Fort Whyte Centre, Winnipeg,** received \$3,450.00 to involve over 20 youth in a Youth Action for Biodiversity project. Youth will clean the forest and conduct a survey to assess the volume of Aspen trees in the area. Youth will also construct and locate bat houses, transplant bluestem to grasslands and participate in a wild flower stomp.

**Friends of the Garden, St. Claude,** received \$2,970.00 to involve 140 youth in a community garden that will extend one kilometer along Canadian Pacific Railway tracks. Youth will grow flowers from seed for a theme garden depicting the town symbol, as well as, and plant trees, shrubs and flowers, participate in composting activities and create interpretive signage.

**Glenway School, Dominion City**, received \$1,325.00 to involve 25 youth in Preserving and Knowing Our Ecosystems by clearing brush and laying stone pathways to create a walking trail through agricultural, forest and wetland ecosystems.

**Hampstead School – Outdoor Education Club, Winnipeg**, received \$4,350.00 to involve 30 youth in a schoolyard revitalization project. Youth will create raised garden beds and plant native prairie plants and Black Ash trees. Youth will also construct 15 duck boxes to be placed at publicly accessible locations along the Red River.

**Indian Springs School, Swan Lake**, received \$4,350.00 to involve 67 youth in a schoolyard enhancement project. Youth will plant a shelter belt of trees and shrubs, as well as, establishing a walking trail and seating area.

**John W. Gunn Middle School, Winnipeg**, received \$1,100.00 to involve 24 youth in a waste minimization project by sorting and organizing recyclables and maintaining a vermicompost bin. The compost will be used to grow plants in the school's greenhouse.

**Kildonan East Collegiate, Winnipeg**, received \$2,900.00 to involve 100 youth in a community garden based on the medicine wheel. Students from Kildonan East, River East and Miles Macdonell Collegiate will plant wild sage, cedar, sweet grass, wild flowers and various native herbs.

**Maison Chapelle Inc., St. Malo**, received \$4,300.00 to involve six youth in creating a community garden with raised garden beds, a compost area and a rainwater drip system.

**Morris School** received \$5,000.00 to involve 150 youth in establishing an outdoor classroom. Youth will create a pea-gravel trail system and butterfly garden, as well as, plant prairie grasses, perennials, herbs, vegetables, and trees.

**Murdoch Mackay Collegiate Institute, Winnipeg**, received \$2,860.00 to involve youth in a project. Youth will seed and fertilize grass, plant trees, prune shrubs and clean the schoolyard.

**Niverville Collegiate Institute** received \$3,810.00 for a schoolyard beautification project involving 10 youth to plant trees and shrubs and install limestone pathways, picnic benches and garbage receptacles.

**Orioles Community Centre, Winnipeg**, received \$550.00 to involve 20 youth in a community cleanup project by weeding, raking and picking up garbage throughout the community. Youth will sort litter collected for recycling.

**O.V. Jewitt School, Winnipeg**, received \$482.00 to involve five special needs students in creating a prairie garden consisting of prairie grasses and native wild flowers.

**Rural Municipality of St. Francois Xavier** received \$3,153.19 to involve 6 youth in a variety of environmental activities to celebrate the Municipality's 125<sup>th</sup> Anniversary. Activities include community, schoolyard and riverbank clean ups, construction of birdhouses and feeders, as well as, a Riparian forest awareness campaign.

**Ryerson School-Age Center Incorporated, Winnipeg**, received \$665.00 to involve 20 youth in a schoolyard enhancement project by planting perennials and annuals, as well as, undertaking composting activities.

**Silverwinds School, Sperling**, received \$1,500.00 to involve 30 youth in a schoolyard enhancement project by creating a seating area and planting shrubs, trees and native prairie grasses.

**South Oaks School, Grunthal,** received \$700.00 to involve 340 youth in a schoolyard enhancement project by planting trees and cleaning the schoolyard.

**Southwood School, Winkler,** received \$616.00 for 100 youth to restore the schoolyard by replacing damaged trees and planting shrubs and perennials.

**Spence Neighbourhood Association Inc., Winnipeg,** received \$2,160.00 to involve 115 youth in a community garden education project. Youth will harvest organically grown vegetables then prepare gardens and compost areas for the winter.

**Strathcona School, Winnipeg,** received \$1,325.00 to involve 300 youth in a Children's Pride garden project by preparing garden beds, spreading soil and planting trees, shrubs and perennials.

**Sturgeon Creek Association, Winnipeg,** received \$1,537.17 to involve 30 youth in a riparian awareness and enhancement project along the Assiniboine River. Youth will assist in biological assessments using vegetation, bird, fish and dragonfly data, as well as, plant trees at Greenwood Park.

**St. George Rainbow Lighthouse, Winnipeg,** received \$202.16 for 50 youth to participate in a Habits for a Healthy Environment project. Youth will participate in community clean up activities, recycling, composting and making cloth lunch bags.

**St. Norbert Arts Centre (SNAC)** received \$350.00 to involve 12 youth in a Sustainable Community Action project. Youth will assist in coordinating and expanding (SNAC)'s compost outreach program by giving composting workshops and presentations, as well as, collecting compost from local schools and businesses.

**St. Vital Mustangs Football Club, Winnipeg,** received \$4,630.00 to involve 200 youth in a community beautification and enhancement project. Youth will clean up of debris and increase riverbank stability by planting native trees along the west bank of Maple Grove Park.

**The Rotary Club of Charleswood, Winnipeg,** received \$1,640.00 for 300 youth to plant trees, enhance walking trails and participate in cleanup events in the Assiniboine Forest.

**The Salvation Army Multicultural Family Centre, Winnipeg,** received \$426.15 to involve 40 youth in making doth lunch bags and mini-terrariums to promote recycling. Youth will also participate in community and riverbank cleanups, as well as, construct birdhouses and feeders.

**Wellington Alive Residents Group, Winnipeg,** received \$668.55 to involve seven youth in removing debris and cleaning the community.

**Whyte Ridge School — Gardening Committee, Winnipeg,** received \$1,213.00 to involve 500 youth in a community beautification and enhancement project by growing flowers from seed and transplanting them to schoolyard flowerbeds.

**Wingham Colony, Elm Creek,** received \$2,335.00 to involve 10 youth in a shelterbelt tree-planting project that will help to reduce soil erosion.

**Winnipeg Boys and Girls Clubs Inc.** received \$3,075.00 to involve 11 youth in creating environmental education demonstration sites at Fort Whyte Centre. This site will include community gardens, composting, vermicomposting and an aquaculture model.

**Winnipeg South Minor Baseball Association Inc.** received \$1,000.00 to involve 70 youth in a tree and shrub planting project at Charleswood Place and Berwick Park.



## **EASTERN REGION**

**Aghaming Community Council** received \$1,175.00 to support 5 youth in a nature trail enhancement project by spreading limestone and creating interpretive signage identifying tree and plant species.

**Black River First Nation** received \$2,000.00 to involve 60 youth in monitoring the impacts of climate change on eastern Manitoba forests. Youth will learn how to measure and monitor air temperature, relative humidity, soil temperature, and pH and moisture levels.

**Friends of Beausejour Daylily Park** received \$1,865.00 to involve 200 youth from the 249 Beausejour Air Cadets and the First Beausejour Scouting Group in preparing and mulching garden beds, planting shrubs and fruit trees, as well as, establishing bluebird houses in the American Hemerocallis Daylily Display Garden.

**Pauingassi School** received \$1,700.00 to involve 125 youth in a waste minimization project. Youth will construct and place garbage receptacles, help establish a recycling depot and participate in community and schoolyard cleanups.

**Sagkeeng Community School, Fort Alexander,** received \$1,740.00 for 30 youth to help in the creation of a community walking trail by clearing brush and debris, and installing garbage receptacles.

**Whiteshell Colony School, River Hills,** received \$1,000.00 to involve 50 youth in a Tree Care for Youth project. Youth will assist in establishing outdoor learning centres, as well as, plant and maintain trees and shrubs and design a brochure on tree awareness.

**Wings of Power, Pine Falls,** received \$1,656.00 to involve 7 youth in a community garden project by planting herbs, vegetables and flowers, maintaining a garden and participating in composting activities.

## **INTERLAKE REGION**

**Croatian Community Centre, Lockport,** received \$3,000.00 to assist 72 youth in a community greening project by establishing walking trails, spreading soil and planting trees and shrubs.

**Dauphin River School** received \$500.00 to involve 20 youth in a community beautification project by collecting and recycling litter and tending flowerbeds.

**Lake St. Martin First Nation** received \$2,065.00 to involve 30 youth in various activities to increase awareness on environmental issues, such as water quality, tree identification and transplanting, gardening, composting and recycling.

**Matheson Island Community Council** received \$1,075.00 for 18 youth to pick up litter and debris and locate recycling bins and garbage receptacles along the beach and throughout the community, as part of a Beach Enhancement and Recycling Upgrades project.

**Peguis First Nation Training and Employment** received \$1,449.00 to involve 43 youth in a community clean up project by removing debris and litter from drainage ditches within the community.

**Pine Dock Community Council** received \$2,000.00 to involve 8 youth in a waste minimization project. Youth will assist with the distribution of recycling blue boxes to community residences for recycling, as well as collecting and sorting recyclables and shipping to Riverdale Place recycling depot.

**Town of Teulon** received \$450.00 to involve 20 youth to remove deadfall from Crescent Creek and install interpretative signage along a 2.5-kilometre walking trail situated at the Teulon-Rockwood Green Acres Park.

## **NORTHEAST REGION**

**Barren Lands First Nation, Brochet,** received \$1,625.00 to involve 40 youth to construct and paint wooden garbage and recycling receptacles, as well as participate in workshops that provide hands-on activities relating to the benefits of recycling and a clean community.

**Cross Lake Band of Indians** received \$2,795.00 to involve 28 youth in a community beautification and enhancement project by picking up litter and debris throughout the community.

**Leaf Rapids Recycling Program** received \$2,734.00 for 75 youth to grow plants, vegetables and fruits in the community greenhouse, build composters, participate in recycling activities and undertake clean up activities throughout the community

**Norway House Cree Nation Education Centre** received \$3,015.00 to involve five youth to create recycling posters that will help increase public awareness and establish a secondary recycling depot for collection and sorting of recyclables.

**Shamattawa First Nation** received \$1,150.00 to involve 300 youth in a waste minimization project through a school recycling program and community and shoreline clean up activities.

