Agenda – Executive Policy Committee – February 15, 2006

REPORTS

Item No. 1 Environmental Priority and Implementation Plan
File E-7

ADMINISTRATIVE RECOMMENDATION:

That the report and the priorities contained herein be received as information.

Agenda – Executive Policy Committee – February 15, 2006

DECISION MAKING HISTORY:

EXECUTIVE POLICY COMMITTEE RECOMMENDATION:

On December 7, 2005, the Executive Policy Committee granted an extension of time of sixty (60) days for the Administration to review the Multiple Family Dwelling Grant Program and report back.

COUNCIL DECISION:

On October 27, 2004, Council concurred in the recommendation of the Executive Policy Committee and adopted the following:

1. That the Civic Environmental Committee's report titled *Sustainable Winnipeg: A Comprehensive Environmental Strategy*, attached as Appendix A, be approved in principle.

2. That *Embracing Sustainability: An Environmental Priority and Implementation Plan for the City of Winnipeg 2004-2006,* attached as Appendix B, be adopted. The Plan provides a consolidated overview of Council-directed services, initiatives, and programs that respond to the Civic Environmental Committee's report.

3. The environment portfolio at the City of Winnipeg, with the support of the Civic Environmental Committee, has evolved from a focus on high level policy direction to a focus on implementation, coordination, and the ongoing review of progress and priorities. Given this evolution, it is recommended that the position of Coordinator of Environmental Initiatives and corresponding operating budget be transferred from the EPC Secretariat to the Administration.

4. That the Chief Administrative Officer report back to the Executive Policy Committee in the fourth quarter of 2005 on progress made in implementing the initiatives identified in *Embracing Sustainability* and provide recommendations for future environmental priorities.

5. That the Proper Officers of the City be authorized to do all things necessary to implement the intent of the foregoing.

RE: Environmental Priority and Implementation Plan

FOR SUBMISSION TO: Executive Policy Committee

ORIGINAL REPORT SIGNED BY: Chief Administrative Officer

REPORT DATE: January 16, 2006

RECOMMENDATIONS:

1) That this report and the priorities contained herein be received as information.

Report Summary

Key Issues:

- On February 18, 2004, the Civic Environmental Committee (CEC) presented ***SUSTAINABLE WINNIPEG: A Comprehensive Environmental Strategy*** (see Appendix A) to Executive Policy Committee (EPC) thereby fulfilling the responsibility assigned to it by City Council. In receiving ***SUSTAINABLE WINNIPEG,*** EPC referred the document to the Chief Administrative Officer to develop a "Priority and Implementation Plan".

- ***EMBRACING SUSTAINABILITY: An Environmental Priority and Implementation Plan for the City of Winnipeg 2004-2006*** was submitted to EPC in June 2004. The plan aligns environmental priorities with the policy directives of ***Plan Winnipeg 2020 Vision*** while responding to many of the objectives outlined by the CEC. It highlights the key services, initiatives, and programs the City will be undertaking over the next several years.

Implications of the Recommendation(s):

General Implications

☐ None

X For the organization overall and/or for other departments

☐ For the community and/or organizations external to the City

☐ Involves a multi-year contract

Comment(s):

The 2005 report on ***EMBRACING SUSTAINABILITY*** represents the Administration's commitment to monitor and report back on progress relative to environmental initiatives and to highlight new environmental initiatives.

Policy implications

X No

☐ Yes

Comment(s):

The policy direction implicit in the report is consistent with existing Council policy as expressed in ***Plan Winnipeg 2020 Vision***.

Environmental implications

☐ No

X Yes

Comment(s):

EMBRACING SUSTAINABILITY represented the City's first comprehensive plan relative to the environment. This report examines the City's progress towards the goals laid out in ***EMBRACING SUSTAINABILITY***.

Human Resources implications

X No

☐ Yes

Comment(s):

Financial Implications

X Within approved current and/or capital budget

☐ Current and/or capital budget adjustment required

Comment:

The initiatives identified in the report have already been funded through the current and/or capital budget.

Report

REASON FOR THE REPORT:

In February 2004, Executive Policy Committee received as information a report presented by the Civic Environmental Committee entitled ***SUSTAINABLE WINNIPEG: A Comprehensive Environmental Strategy***. Executive Policy Committee (EPC) referred the report to the Chief Administrative Officer to develop a "Priority and Implementation Plan" in consultation with the Civic Environmental Committee and report back to Executive Policy Committee by June 2004.