**St. Theresa Point First Nation Elementary School** received \$2,540.00 to involve 20 youth in creating a park-like area by preparing school grounds for the transplantation of trees and to seed grass.

**Thompson Boys and Girls Club** received \$1,400.00 to involve 25 youth in planting up to 65,000 seedlings. Youth will receive educational and field experience in sustainable forestry practices. Youth will also participate in clean up activities at Setting Lake and Paint Lake Provincial Parks and along the shorelines of Mid Lake and the Burntwood River.

**West Lynn Heights School, Lynn Lake,** received \$815.00 for a project to involve 30 youth in attempting to bring back woody plant growth on a 300-hectare deposit of mine tailings. Youth will also participate in germinating seeds to produce seedlings, monitoring growth of seedlings and testing soil nutrients and pH levels.

## **NORTHWEST REGION**

**Community Youth Resource Centre, Flin Flon,** received \$2,325.00 to involve 19 youth in a walking trail revitalization project. Youth will clean and prepare the trail, as well as, plant native flowers and trees and create a resting area with benches and rock people.

**Opaskwayak Cree Nation—Social Development** received \$3,173.00 to involve 6 youth in developing flowerbeds and removing debris along riverbanks and walking trails.

## **WESTERN REGION**

**Baldur School** received \$3,750.00 to involve 100 youth in creating a park-like green space by creating flowerbeds and planting trees.

**Camperville Community Council** received \$3,485.00 to involve 20 youth to construct and locate waste receptacles, birdhouses and waterfowl nesting structures throughout the community.

**City of Brandon Community Services** received \$1,115.00 to involve 118 youth in various environmental activities to increase awareness on environmental issues, including recycling, composting, soil protection, water conservation and green-space awareness. Other activities include community cleanup, flower planting and tree identification.

**Crane River Recreation Committee** received \$1,357.00 to involve 10 youth in a community cleanup by picking up debris and clearing brush in community parks and ditches.

**Dauphin Joint Recreation Commission** received \$3,777.42 to involve 165 youth in the beautification and enhancement of Vermillion Park by developing a perch pond, establishing butterfly gardens and a recycling depot.

**Decker Colony School** received \$500.00 to involve 45 youth in a community enhancement project by constructing birdhouses and planting a shelterbelt of trees and shrubs.

**Duck Bay School** received \$805.00 to involve five youth in replacing diseased Dutch elm trees with maple and ash trees and removing a weed called burdock from ditches within the community.

**Hamiota Conservation Authority** received \$2,763.00 to involve 6 youth in building a viewing platform and birdhouses, as well as, planting trees along the existing Rails to Trails walking path.

**Meadow Portage Community Council** received \$1,357.00 to involve four youth to create community awareness by participating in community clean up activities by picking up debris along roadsides.

**Melita School** received \$2,172.00 to involve 296 youth in a Growing Green with Youth project. Youth will create a park-like setting with flowerbeds, bird feeders, recycling bins, picnic tables and benches. Youth will grow vegetables and flowers in the school's greenhouse that will be transplanted to the flowerbeds.

**Nature Valley School, Wawanesa**, received \$1,571.00 to involve 17 youth to enhance and beautify the village entrance of Dunrea. Youth will help create an eight-foot Christmas tree-like structure, containing 60 flower pots on the branches with a purple marten birdhouse located in the centre.

**Pierson Environmental Group** received \$3,260.00 to involve 20 youth in a Protecting Our Environment for the Future project. Youth will plant and care for trees, as well as, help educate the agricultural community on how to reduce the amount of applied chemicals and fertilizers by using a hand-held Global Positioning System (GPS) unit.

**Sapotaweyak Cree Nation, Pelican Rapids,** received \$200.00 to involve 30 youth in a schoolyard, lake and riverside clean up project.

**Spence Lake Recreation Committee** received \$1,357.00 to involve in a community beautification and enhancement project. Youth will plant and water trees, shrubs and flowers, as well as, construct bird houses and clean ditches and roadsides.

**Tootinaowaziibeeng Treaty Reserve—Anishinabe Health Program** received \$1,398.00 to involve 116 youth in a recycling-awareness project involving poster and essay-writing contests on recycling. Entries will be displayed at the community health fair. Youth will also participate in a schoolyard clean up.

**Town of Neepawa** received \$3,625.00 to involve 60 youth in a community enhancement project by planting native trees and shrubs, participating in community clean up and composting initiatives, and constructing bird houses and feeders from recycled materials.

**Town of Shoal Lake—Lakeview Park Board** received \$4,650.00 to involve 45 youth to clean up debris and plant basswood and black ash trees in Lakeview Park.

**Town of Virden** received \$814.73 to involve eight youth in transforming a vacant lot into a public green space by landscaping and planting flowers and shrubs.

**Whistling Wind School, Glenboro,** received \$1,275.00 to involve 10 youth in creating a 1.8-kilometre walking trail. Youth will clean up litter and debris along the trail, plant trees and shrubs and establish resting areas.

## **MANITOBA CLIMATE CHANGE ACTION FUND**

**Administering Department:** Manitoba Energy, Science and Technology, Climate Change Branch  
**Date Approved:** 2005/06 Treasury Board Estimates Review Process  
**Total Amount Approved:** \$400,000.00  
**Total Amount Expended:** \$367,455.00

### **Summary:**

A Broad Allocation totalling \$400,000.00 was made under the Sustainable Development Innovations Fund for the Climate Change Action Fund (MCCAF). Manitoba Energy, Science and Technology, Climate Change Branch, administers the Manitoba Climate Change Action Fund (MCCAF) to support practical, Manitoba based, actions that respond to the issue of Climate Change. MCCAF will support projects focusing on public education and outreach; the scientific understanding of climate change impacts and potential adaptation practices; technological innovation (research and commercialization); energy efficiency and alternative or "green energy". MCCAF will provide up to 50% of the total budget costs.

### **MCCAF SUMMARY**

<b>Total Allocation for 2005/06</b>	<b>\$400,000.00</b>
Applications Processed	11
Applications Approved	11
Total Amount for Grants Approved	\$392,455.00
<b>Total Amount Expended</b>	<b>\$392,455.00</b>

Brief descriptions of the 11 projects approved under the Manitoba Climate Change Action Fund during the 2005/06 fiscal year are as follows:

## **Education and Outreach**

### **Climate Change Connection**

**Proponents Are:** Manitoba Eco-Network Inc.  
**Date Approved:** July 19 2005  
**Total Amount Approved:** \$42,000.00  
**Total Amount Expended:** \$42,000.00

A grant in the amount of \$42,000.00 was provided to the Manitoba Eco-Network to continue its role as a host to the Climate Change Connection (CCC), Manitoba's climate change public education and outreach hub. The Connection will continue to create awareness about climate change, to empower Manitobans to take action to reduce the GHG emissions and to assist Manitobans in making the changes necessary to live more sustainable and climate-friendly lifestyles.

## **Resource Conservation Manitoba**

<b>Proponents Are:</b>	Resource Conservation Manitoba
<b>Date Approved:</b>	August 17, 2004
<b>Total Amount Approved:</b>	\$100,000.00
<b>Total Amount Expended:</b>	\$100,000.00

A total grant in the amount of \$300,000.00 was approved in 2004 (\$100,000.00 annually over three fiscal years from 2004/2005 to 2006/2007) to provide programs and services aimed at reducing Greenhouse Gas (GHG) emissions in the urban transportation sector through a series of four (4) climate change and urban trip reduction programs, delivered through a strategic and coordinated approach, that promote climate-friendly transportation. Programs include Active & Safe Routes to School, Manitoba Student Transportation Network, Workplace Trip Reduction Project and Commuter Challenge 2006.

### Commuter Challenge

The Commuter Challenge is a national competition that promotes environmentally friendly ways of getting to work and school during Environment Week each June. Workplaces compete in various size categories through web-based participant registrations and those with the highest proportion of “green commuting” trips are deemed the winners.. Through the web-based participation, GHG reductions are automatically calculated during the event. Schools participate on Clean Air Day during Challenge Week. The event has been highly successful in getting thousands of Manitobans thinking about the environmental, fitness and financial consequences of their commuting choices. RCM led Winnipeg to a first place finish in the national Commuter Challenge from 2003 to 2005. In 2005, RCM's leadership role resulted in an increase in registrations from Manitoba communities outside Winnipeg.

### Workplace Trip Reduction Initiatives

This program follows up with Commuter Challenge worksites to support year-round sustainable transportation choices. Through transportation demand management (TDM) approaches, the program aims to increase transportation efficiencies and helps to reduce GHG emissions by encouraging alternatives to the use of single-occupant vehicles. Using tools such as surveys, checklists, site assessments, education, incentives, and removal of barriers to alternative modes of travel, TDM provides a flexible means of achieving environmental, cost-saving and health benefits at participating locations. Trip reduction programs are a means to encourage the adoption of alternative modes of transportation including transit, safe cycling, walking, carpooling, and telecommuting. Employee surveys identify any needed workplace improvements and capture modal shifts among participants.

### Manitoba Students Transportation Network

Manitoba Students Transportation Network (formerly Off Ramp Manitoba) is a student-led trip reduction program for secondary schools. High school students are encouraged to walk, cycle, carpool, or take transit to school to reduce GHG emissions. The program aims to raise students' awareness about the environmental impacts of automobile use and climate change. With training and support from RCM, student organizers at participating schools assess opportunities for sustainable transportation, using various tools including, baseline surveys, and checklists. A campaign is then implemented to encourage their peers to choose sustainable modes of travel to school. The network provides ideas for events and activities to help motivate student participation. Pre- and post-program surveys document modal shifts and provide GHG reduction estimates.

### Active and Safe Routes to School

Active and Safe Routes to School (ASRTS) aims to reduce GHG emissions by decreasing the use of cars to transport children to and from school. As co-benefits of the program, air quality is improved, children's fitness increases, traffic safety awareness is raised, and the profile of ecologically sustainable transportation choices is increased. The program relies on tools such as walking school buses, Walking Wednesday Clubs, and International Walk to School Week to get children safely to and from school under adult supervision. The program also works to establish 'no-idling' zones for cars around schools. Kits, posters and ongoing support to encourage active participation in ASRTS is also provided.

### **Joint Seminar with Iceland on Hydrogen Infrastructure with Educational Follow-up**

<b>Proponents Are:</b>	Hydrogen Centre of Expertise
<b>Date Approved:</b>	March 29, 2006
<b>Total Amount Approved:</b>	\$18,000.00
<b>Total Amount Expended:</b>	\$18,000.00

A grant in the amount of \$18,000.00 was provided to the Hydrogen Centre of Expertise (HCE) to organize a seminar regarding hydrogen infrastructure involving representatives from Iceland, further to the September 2003 MOU on Hydrogen Development with that country. Education and training related to the HCE as well as an advanced hydrogen hybrid fuel cell transit bus will be showcased at the seminar. The intent of the project also will be towards follow-up implementation of specialized college and university level courses or curriculum components for Manitoba on hydrogen utilization and technology.

## **ENERGY EFFICIENCY, ALTERNATIVE OR RENEWABLE ENERGY**

### **Manitoba Climate Change Community Challenge**

<b>Proponents Are:</b>	Manitoba Energy, Science and Technology
<b>Date Approved:</b>	July 19, 2005
<b>Total Amount Approved:</b>	\$150,000.00
<b>Total Amount Expended:</b>	\$150,000.00

A grant in the amount of \$150,000.00 was approved for the Manitoba Climate Change Community Challenge to enable Manitoba Energy, Science and Technology, in partnership with the federal government's One-Tonne Challenge, assist communities to identify, plan, and implement innovative energy and resource conservation initiatives that result in reduced GHG emissions. This project, the first such collaborative partnership in Canada, will enable Manitoba communities to conduct practical projects that address the challenge of climate change locally, while achieving sustainable economic success through innovative energy efficiency and resource conservation methods, while at the same time providing education and outreach to encourage individuals to take personal action on climate change. Four Manitoba communities (Brandon, Morden/Winkler, Peguis First Nation and North Central Communities Futures Development Corporation in Thompson, which represents 17 northern communities) were selected to participate in this pilot program.

## **Energy Efficient Housing – A Path to Island Lake Sustainability**

**Proponents Are:** Island Lake Tribal Council  
**Date Approved:** March 29, 2006  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

Island Lake Tribal Council is developing a long term process to systematically improve the energy efficiency and durability of existing and planned residential and public buildings in the four member communities. Each community has completed a detailed energy evaluation surveying existing consumption patterns and emissions. This project uses this community specific information to establish an analytical model using elements of Energuide and LEED to evaluate cost effective approaches for renovations and new construction. This approach will reduce emissions and encourage the use of local materials and skills. The resulting framework will be available for other First Nations and northern and remote communities seeking to improve the efficiency of their buildings and identify the supporting skills and business opportunities related to Energy Efficient design and construction.

## **IMPACTS AND ADAPTATION**

### **Manitoba-PARC Climate Change Impacts and Adaptation Research Coordinator**

**Proponents Are:** University of Winnipeg, Centre for Forest Interdisciplinary Research (C-FIR)  
**Date Approved:** January 4, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

A total grant in the amount of \$50,000.00 was approved in 2004 (\$25,000.00 annually over two fiscal years from 2004/2005 and 2005/06) to enter into a joint two-year agreement with the University of Winnipeg, Centre for Forest Interdisciplinary Research (C-FIR) to provide continued provincial funding for a Manitoba-PARC Climate Change Impacts and Adaptation Research Coordinator at the University of Winnipeg. The role of the MB-PARC Coordinator is to coordinate climate change research efforts in the province to ensure that duplications are minimized, available resources are used effectively and that strategic gaps relating to research expertise and to areas with significant funding and growth potential, as well as impact on the public good, are addressed. This position also assists researchers in accessing funding and facilitating the flow of research project results and information among educators, policy makers and researchers. In addition, the level of interaction between federal and provincial climate impact and adaptation research committees is enhanced.



## **Workshop on Strategic Responses to Climate Change**

**Proponents Are:** Manitoba Model Forest  
**Date Approved:** March 29, 2006  
**Total Amount Approved:** \$8,000.00  
**Total Amount Expended:** \$8,000.00

Grant funding in the amount of \$8,000.00 was provided to the Manitoba Model Forest to conduct a workshop with residents, stakeholders, leaders and decision makers in Victoria Beach, Manitoba, to begin the process of identifying adaptation options and strategies for that community. A warmer climate may have serious effects on a forest's capacity to supply lumber and food and to support tourism, which could result in altered economic and social conditions for people in forest-dependent communities. The workshop is an extension of a larger Western Canadian climate change vulnerability research project focused on forest-based communities.

## **Eastside Boreal Peatlands Carbon Monitoring**

**Proponents Are:** Poplar River First Nation  
**Date Approved:** March 29, 2006  
**Total Amount Approved:** \$24,455.00  
**Total Amount Expended:** \$24,455.00

Funding support of \$24,455.00 was provided to Poplar River First Nation for a component of a multi-year project to establish boreal forest/peatlands research sites in the unstudied east side of Lake Winnipeg. The project will apply traditional knowledge in assessing approaches to climate change study, obtain data on carbon sequestration and baseline data for climate change impacts monitoring, study fire and other natural disturbances in the boreal zone and apply innovative field technologies in conducting research in this area of the province.

## **MANITOBA FORESTRY ASSOCIATION WOODLOT PROGRAM**

**Managing Department:** Manitoba Conservation, Forestry Branch  
**Date Approved:** 2005/06 Treasury Board Estimates Review Process  
**Total Amount Approved:** \$200,000.00  
**Total Amount Expended:** \$200,000.00

### **Summary:**

A Broad Allocation of \$200,000.00 was made under the Sustainable Development Innovations Fund to support the operations of the Manitoba Forestry Association's Woodlot Program.

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.

### **Expanded Program**

Over the years the Manitoba Forestry Association has continued to provide a limited number of woodlot management plans and services to landowners in the Swan Valley area. Under the new agreement and additional funding provided by the Sustainable Development Innovations fund, the Woodlot Program was able to expand into this area of the Province. A contract employee was hired and an office in Swan River established. The employee has actively pursued woodlot management plans in Swan River and surrounding areas and has arranged speaking engagements to promote the Woodlot Program. As well, meetings have taken place with Manitoba Agriculture, Food and Rural Initiatives to clarify the mandates of the Manitoba Forestry Association Woodlot Program and the Agro-Woodlot program under Manitoba Agriculture. A meeting with Louisiana Pacific provided suggestions on how to mold the Woodlot Program to better serve the target audiences in the region. As a result of this meeting, the employee is establishing training seminars for landowners in the area, working with Conservation districts and rural municipalities to deliver the message, showcasing successful landowners in the area who have conducted sustainable woodlot management, and introducing field days and bus tours in the area.

### **Woodlot Program Components**

The three components of the Woodlot Program are management plans, return visits and public education/extension. Brief descriptions of the three components and achievements for 2005/06 are as follows:

#### **Management Plans**

The primary component/service offered by the Woodlot Program to the landowner is an initial "onsite" visit and the preparation of a Woodlot Management Plan. A Manitoba Forestry Association Extension Officer meets with the landowner and during their "walk and talk" visit discusses various possibilities available for the development and maintenance of the property. Many landowners appreciate the opportunity to exchange ideas with the Extension Officer.

Following the visit, the Extension Officer prepares a detailed management plan based on the specific topics/objectives discussed during the "walk and talk". The plan, along with additional information required to carry out the recommendations in the plan, is presented to the landowner. The landowners are also invited to join various organizations such as the Manitoba Forestry Association for the benefits these organizations provide.

During 2005/06, 69 woodlot management plans were completed. Of these plans, nine were conducted in the expanded area of the Swan River Valley. Through discussions with industry and local representatives, there is a much needed demand for woodlot services in this area.

## Return Visits

The second component of the Woodlot Program is the return visit. A return visit, after the initial “walk and talk”, is a valuable complement to the written plan provided to the landowner. Return visits offer assistance to the woodlot owner who wishes to proceed with timber harvesting (Operational Return Visit) or has completed initial recommendations contained in his/her management plan and may want to carry out additional work in the woodlot (Technical Return Visit).

### a) Operational Return Visit

During an operational return visit the MFA Extension Officer may provide a liaison service to landowners who need assistance in marketing their timber. This service is tailored to the needs of the individual landowner and the size and complexity of the proposed timber harvest. The technician will contact and arrange a meeting with a potential wood buyer, assist with securing a contract, monitor the harvesting operation and, possibly scale the wood.

Information on tree species, composition, age, growth rate, health and volume (m<sup>3</sup>/ha) are reviewed with both parties. This information, combined with the landowner’s objectives and the technician’s recommendations, will result in a sustainable timber harvest. The recommended harvesting method is discussed in the operational return visit. This includes selection, shelterwood, seed tree, group selection or clearcutting. The Extension Officer also addresses tree marking, harvest timing and landing site selection, as well as trail layout, cutblock arrangement and regeneration with the landowner and contractor so that both parties have a clear understanding of their obligations.

The newly produced “Beneficial Management Practices” (BMP’s) manual will serve as a valuable tool ensuring the landowner’s rights and interests are respected. The BMP’s are also designed to help contractors and landowners conduct woodlot management activities in an environmentally responsible manner, to minimize damage to the existing trees and sustain the productive potential of the woodlot. Funding from the Manitoba Model Forest made the development of this manual possible.

The return visit is a valuable service to both the landowner and the wood purchaser in that both parties are comfortable with the Extension Officer’s technical involvement throughout the process. The program has been instrumental in joining woodlot owners with potential forest buyers.

### b) Technical Return Visit

The technical return visit is provided to landowners who:

- have or are in the process of completing recommendations contained in their woodlot management plan and request an evaluation of their ongoing silvicultural practices or,
- who wish to advance to the next level of woodlot management.

Some landowners require technical assistance following an inspection of their silvicultural activities by the Extension Officer. The technical return visit provides assurance to the landowner that he/she is on track with ongoing recommendations contained in the woodlot management plan. Other landowners such as Christmas tree growers require insect/disease identification and control measures on an ongoing basis.

Landowners' rekindled interest in tree planting, recreational opportunities, eco-tourism, and non-timber forest products often result in a return visit by the Extension Officer.

Landowners in eastern Manitoba continue to become involved in small-scale timber harvests from their woodlots for economic benefits. While providing supplemental income for the landowner, these patch cuts improve the health of the overall woodlot and enhance wildlife habitat and recreational opportunities.

As the demand for fibre increases, many landowners have become involved in small-scale commercial harvesting activities in eastern Manitoba. These landowners received operational return visits and the estimated volume for sawlogs/pulp/firewood from these activities for the 2005/06 is 5,395 m<sup>3</sup> of softwood and 32,310 m<sup>3</sup> of hardwood. Market demand for timber has increased the stumpage values considerably. Landowners continue to derive supplemental income through sustainable low impact harvesting.

Our newly developed landowner database will provide detailed information on a variety of aspects relating to woodlot management activities. The database will soon be operational and will be able to generate additional statistical information for next year's reports. Funding from the Manitoba Model Forest made the development of the database possible.

A total of 34 return visits were completed for landowners during 2005/06.

#### Landowner Interests with Respect to Management Plans and Return Visits

Increased stumpage prices for aspen have resulted in an increase in harvesting activities on private land. Some landowners are feeling pressure to harvest their wooded areas and are seeking the advice of the Manitoba Forestry Association Woodlot Program staff to enable them to make informed decisions.

The percentage of landowner interest in management activities and production of specialty products from private land is as follows:

- a) 41.0% - Traditional Tree Harvesting for Income. This includes harvesting for the sale of sawlogs and pulpwood; harvesting for value-added products such as planing, kiln drying and grading lumber for market within the community and for lumber used for on site building materials; and harvesting for firewood.
- b) 16.6% - Non-Traditional Forest Products. This includes Manitoba maple syrup, mushroom production, jams/jellies, Christmas trees and hybrid poplars for pulpwood, sawlogs and future carbon sequestering benefits.
- c) 42.4% - Environmental Benefits. This includes recreation (trail construction), wildlife enhancement, eco-tourism and tree planting.

### **Public Education/Extension**

The Manitoba Forestry Association delivers a number of educational and extension activities as a part of the third and final component of the Woodlot Program. The Public Education/Extension component includes a variety of other woodlot activities such as woodlot education seminars, skills development seminars, bus tours, workshops and field days, as well as programming with groups and agencies supportive of woodlot management

Over 50 requests for site visits and subsequent woodlot management plans results from the Woodlot Program activities. Following is a list of activities undertaken by the Woodlot Program staff:

a) Evening Seminars and Special Presentations

As part of Manitoba Forestry Association's ongoing "Woodlot Series" evening presentations, numerous seminars were held through the province during 2005/06. General Woodlot Management Seminars were held in Selkirk in cooperation with a Manitoba Agriculture, Food and Rural Initiatives representative; Winnipeg in cooperation with the Special Areas Group (SAG) Teacher's Conference; Arborg in cooperation with Interlake School Division; Inglis, arranged by the Lake of the Prairies Conservation District and the Roblin Manitoba Agriculture, Food and Rural Initiatives Office and; Carman in cooperation with the Carman Horticultural Society. These evening seminars result in numerous requests for personalized woodlot management plans.

Six Non-Timber forest Products Seminars were also held as part of the "Woodlot Series" presentations, with a seventh scheduled for April 2006. Seminars were held in the communities of Manitou, Stonewall, Winnipeg, Carman and Portage la Prairie. Over 120 people were in attendance. Topics of discussion included: Manitoba Maple syrup, specialty mushrooms, and other non-timber forest products.

b) Field Days and Workshops

In April 2005, a Maple Syrup Field day was held in Beausejour; a 'How to Start a Christmas Tree Farm' seminar was held in Beausejour; the 7<sup>th</sup> Annual St. Peter's Church Woodlot Walk 'n Talk was held in East Selkirk and a Manitoba Maple Syrup Field Day was held in Ste Genevieve.

c) Bus Tours

The Manitoba Forestry Association Woodlot Program in partnership with the Manitoba Model Forest, Woodlot Association of Manitoba and South Interlake School Division held the following tours: Desert Sands and Timber Stands Bus Tour, Interlake Extravaganza Bus Tour, and Explore Pinawa Bus Tour.

d) Annual Meetings

Manitoba Forestry Association staff helped to organize the Manitoba Christmas Tree Growers Association Annual Meeting in Steinbach and delivered a review of the 2005 Woodlot Program activities at the Woodlot Association of Manitoba Annual General Meeting at the Living Prairie Museum in Winnipeg in January 2006.

e) Seedling Distribution

The third annual "Day in the Pines" seedling distribution and Sandilands Forest Centre tour was held in May 2005 at the Manitoba Forestry Association Sandilands Forest Education Centre. The seedling distribution program has helped to provide hundreds of thousands of seedlings to landowners across the province. Seedlings are planted for numerous purposes including shelter, lumber products, Christmas trees, landscape sales, wildlife enhancement and aesthetic value. During the two-day event, over 130,000 trees were distributed to approximately 180 landowners.

f) Staff Education

Two staff obtained their arborist licenses from the Province of Manitoba. This course was a definite asset to the staff as a large part of their job is providing information to the general public on insect and disease control, tree selection and planting techniques, as well as proper pruning techniques.

#### g) Audio/Visual

A "Chain Saw Safety" Power Point presentation, complete with props for use at workshops, was developed.

#### h) Program Promotion/Partnerships

Staff continue to be active with the Manitoba Model Forest Woodlot Working Group; assist in developing plans for the Model Forest Demonstration Woodlot, offer technical assistance in developing woodlot trails and establishing plantation sites; deliver Chainsaw Safety Seminars in partnership with the Manitoba Model Forest and; continue working with the Manitoba Christmas Tree Growers Association Board of Directors to establish advertising/marketing campaigns.

### **Conclusion**

Woodlot management objectives vary between landowners as they manage their woodlots for environmental benefits, timber and non-timber forest products. However, small scale harvesting is becoming more frequent as demand for aspen continues. Staff continues to be busy assessing woodlots for timber volume and quality. Landowners find the "contract for sale of standing timber", that is included in their woodlot management plan, very helpful and reassuring when conducting a timber harvest.

Thirty-four 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 Manitoba Forestry Association-Woodlot 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.

## ORPHAN MINE SITE ASSESSMENT PROGRAM

**Managing Department:** Manitoba Conservation, Environmental Programs  
**Date Approved:** 2005/06 Treasury Board Estimates Review Process  
**Total Amount Approved:** \$250,000.00  
**Total Amount Expended:** \$ 75,000.00

### Summary:

Treasury Board approved a four year \$1.0 million Broad Allocation (\$250,000.00 annually) commencing in 2001/2002 under the Sustainable Development Innovations Fund for the Department of Conservation to undertake site specific human health and environmental site assessments at identified orphan/abandoned mine sites (Refer to Table 1).

**TABLE 1**

A total of \$1,000,000.00 was approved over a four-year period for the following assessment projects:

<i>Location</i>	<b>Approved Amount</b>	<b>Assessment Project</b>	<b>Status</b>	<b>Total Expenditure to Date</b>
Sherridon	\$375,400.00	<ul style="list-style-type: none"> <li>• Hydrogeological/chemistry study</li> <li>• Site Specific Human Health and Ecological Risk Assessment</li> </ul>	<ul style="list-style-type: none"> <li>- Completed</li> <li>- Initiated December 2002</li> </ul>	\$353,723.08
Lynn Lake	\$384,600.00	<ul style="list-style-type: none"> <li>• Site Specific Human and Ecological Health Risk Assessment</li> </ul>	<ul style="list-style-type: none"> <li>- November 2001 to March 2004</li> </ul>	\$391,096.58
Snow Lake, Baker Paton, Gods Lake	\$250,000.00	<ul style="list-style-type: none"> <li>• Site Specific Human and Ecological Health Risk Assessment</li> </ul>	<ul style="list-style-type: none"> <li>- Initiate in 2005/06</li> </ul>	\$75,000.00
<b>Total</b>				<b>\$819,819.66</b>

Two assessments were initiated between 2001 and 2004, one at Sherridon and the other at Lynn Lake. The hydrogeological/geochemical study of the Sherridon mine tailings impoundment was initiated in 2001/2002. This study provided important environmental information on the impacts of the mine tailings on the adjacent water bodies and the data obtained was applied to the site specific risk assessment that was initiated in 2002/2003 and completed in 2004/2005. Data were collected over the summer and early fall of 2001 with additional sampling work conducted in 2002/2003. This involved collection of groundwater and surface water samples around the mine tailings impoundment and assessment of hydrogeological/geochemical conditions. The samples were analyzed and the data assessed. The study determined that contaminants continue to be released to the aquatic environment and this will continue for the next 100 years. The information from the study was applied in the site specific risk assessment.

Both the Cold Lake/Sherridon and Lynn Lake Risk Assessments were completed in 2004/2005.

A request for proposals was issued during 2005/06 for The Closure Report regarding the former Baker Patton mine site and Environmental Site Assessments for former God's Lake mine site and surrounding area and the Snow Lake Residue Pile, Lined Leach Basin, former Tailings area and surrounding areas. UMA Engineering Ltd. was awarded the contract for these former mine sites, which are being treated as one contract.

As the contract was awarded late in 2005/06, work will begin early in 2006/2007. The contract services to be provided are:

- review of existing environmental data, rehabilitation work and pertinent mine information;
- delineation of contaminants in the soil, sediment and surface groundwater based on CCME and/or Manitoba Surface Water Quality Guidelines;
- identification of groundwater flow direction and gradients; and
- provision of site assessment reports for the former Baker Patton mine site, God's Lake mine site and Snow Lake mine site by the end of 2006/2007.



## **WASTE REDUCTION AND POLLUTION PREVENTION (WRAPP) FUND**

**Proponents Are:** Manitoba Conservation, Pollution Prevention Branch  
**Date Approved:** 2005/06 Treasury Board Estimates Review Process  
**Total Amount Approved:** \$550,000.00  
**Total Amount Expended:** \$496,293.02

### **Summary:**

The WRAPP Fund was allocated \$550,000.00 for the 2005/06 fiscal year to support 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; parks projects; regional recycling; and green procurement. Financial partnerships are encouraged.

Up to \$100,000.00 of the total allocation is set aside for program development.

The Minister of Conservation has delegated grant approval authority up to \$25,000.00, including approvals flowed or phased over more than one fiscal year.

### **WRAPP FUND SUMMARY**

<b>Total Allocation for 2005/06</b>	<b>\$550,000.00</b>
Applications Processed	36
Applications Approved	29
Applications Deferred	1
Applications Declined	6
Applications Withdrawn	0
Total Amount for Grants Approved	\$430,200.00
Total Amount for Grants Expended	\$430,166.99
Program Development (consultations, promotions, requests for proposals, seminars, materials, etc.)	\$ 66,126.03
<b>Total Expended</b>	<b>\$496,293.02</b>

Brief descriptions of the twenty-nine (29) projects within the priority WRAPP areas are as follows:

### **COMPOSTING**

## **COMPOSTING 101 FOR MUNICIPALITIES**

**Proponent:** Resource Conservation Manitoba  
**Date Approved:** March 24, 2006  
**Total Amount Approved:** \$5,500.00  
**Total Amount Expended:** \$5,500.00

A grant of \$5,500.00 was approved to conduct a series of six practical workshops intended to boost composting capacity throughout Manitoba at the municipal level. The workshops provide practical education for those considering municipal composting, or wanting to improve their current operations. The focus will be on development of centralized municipal operations, as well as providing information on backyard composting education and offering resources. Development of a provincial network of municipal contacts is a key secondary objective.

## **COMMUNITY ACTION ON COMPOSTING**

**Proponent:** Resource Conservation Manitoba  
**Date Approved:** October 25, 2005  
**Total Amount Approved:** \$50,000.00  
**Total Amount Expended:** \$50,000.00

A grant of \$50,000.00 was approved to support a strategically targeted initiative to be undertaken through Resource Conservation Manitoba's Compost Action Project (CAP). The aim is to boost composting capacity throughout Manitoba at the level of household, mid-scale (institutional and neighbourhood), agricultural, and centralized municipal operations. Through direct service and delivery and resource production, this program will provide education, tools resources, and training to catalyze practical action across the Province.

## **COMPOSTING STRATEGIES FOR STRAW-BASED HOG PRODUCTION**

**Proponent:** Agriculture and Agri-Food Canada  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

A grant of \$25,000.00 was approved to build on a previous study of nutrient density in straw-bedded livestock systems and manure treatment on pathogen inactivation in swine production systems. This study will examine moisture, nitrogen, and temperature of the bedded pack inside a shelter and evaluate the effect of four composting strategies on manure nutrient levels, uniformity, mass, volume and moisture content. Specific sampling protocols will be developed to monitor the frequency of turning, the use of compost covers. Amendment with zeolite or gypsum will be evaluated in terms of nutrient conservation, cost and ease of use.

## **MID ASSINIBOINE RIVER CONSERVATION DISTRICT MANURE COMPOSTING DEMONSTRATION**

**Proponent:** Mid Assiniboine River Conservation District  
**Date Approved:** July 20, 2005  
**Total Amount Approved:** \$4,000.00  
**Total Amount Expended:** \$4,000.00

A grant of \$4,000.00 was approved to redirect manure from Heartland Livestock Sales to pasture and forage site rather than the City of Brandon landfill. Prior to delivery, the site will be soil and compaction tested. The manure will be piled into three windrows (one unturned, one turned three times and one turned six times). All turned piles will be tested for completion of composting using a compost temperature probe. Site compaction and soil moisture will be assessed and lab testing of micronutrients will be performed on the compost. Spreading will be done using a standard manure spreader. A producer field day with media coverage to disseminate information will occur. The demonstration day will include the use of a Settler compost windrow turner.

## **PRODUCING QUALITY ON-FARM COMPOST**

**Proponent:** Organic Food Council of Manitoba  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$5,000.00  
**Total Amount Expended:** \$5,000.00

A grant of \$5,000.00 was approved to assist with research, promotion and demonstration of composting to the local community and the surrounding area of southeastern Manitoba. A custom built compost turner will be used for demonstrations, The idea of promoting composting, as an alternative to spreading raw manure, is expected to reduce run off and the resulting pollution of surface water and ground water.

## **SNAC WASTE REDUCTION AND COMPOST EDUCATION INITIATIVE**

**Proponent:** St. Norbert Arts Centre  
**Date Approved:** March 24, 2006  
**Total Amount Approved:** \$11,000.00  
**Total Amount Expended:** \$11,000.00

A grant of \$11,000.00 was approved to begin an organic waste pick-up service on several streets in the St. Norbert community. The St. Norbert Arts Centre Coordinator along with Katmavik volunteers will aid in the pick up. The volunteers will go door to door in St. Norbert and give residents the opportunity to join a free weekly organic waste pick-up service, as well as provide information on waste reduction and diversion strategies. A series of free community workshops facilitated by the coordinator, in conjunction with Resource Conservation Manitoba, will be offered.

## **SOLAR/GEOTHERMAL WORM COMPOSTING**

**Proponent:** Wiggler Wranch  
**Date Approved:** March 24, 2006  
**Total Amount Approved:** \$20,000.00  
**Total Amount Expended:** \$20,000.00

Wiggler Wranch is currently setup at Brady landfill and is composting approximately four to seven thousand pounds of organic waste a week during warmer periods, as there is no access to normal power sources. Free workshops are provided to the general public every weekend on indoor vermi-composting for household waste. A grant of \$20,000.00 was approved to exhibit that composting can be performed on a year round basis. Wiggler Wranch will compare alternative power sources and determine what benefits and weaknesses are involved in establishing a no fossil fuel heating system. Solar, wind, water and bubble power methods have been chosen for this pilot project.

## **WINNIPEG BACKYARD COMPOSTER SALE 2005**

**Proponent:** City of Winnipeg  
**Date Approved:** July 20, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

A grant of \$25,000.00 was approved to conduct a truckload composter sale, similar to a previous event that occurred in 2004. The proponent proposes to sell 5,000 Earth Machine composters from four different locations around the City of Winnipeg at a subsidized price of \$25 (tax included). The sale took place May 7, 2005.

## **INTEGRATED WASTE MANAGEMENT**

### **CITY OF BRANDON METHANE GAS RECOVERY FEASIBILITY STUDY**

**Proponent:** City of Brandon  
**Date Approved:** March 24, 2006  
**Total Amount Approved:** \$20,000.00  
**Total Amount Expended:** \$20,000.00

A grant of \$20,000.00 was approved to explore the possibility of recovering methane gas from the waste disposal facility and converting it to energy for heating one or more buildings in the area. If the volume or quality is not sufficient, the City would consider flaring the methane instead of allowing it to dissipate into the atmosphere.

## **DAUPHIN TREE CHIPPER PURCHASE**

**Proponent:** Dauphin Joint Recreation Commission  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$20,000.00  
**Total Amount Expended:** \$20,000.00

A grant of \$20,000.00 was approved to purchase a new rotary drum tree chipper that would be owned, operated and maintained by the DJRC for their annual tree removal and pruning programs. The equipment would allow the DJRC and the general public to reduce the amount of recyclable material that would be deposited in the City of Dauphin landfill. As a result, an expected increase in the amount and the use of organic material in various aspects of gardening and beautification would occur.

## **EVERGREEN ENVIRONMENTAL TECHNOLOGIES SHREDDER**

**Proponent:** Evergreen Environmental Technologies Corporation  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

A grant of \$25,000.00 was approved to purchase a horizontal feed material grinder to process organic wastes and construction and demolition waste. The grinder will be used in the day to day operations of the facility to ensure these waste streams are diverted from the landfill, processed and reused. Provisions will be established ensuring that each partner municipality will be able to use the grinder to process their wastes at their present and any future transfer stations.

## **LANSDOWNE WASTE MANAGEMENT TRANSFER SITE**

**Proponent:** Rural Municipality of Lansdowne  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$15,000.00  
**Total Amount Expended:** \$15,000.00

A grant of \$15,000.00 was approved to construct a waste transfer station for household garbage to be shipped via a bin system to BFI's garbage site at Oak Point Highway. The transfer station will divert household waste to an established provincially approved integrated waste management site and the local landfill will be closed. The intent of the project is to improve waste management in the area and protect the surrounding environment.

## **MELITA GLASS CRUSHING PROJECT**

**Proponent:** Town of Melita  
**Date Approved:** July 20, 2005  
**Total Amount Approved:** \$1,600.00  
**Total Amount Expended:** \$1,600.00

A grant of \$1,600.00 was approved to purchase a glass crusher to reduce the amount of glass bottles in the landfill as well as create a useful end product. With this purpose in mind, the Town will attempt to bring more residents on board with glass recycling. The Town will purchase the machine from Gerbrandt Machine Shop in Manitou.

## **PARC REGIONAL WASTE MANAGEMENT PROJECT**

**Proponent:** Parkland Agricultural Resource Coop Ltd.  
**Date Approved:** March 24, 2006  
**Total Amount Approved:** \$11,000.00  
**Total Amount Expended:** \$11,000.00

A grant of \$11,000.00 was approved to conduct a regional assessment process to find a site or sites: where solid waste disposal can be accomplished economically; where the impact to the environment is minimized; which is acceptable to the public; and which satisfies the requirements of the regulatory authorities. The objective will be met by examining the geologic and hydrologic setting surrounding the project partner's region. UMA Engineering has been selected to provide an integrated summary of the existing landfills and recommend best practical environmental options to proceed with development.

## **ROCKY LAKE EAST SHORE WASTE MANAGEMENT PROGRAM**

**Proponent:** Rocky Lake East Shore Waste Management Group  
**Date Approved:** July 20, 2005  
**Total Amount Approved:** \$10,000.00  
**Total Amount Expended:** \$10,000.00

A grant of \$10,000.00 was approved to introduce a waste management system for Rocky Lake residents. The project intends to reduce the amount of waste going to landfill by providing compost bins to residents at the disposal grounds, providing a recycling depot trailer for transport to The Pas Recycling Centre, site improvements at the landfill to improve capture of recyclables, and education and awareness of recycling through newsletters, seminars, etc.

## **PARKS**

### **PAINT LAKE PROVINCIAL PARK RECYCLING DEPOT**

**Proponent:** Paint Lake Cottage Owners Association  
**Date Approved:** July 20, 2005  
**Total Amount Approved:** \$10,000.00  
**Total Amount Expended:** \$10,000.00

A grant of \$10,000.00 was approved to establish 10 mini recycling collection bins throughout the park. This project will demonstrate and promote the environmental and economic benefits of reducing and preventing waste. Currently, there are no recycling collection depots within the park. The proposal notes that a considerable volume of drink containers will be collected and recycled, thus diverting them from the Paint Lake landfill.

### **REPLACEMENT OF RECYCLING BINS IN TURTLE MOUNTAIN PROVINCIAL PARK**

**Proponent:** Manitoba Conservation, Boissevain District  
**Date Approved:** March 24, 2006  
**Total Amount Approved:** \$3,500.00  
**Total Amount Expended:** \$3,466.99

A grant of \$3,466.99 was approved to construct receptacles for visitors to Turtle Mountain Provincial Park to use for recyclable materials. A great deal of waste is generated by the park users throughout the year, much of which is ultimately deposited in landfill sites as a result of insufficient facilities within the park. Park administrators believe that updating the recycling receptacles will result in sufficient reduction of waste transferred to these landfill sites.

## **POLLUTION PREVENTION**

### **GREENING MANITOBA SUPPLIERS: A PEER ASSISTANCE APPROACH**

**Proponents:** Manitoba Environmental Industries Association and Canadian Centre for Pollution Prevention  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$20,000.00  
**Total Amount Expended:** \$20,000.00

A grant of \$20,000.00 was approved for the proponents to work with large Manitoba companies on an initiative to 'green' their supply chains. The initiative will involve recruiting small and medium sized businesses within the large companies supply chain to participate in a series of four, one-day training sessions learning tools to assist them in reducing their environmental impact. This type of forum would enable the participating suppliers to learn from each other. A resource guide outlining the benefits, challenges and incentives for this approach to greening supply chains will also be developed.

## **INCORPORATING NATIONAL AND INTERNATIONAL END-OF-LIFE WHITE GOODS STRATEGIES INTO MANITOBA'S EVOLVING WHITE GOODS MANAGEMENT PLAN**

**Proponent:** University of Manitoba, Natural Resources Institute  
**Date Approved:** March 24, 2006  
**Total Amount Approved:** \$15,000.00  
**Total Amount Expended:** \$15,000.00

A grant of \$15,000.00 was approved to research different national and international methods towards responsible end-of-life white goods management strategies. White goods or “domestic appliances” such as refrigerators, freezers, window air conditioners containing an ozone depleting substance. The intent of the project is to determine what Manitoba can learn and use from other jurisdictions in the development of a provincial white goods management plan.

## **PROMOTION AND EDUCATION**

### **DELIVERY OF STAR PROGRAM (EDUCATION COMPONENT)**

**Proponent:** Manitoba Energy, Science and Technology, Green Manitoba  
**Date Approved:** March 24, 2006  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

An allocation of \$25,000.00 was approved to distribute to school materials previously sent by the Manitoba Product Stewardship Corporation (MPSC) as part of the STAR Program. The project involves coordinating the transfer of material from MPSC, arranging for printing of new materials, and coordinating distribution of educational material to approximately 445 schools in fiscal year 2006/2007.

### **DEVELOPMENT OF GREEN PROMOTION AND EDUCATION MATERIAL**

**Proponent:** Manitoba Energy, Science and Technology, Green Manitoba  
**Date Approved:** March 24, 2006  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

An allocation of \$25,000.00 was approved to develop information on key activities coordinated by Green Manitoba, which are consistent with Manitoba's Green and Growing Strategy. These materials will be distributed at conferences and forums, schools, and in response to public inquiries.



## **GREENING SPORT THROUGH WASTE REDUCTION**

**Proponent:** Manitoba Organization of Disc Sports  
**Date Approved:** July 20, 2005  
**Total Amount Approved:** \$400.00  
**Total Amount Expended:** \$400.00

A grant of \$400.00 was approved to reduce the overall amount of waste produced at the Canadian Ultimate Championships (CUC). This project also intends to divert as much waste as possible from the annual tournaments held in Winnipeg. Four to five tournaments will be the focus of the waste reduction efforts, where waste prevention, composting, recycling and reusing will be the primary methods of waste diversion. An assessment will be made of the amount of recycling and compost material collected, along with statistics regarding the number of people who attended the event and the quantity of products and foods purchased. A survey will also be conducted to evaluate perceptions, opinions and suggestions for the project. From this project, a results manual will be produced outlining how future organizers can organize waste diversions efforts each year.

## **MANITOBA ENVIRONMENTAL INFORMATION SERVICES PARTNERSHIP**

**Proponent:** Resource Conservation Manitoba  
**Date Approved:** July 20, 2005  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

A grant of \$25,000.00 was approved to provide the public with environmental information on composting, green transportation and resource conservation. Since 2000, RCM has developed and delivered programming and promotion activities for schools, businesses and communities throughout the province to encourage Manitobans to compost, reduce waste and adopt environmentally-friendly forms of transportation.

## **REGIONAL RECYCLING**

### **BOISSEVAIN RECYCLING BUILDING ADDITION**

**Proponent:** Town of Boissevain  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$10,000.00  
**Total Amount Expended:** \$10,000.00

A grant of \$10,000.00 was approved to build an addition to the existing Recycling Building. The Town of Boissevain and R.M. of Morton are participants in the Recycling Program. The intent of the project is to improve the working conditions for recycling volunteers, and allow for increasing volumes of recyclables to be handled in the facility.

## **BUILDING FOR TOMORROW – NEW STEINBACH MRF**

**Proponent:** Eastman Recycling Services  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$25,000.00  
**Total Amount Expended:** \$25,000.00

A grant of \$25,000.00 was approved to assist with equipment in a new materials recycling facility. The grant will aid in funding the material handling equipment, a dump pit conveyor, an elevated sort line conveyor, bunkers and bins, an in-floor conveyor, as well as a conveyor to move materials up to the baler for processing.

## **REDUCE, REUSE, RECYCLE – DELORAINE BLUE BOX**

**Proponent:** Town of Deloraine  
**Date Approved:** July 20, 2005  
**Total Amount Approved:** \$3,200.00  
**Total Amount Expended:** \$3,200.00

A grant of \$3,200.00 was approved to revitalize the current recycling system with a blue box program. The current system consists of a once a week curbside pickup. The Town of Deloraine will obtain prices from different manufacturers of Blue Boxes, place and order; and distribute the blue boxes. The town will provide all of its residents with a blue box and information regarding what can be recycled and how the recyclables are processed.

## **SNOW LAKE RECYCLING PROJECT**

**Proponent:** Snow Lake Recycling  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$10,000.00  
**Total Amount Expended:** \$10,000.00

A grant of \$10,000.00 was approved to renovate the existing facility located at the Snow Lake landfill, as well as repair a donated forklift. The existing facility requires repair work to the roof, walls and floor. Currently, the bales are moved via a pallet jack, limiting the movement area due to the style of the housing shed. A working forklift would allow for easier transportation and safer storage packing.

## **WANLESS COMMUNITY RECYCLING ENHANCEMENT**

**Proponent:** The Pas & Area Recycling Centre  
**Date Approved:** February 16, 2006  
**Total Amount Approved:** \$6,000.00  
**Total Amount Expended:** \$6,000.00

A grant of \$6,000.00 was approved to construct a mobile depot and place it at the Wanless landfill site. This will give residents the option of recycling more of their waste. Construction and maintenance of the recycling trailer, as well as hauling, will be done on a volunteer basis.

## **WASKADA RECYLCING FACILITY ENHANCEMENT**

<b>Proponent:</b>	Village of Waskada
<b>Date Approved:</b>	July 20, 2005
<b>Total Amount Approved:</b>	\$4,000.00
<b>Total Amount Expended:</b>	\$4,000.00

A grant of \$4,000.00 was approved to establish a recycling facility in Waskada to divert more recyclable waste from the landfill. Money obtained will be used for promotion of pollution prevention projects.

## **PROGRAM DEVELOPMENT**

An allocation of up to \$100,000.00 was approved for WRAPP program development in fiscal year 2005/06.

In 2005/06, the WRAPP Fund expended \$66,126.03 supporting the following key activities:

- Green Transportation and Commuter Challenge
- Composting Conference and Training
- Water Conservation
- Ozone Depleting Substances Management Program
- Waste Reduction Week
- Sustainable Development – Greening Government
- Product Stewardship Program Development
- Canadian Council of Ministers of the Environment (CCME) Pollution Prevention Awards Program and Promotion
- Regional Waste Management Activities

## **BEAR SMART PROGRAM**

<b>Managing Department:</b>	Manitoba Conservation, Wildlife and Ecosystem Protection Branch
<b>Date Approved:</b>	2005/06 Treasury Board Estimates Review Process
<b>Total Amount Approved:</b>	\$50,000.00
<b>Total Amount Expended:</b>	\$49,777.49

### **Summary:**

A broad funding allocation totalling \$50,000.00 for 2005/06 from the Sustainable Development Innovations Fund (SDIF) to support implementation of the *Bear Smart Program* in Manitoba was authorized.

Black bears, from time to time, cause damage to apiaries, leaf cutter bees, crops, livestock, other types of private property and may, on rare occasions, be a threat to human safety in areas such as parks, campgrounds, cottage developments, in and around communities, rural sub-divisions and remote areas.

As the interface between humans and bears broadens, the frequency and intensity of human-bear interactions is expected to increase. Through the introduction of a *Bear Smart Program*, Manitoba Conservation (MC) is shifting from reactive resolution of conflicts with bears to proactive prevention.

By practicing *Bear Smart* principles, the key being - eliminating and/or securing all attractants - bears can be taught (learned behaviour) not to associate people and dwellings with food.

The unfortunate events of 2005 (one fatal and one non-fatal mauling) have heightened awareness and made communities and individuals more receptive to a *Bear Smart Program*. The public is also looking for assurance that it is safe to be in bear country and that the Department is actively working toward ensuring their safety.

### **Background:**

MC estimates that there are 27,000 to 33,000 black bears in Manitoba. The population continues to exhibit a stable trend in most non-agro areas. However, in agro-fringe areas, the population is exhibiting a growing trend due in part to the lack of population control which is limited by firearm restrictions and access to land to hunt.

MC receives on average 1,450 black bear complaints annually (range, 700 – 2,200) and of those, two-thirds are dealt with by Department staff.

- Of these complaints
  - 42% occur in recreational areas
  - 33% in residential areas and
  - 25% in agricultural and undeveloped rural areas

An implementation plan for a Manitoba *Bear Smart Program* was developed and forwarded to the Department Executive in June 2005. The proposed program identified three Phases:

- Phase 1 – Education and Awareness through public outreach programming, as well as developing signs, posters, handout material, and an enhanced web-site.
- Phase 2 – Develop a partnered arrangement with a community where prevention measures would be implemented over a three to five year period as a pilot study.

- Phase 3 - If Phase 2 is successful, communities with high incidents of conflicts would be encouraged to adopt the proven measures. Any community wishing to install the necessary infrastructure would be expected to take the lead for implementing and administering its specific bear-proofing initiatives. MC would provide counsel and facilitate the process.

In late-August and early-September, Manitoba recorded its third bear-caused human fatality in the last 75 years and its tenth non-fatal incident since 1987. The two prior fatal maulings occurred in 1929 and 1982. Three of the previous non-fatal attacks occurred in 2003.

Total occurrences in 2005 reached a new all-time high of 2,300 complaints – a 50 % increase when compared to the previous three-year average. The reason is attributed to natural food failure experienced around residential and recreational areas and the extensive media coverage given to the fatal maulings in Manitoba followed shortly by one in Ontario.

### **Program Activities**

In October 2005, Department Executive directed MC:

- To accelerate the education and awareness component for 2006;
- Implement bear-proofing initiatives in provincial parks rather than communities; and
- Develop a list of deliverables that could be achieved for each of the following budget levels for 2006:
  - At \$50.0, the funding level allocated by SDIF in 2005;
  - At \$125.0, the funding increase proposed by SDIF for 2006; and
  - At \$275.0, the funding increase proposed by SDIF for 2006 and funds from the new initiatives submission to Treasury Board.

In November 2005, a tour of bear-proofing measures in the town site of Wasagaming in Riding Mountain National Park (RMNP) was taken by MC staff. The key points identified by RMNP staff were:

- RMNP invested \$400.0 in a mechanized waste-management infrastructure almost 30 years ago. Ongoing costs have since been minimal. At today's prices, the investment would now cost \$1.4 million. In 2005, RMNP staff handled one problem bear while in the nearby community of Onanole and surrounding cottage subdivisions, nine bears were dispatched.
- If RMNP had to do it all over again, they would develop a partnered relationship with the bordering community. They would have the RM of South Park take the lead for implementing and administering waste management measures. As well, they would group bins into stations which would require fewer bins, thereby, reducing costs significantly.
- The key to effecting long-lasting change in people's attitudes and behaviour respecting co-existence with black bears is communication, education, and regulation.

Bear-proofing initiatives are already in place in most provincial parks; they include a variety of bear-resistant garbage containers, chicken-wire/chain-link garbage collection cages, and some automated trash removal capability. These measures have been effective in managing for human-bear conflicts, as less than 4% of all complaints actioned by Manitoba Conservation staff

originate in provincial parks. The main problem is within communities and cottage developments adjacent to parks.

In December 2005, the Rural Municipality of Victoria Beach and the Victoria Beach Cottage Association wrote letters to the Conservation Minister outlining their concerns about problem bears. Both groups requested Department support to establish a *Bear Smart* Program in their community.

- The Victoria Beach Police Force polices a community of 1,000 cottages within an extremely small area (1.5 x 0.5 mile). In 2005, they handled 82 human-bear conflicts and destroyed seven bears. This was double the number they handled in 2003.
- This one cottage community (Victoria Beach) accounted for one third of all complaints actioned in the Grand Beach District in 2005.
- In two of the seven instances where bears were destroyed, several citizens voiced their displeasure about the actions of police to the news media.

Dr. Mike Campbell, Associate Professor, Recreation Management, University of Manitoba, applied to SDIF for funding in 2006 to evaluate components of the *Bear Smart* Program. The pilot study would:

- Test and identify which mitigation measures reduce human-bear conflicts and are cost-effective and appropriate.
- Evaluate which communication-education strategy is most effective in modifying human behaviour to minimize negative conflict with bears over the long-term, and
- Determine if bears move out of communities that implement such measures.

### **Program Results:**

Phase 1, education outreach, was successfully completed in 2005. A total of \$31.0 was committed to:

- Developing handout material (a folder jacket, *Bear Smart* message and fridge magnet, black bear fact sheet, information sheet on commercially available bear-resistant container suppliers, "Wildlife at Risk" campsite posters, the reprinting of two pamphlets – *Removing the Attractant - Removes the Bear* and *Black Bear Encounters – What To Do*, etc...)
- Purchasing 100 copies of two DVDs - *Living in Bear Country* which gives practical advice on ways to minimize problems with bears in the places that people live, and *Staying Safe in Bear Country* which provides information to help reduce human injuries. Copies of each will be available to the public at all district and regional offices as well as Department information centers and libraries. Shaw Cable has expressed an interest in running the two DVDs during the summer of 2006.
- Purchasing 100 copies of a children's book entitled *The Troublesome Cub*, which teaches kids about the importance and fundamentals of becoming *Bear Smart*. The book will be read to school groups and then left behind as part of the school's reading material.

- Expenses associated with delivering twelve *Bear Smart* workshops in Gull Lake, Pine Falls, Beausejour, Pinawa (two), Lac du Bonnet, Sprague, Rennie, Falcon Lake, Victoria Beach, East Selkirk and the Manitoba Association of Cottage Owners' annual meeting. Audio visual equipment was purchased to deliver the workshop material. The purpose of the workshops is to increase people's understanding as to why conflicts between humans and bears occur and what people can do when they encounter bears.

The balance, \$19.0, was committed to:

- The design and construction of *Be Bear Smart* signage (highway, traffic and pedestrian). The Branch, through a contractor, will install the signs in accordance with Transport and Government Services policy in the spring of 2006. The signs will be placed near and in several communities with high incidents of bear encounters in the Eastern region and around the southern portion of Lake Winnipeg.

The Wildlife and Ecosystem Protection Branch worked with:

- Operations Division to begin revising the operational guidelines respecting the handling of problem black bears in the field.
- Parks and Natural Areas Branch to review garbage management and pickup practices, and ensuring that public outreach in provincial parks is consistent with the overall *Bear Smart* theme.

#### **Evaluation:**

All program objectives of Phase 1 were met for 2005/06. Although attendance at the workshops was lower than expected, the presented material was well received and prompted Victoria Beach and Pinawa to review their situation as it applies to problem bears. Except for Gull Lake, attendance preceding the fatal mauling was 53 people for seven workshops, while post mauling, attendance ranged between 40 and 65 in each of four workshops,

Conflict between humans and bears will never be totally resolved. However, the frequency and intensity of that conflict can be managed if people practice bear smart behaviour. Communication is key to the success of the Bear Smart initiative and the material developed in 2005 will be the cornerstone of what will be available to the public once the program is formally launched in 2006. The need to communicate the bear smart message will be ongoing and therefore continued SDIF funding will be required.



## WATER STEWARDSHIP INITIATIVES

<b>Managing Department:</b>	Manitoba Water Stewardship
<b>Date Approved:</b>	2005/06 Treasury Board Estimates Review Process
<b>Total Amount Approved:</b>	\$350,000.00
<b>Total Amount Expended:</b>	\$269,500.00

### **Summary:**

A broad funding allocation totaling \$350,000.00 for 2005/06 from the Sustainable Development Innovations Fund (SDIF) provided grants in support of research, projects and activities that further the purpose of *The Water Protection Act*, which received Royal Assent on June 26, 2005, and/or assist in the implementation of watershed management plans or water conservation programs.

The Water Stewardship Initiatives will support projects in the following priority areas: watershed management planning and implementation; water-related scientific research; education and capacity building; water conservation; water quality; and economic development.

A sub-allocation of \$25,000.00 was established for the Zebra Mussel Program.

The Minister of Water Stewardship has delegated grant approval authority up to \$25,000.00, including approvals cashflowed or phased over more than one fiscal year.

## **WATER STEWARDSHIP INITIATIVES SUMMARY**

<b>Total Allocation for 2005/06</b>	<b>\$350,000.00</b>
<b>Water Stewardship Fund</b>	
Applications Processed	5
Applications Approved	5
Applications Deferred	0
Applications Declined	0
Applications Withdrawn	0
Total Amount for Grants Approved	\$244,500.00
Total Amount for Grants Expended	\$244,500.00
<b>Zebra Mussel Program</b>	<b>\$ 25,000.00</b>
Total Expended	\$269,500.00

A brief description of the five projects funded under the Water Stewardship Initiatives, including the Zebra Mussel Program follows:

## **Water Stewardship Initiatives**

### **EDUCATION AND CAPACITY BUILDING**

#### **WATER POLICY WORKSHOPS**

<b>Proponent:</b>	Pollution Probe
<b>Date Approved:</b>	January 10, 2006
<b>Total Amount Approved:</b>	\$25,000.00
<b>Total Amount Expended:</b>	\$25,000.00

Pollution Probe is a Canadian environmental organization that defines environmental problems through research, promotes understanding through education and presses for practical solutions through advocacy.

A grant of \$25,000.00 was approved for Pollution Probe to conduct a workshop in Winnipeg as one of a series of five progressive workshops across Canada examining the state of water policy in Canada, in cooperation with key organizations and institutions. The objective of the initiative is to allow decision makers and stakeholders to exchange perspectives on the subject and ultimately suggest new strategies for achieving long-term sustainability of our water sources. The workshops will look at the key issues and challenges and opportunities regarding both quality and quantity within global, North American and national context for domestic water.

#### **WATER CAUCUS**

<b>Proponent:</b>	Manitoba Eco-Network
<b>Date Approved:</b>	January 10, 2006
<b>Total Amount Approved:</b>	\$25,000.00
<b>Total Amount Expended:</b>	\$25,000.00

The Water Caucus was established in 2004. The Caucus's mandate is to bring together environmental, non government organizations (ENGOS) from around the province of Manitoba with an interest in or activities and policies related to water, in order for the groups to share information with each other, build capacity to understand and act upon water issues in their communities, while working together on common goals.

A of \$25,000.00 was approved to support the position of the Caucus Coordinator, as well as the activities associated with the Water Caucus. The Coordinator will facilitate activities, arrange regular meeting opportunities, ensure timely communications to the members of the Water Caucus and provide support to groups where possible. The goals of the grant proposal are to encourage and facilitate the participation of ENGOS in public policy discussions and development on water issues in Manitoba; educate ENGOS and the public on water issues and opportunities in Manitoba; and create opportunities for networking and outreach between the ENGOS, the public, and government organizations interested in water stewardship.

## **LEARNING EXPERIENCE TOUR**

**Proponent:** Manitoba Conservation Districts Association (MCDA)  
**Date Approved:** March 7, 2006  
**Total Amount Approved:** \$9,500.00  
**Total Amount Expended:** \$9,500.00

A grant of \$9,500.00 was approved for the Manitoba Conservation Districts Association (MCDA), in partnership with the South Nations Conservation Authority in Ontario, to plan a learning tour for members from Manitoba Conservation Districts to Ottawa, Ontario to learn from Ontario's watershed planning experience. Thirty members of the MCDA are involved: fifteen managers, fifteen board members and the MCDA Chair and Executive Director. The tour will include a combination of site visits, presentations and meetings with federal Ministers.

The primary purpose of the learning tour is to broaden the knowledge base of the Conservation District Managers and board members in regards to watershed planning and seek new methods which can be applied in Manitoba. Watershed planning is a means of aiding landowners and communities while raising awareness of positive water protection initiatives, leading to reduced risks and providing benefits to Manitoba's water, soil and air resources. Currently, 17 conservation districts cover 70% of agro-Manitoba and work to educate and aid landowners in various capacities and areas, such as riparian management, soil erosion, water quality, livestock water systems, drainage and buffer strips.

## **WATER RELATED SCIENTIFIC RESEARCH**

### **WATER MANITOBA 2003: VISIONING SUSTAINABILITY**

**Proponent:** International Institute for Sustainable Development (IISD)  
**Date Approved:** March 21, 2006  
**Total Amount Approved:** \$160,000.00  
**Total Amount Expended:** \$160,000.00

A grant of \$160,000.00 was approved for IISD to develop a comprehensive water resource sustainability study for Manitoba, including a planning framework stating targets, initiatives and strategic directions. 'Water Manitoba 2030: Visioning Sustainability' will complement Manitoba's existing vision, strategies, programs and policies. It will address concerns regarding current patterns of water resource use and management and suggest methods ensure long term sustainability of the resource from both an economic and environmental perspective. The study will provide an analysis that will help define a future vision for sustainable water resources management in the province and describe the policies, programs and economic instruments necessary to achieve this vision. It will provide a policy framework to support sustainable water resources management.

The grant is provided to support Phase I of a three phase water sustainability study:

Phase One: Policy Review and Current Water Use  
    Historical water policy review  
    Current water use study  
    Current policy gap analysis  
    Technology survey and future water use projections.

Subsequent phases of the overall project include: Phase Two: Conventional Demand Side Management and Phase Three: The Soft Path Analysis.

Elements of the study include:

- A comprehensive water use analysis for the province;
- An integrated water/energy efficiency co-benefits study, demonstrating synergies between water use efficiency, energy efficiency and climate change mitigation;
- A watershed- based case study, where a representative watershed is used to illustrate the key features of the province-wide water soft path;
- Scenario analyses of irrigation and agricultural water management; and
- An analysis of the changes in natural capital (measured as changes in ecological goods and services provisioning) at a watershed scale and, if possible, at a provincial scale.

A technical committee established by the IISD, with representation from key government departments, will provide input to the project manager.

Upon completion of the study by IISD, Manitoba Water Stewardship, Manitoba Agriculture, Food and Rural Initiatives, Manitoba Energy, Science and Technology and Green Manitoba, will be able to access the findings to support research and analysis to establish a clear vision, specific water use targets and required policies and programs to achieve the vision and move Manitoba into a leadership role in sustainable water resources. With this research and analysis Manitoba will increase its ability to deal with existing and future balances between water supply and demand.

## **WATER QUALITY**

### **CANADA/MANITOBA LAKE WINNIPEG IMPLEMENTATION COMMITTEE**

<b>Proponent:</b>	Red River Basin Commission
<b>Date Approved:</b>	May 17, 2005
<b>Total Amount Approved:</b>	\$25,000.00
<b>Total Amount Expended:</b>	\$25,000.00

While long-term provincial efforts and commitments to Lake Winnipeg are clear, it is less certain that federal efforts will be sustained. To this end, a Federal-Provincial Lake Winnipeg Implementation Committee has been formed through and supported by, the Red River Basin Commission. The Red River Basin Commission is a non-governmental organization with representation from Minnesota, South Dakota, North Dakota and Manitoba. A grant of \$25,000.00 was approved to support the Red River Basin Commission's role within the Implementation Committee. The Committee's role is to coordinate development of a Canada-Manitoba framework agreement on scientific research and a basin wide action plan to enhance Lake Winnipeg water quality. This agreement identifies joint priorities and funding sources and defines respective roles and responsibilities for implementation of the plan. The Implementation Committee will be informed by the work and consultations of the Lake Winnipeg Stewardship Board and will work closely with a team of federal and provincial officials to support them in coordination of programs that can be put in place quickly to promote the health of the lake. An agreement between Manitoba and Canada to jointly fund the Lake Winnipeg Implementation Committee has been reached.

## **ZEBRA MUSSEL 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. Since that time, 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 have been found in the Missouri River at Sioux City, Iowa. Although not presently found in Manitoba waters, this costly foreign species is close to our watershed boundaries

Zebra mussels attach themselves to any suitable submerged surface including the inside of man-made structures. They have caused millions of dollars of damage in the Great Lakes region of Ontario and the US by clogging the intakes of towns, cities, manufacturing industries and utilities. They have severely reduced the recreational value of beach areas and reduced native species important in the food chain.

Dispersion of zebra mussels in large connected water basins is largely due to the movement of commercial watercraft such as large ships and barges that have zebra mussels attached to the hull. 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.

Manitoba remains vulnerable to invasion by zebra mussels. For example, on June 30, 1999, zebra mussels were found on a pleasure boat that was purchased five days earlier at Orillia Ontario (Lake Simcoe) and trailered to a yacht club on the Red River just north of Winnipeg. All zebra mussels were dead and no immatures were found in the bilge water. As a precaution, the owner was ordered to scrape the boat and wash it down with water containing bleach.

Water quality data indicate that numerous lakes and rivers in Manitoba would support populations of zebra mussels, should they be accidentally introduced into the province. 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, Brainerd Lakes, Minnesota. Trailered watercraft is recognized as a key vector of zebra mussel dispersion by North American agencies responsible for aquatic invasive species (AIS) prevention and management.

Thus, 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 aquatic invasive species.

### **Goal and Objectives:**

The primary goal of this program is to prevent accidental introduction of zebra mussels and other aquatic invasive species into the province of 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. 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 provide employment to students under the STEP Employment Initiative.

### **Program Results 2005/06:**

#### **Education and Promotion:**

A zebra mussel brochure was re-drafted, printed and distributed for the boating public and a key-chain (carabiner) was provide to the public. Brochures outlining the steps boaters can take to prevent accidental introductions and carabiners with the message 'Stop Invasive Species!' were provided to each boater who was inspected and surveyed at the international borders and other boat ramps in eastern Manitoba including Whiteshell Provincial Park.

- During the open water season of 2005, two STEP students were employed by Manitoba Water Stewardship to inspect trailered watercraft traveling into Manitoba. Two STEP students were hired from May 1 to August 31, 2006 to allow for equipment inspections of the early fishing season. Inspections were made at the international border crossings at Emerson and Sprague. In addition, inspections of boat trailers were made at launch sites in the Whiteshell Provincial Park, and along the Red River corridor from Emerson to Selkirk Park. In addition to equipment inspections, boaters were surveyed (where possible) about their general knowledge of AIS. Results of the inspections and surveys are summarized as follows:

#### **Border Crossings:**

Students inspected trailered watercraft entering Manitoba at Sprague and Emerson from approximately May 9<sup>th</sup> to August 30<sup>th</sup>, 2005.

- 279 border inspections and interviews were conducted at two international border locations;
- 433 inspections of boat trailers were conducted in the Whiteshell Provincial Park and Red River Corridor;

- 167 boats out of 279 (60%) originated from jurisdictions that have waters with zebra mussels;
- no evidence of zebra mussels or other AIS was found on any boat or trailer;
- 14% of visitors trailering a boat did not clean their boat before traveling;
- 14% of the boating visitors were unaware of issues concerning AIS;
- boats originated mostly from the following jurisdictions: Minnesota (48%), North Dakota (11%), Iowa (9%), South Dakota (9%), and Wisconsin (4%).

#### **Public Boat Launch Inspections:**

443 boat trailers were inspected at 17 launch sites;  
80% originated within Manitoba;  
4% originated from Alberta;  
3% originated from Minnesota;  
no evidence of zebra mussels or other AIS were found on boat trailers.

#### **Program Evaluation:**

##### **Positive Results:**

A critical evaluation of the program indicates that during 2005/06, all five program objectives were met. Approximately 710 equipment inspections were completed from various locations in eastern Manitoba and 279 surveys of visiting boaters were completed. Brochures and carabiners reminding boaters of aquatic invasive species were handed out to visiting boaters. Information about the prevention of zebra mussels was also sent to registrants of those Manitoba fishing derbies likely to attract international competitors.

# PROJECTS FROM PREVIOUS YEARS

## PROGRAMS ALLOCATED FUNDING

## DURING THE 2005/06 FISCAL YEAR

Number of Projects: 4  
Total Expended: \$14,813.37

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<u>PROJECT NAME</u>	<u>TOTAL EXPENDED</u>
<b>SUSTAINABLE AGRICULTURAL PRACTICES</b>	
McLeod Harvest New Grain Harvesting Technology	\$0.00
<b>UNDERSTANDING OUR ENVIRONMENT</b>	
Biodiversity Publication – Manitoba Edition	\$7,000.00
Fisheries Sustainable Development Educational Science Exercises (Senior II to IV)	\$3,243.01
Hayes River Educational Kit	\$4,570.36



**DETAILED LISTING OF PROJECTS**  
**FROM PREVIOUS YEARS WITH CARRYOVER**  
**AUTHORITY**  
**IN THE 2005/06 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 2005/06 fiscal year.

Project descriptions have been provided in previous Annual Reports.

**SUSTAINABLE AGRICULTURAL PRACTICES**

**McLeod Harvest New Grain Harvesting Technology**

Proponent:	McLeod Harvest Inc.
Date Approved:	March 23, 2004
2005/06 Expenditures:	\$0.00
Total Amount Projected:	\$0.00

**UNDERSTANDING OUR ENVIRONMENT**

**Biodiversity Publication – Manitoba Edition**

Proponent:	Manitoba Conservation and Keewatin Publications
Date Approved:	March 16, 2005
2005/06 Expenditures:	\$7,000.00
Total Amount Projected:	\$ 0.00

**Fisheries Sustainable Development Educational Science Exercises (Senior II to IV)**

Proponent:	Manitoba Water Stewardship, Fisheries Branch
Date Approved:	March 4, 2004
2005/06 Expenditures:	\$3,243.01
Total Amount Projected:	\$ 0.00

**Hayes River Educational Kit**

Proponent:	Manitoba Conservation
Date Approved:	October 28, 2002
2005/06 Expenditures:	\$4,570.36
Total Amount Projected:	\$ 0.00

## **APPENDIX I**

**Sustainable Development Innovations Fund  
 Five Year Expenditure Summary (\$000)  
 for years ending March 31, 2001 - March 31, 2006**

APPROPRIATION	Actual/Adjusted Expenditures				
	2001/02	2002/03	2003/04	2004/05	2005/06
Sustainable Development Innovations Fund	2,865.8	2,848.3	2,938.8	2,969.1	3,754.7
<b>Total</b>	2,865.8	2,848.3	2,938.8	2,969.1	3,754.7