EMBRACING SUSTAINABILITY, the City's environmental priority and implementation plan, was submitted to Executive Policy Committee in June of 2004. Executive Policy Committee then directed the Chief Administrative Officer to report back in the fourth quarter of 2005 on progress made in implementing the initiatives identified in ***EMBRACING SUSTAINABILITY*** and provide recommendations for future environmental priorities.

This report details the progress made on implementing the initiatives identified in ***EMBRACING SUSTAINABILITY***, and fulfils the Administration's commitment to regularly report on the City's environmental initiatives.

HISTORY:

On February 18, 2004, the Civic Environmental Committee (CEC) presented *Sustainable Winnipeg: A Comprehensive Environmental Strategy* to Executive Policy Committee. Building upon the policy foundation for environmental sustainability already established in *Plan Winnipeg 2020 Vision*, the CEC report provided the civic organization with a comprehensive guide to ensuring Winnipeg's sustainability for years to come. *Sustainable Winnipeg* identified a series of key principles, established policy objectives in critical areas of environmental management, and offered numerous suggestions for strategic action in the future.

In receiving *Sustainable Winnipeg,* Executive Policy Committee referred the document to the Chief Administrative Officer to develop a "Priority and Implementation Plan" that is consistent with the principles and policy objectives identified in the CEC report

Embracing Sustainability: An Environmental Priority and Implementation Plan for the City of Winnipeg – 2004 to 2006 represented the City's environmental priorities over the time period covered in the plan. Guided by the policy directives in Plan Winnipeg and following the advice and suggestions outlined in *Sustainable Winnipeg*, *Embracing Sustainability* described each of the environmental programs, services and projects that the City was either currently doing or was planning to do within the next three years.

EPC then requested that the Chief Administrative Officer report back annually on the status of the initiatives outlined in the plan. This is the first annual report on the City's environmental priority plan and demonstrates a commitment to report on progress.

DISCUSSION:

Embracing Sustainability contains eight chapters, which align with the chapters of *Sustainable Winnipeg*.

1) Decision Making and Management
2) Climate Change and Air Quality
3) Urban Energy
4) Sustainable Land and Development
5) Sustainable Transportation
6) Solid Waste and Materials Management
7) Sustainable Water and Wastewater Management
8) Pesticides in the Urban Environment

There are a total of 73 initiatives outlined in *Embracing Sustainability.* Many of the initiatives are ongoing, and demonstrate a long-term commitment to the environment. Others are pilot projects, or feasibility studies, intended to determine the effectiveness of specific environmental initiatives in the City's operations. The intent of this report is to provide a list of the initiatives outlined in *Embracing Sustainability* and a brief description of their current status. This information can be found in Appendix A and B of this report.

In reviewing the progress of the priority plan, it is worth noting the changes since the publication of *Embracing Sustainability*. At the time the priority plan was prepared, many of the initiatives outlined were just getting underway. Environmental awareness was important for many staff, but had not fully been absorbed into the City's corporate culture. *Embracing Sustainability* was the first time that the City's environmental priorities were bundled together under one cover. The report demonstrated that the City of Winnipeg is an organization that provides a range of environmental services that are designed to protect and enhance Winnipeg's sustainability

In meeting the challenges outlined in the plan, it is clear that environmental awareness is an increasingly important factor in the analysis and review of City initiatives. Each of the City's administrative reports now include a request for the environmental impact of the recommendation, placing the environment alongside financial and human resource factors as a key consideration. Further, the Environmental Coordinator position was filled in the summer of 2005.

A number of other environmental initiatives are being developed as well. As reported in *Embracing Sustainability*, the City is committed to reducing greenhouse gas emissions through the development of a Climate Change Action Plan. Public Works is hard at work increasing the efficiency of civic buildings through their Energy Management Plan. Both

the Fleet Management Agency and Transit are testing anti-idling programs, to save on fuel and reduce greenhouse gases. And Water & Waste is in the process of implementing a wide range of wastewater system improvements resulting from direction by the Clean Environment Commission.

While the status of each of the City's 73 initiatives is outlined in Appendix A and B, the following highlights the four initiatives just described. Several of these initiatives are new since the publication of *Embracing Sustainability*, reflecting new environmental priorities.

1) Climate Change Action Plan

One of the largest environmental issues facing Winnipeg today is climate change caused by greenhouse gas emissions, which has the potential to significantly impact on our way of life. To address the City's greenhouse gas emissions, the Chief Administrative Officer has been directed by Council to submit a Climate Change Action Plan in 2006.

The objective of the plan is to develop a comprehensive greenhouse gas emissions reduction strategy for the municipal operations of the City of Winnipeg. In addition, it is hoped that by circulating the plan throughout the community, it will encourage the private sector and the public at large in Winnipeg to take operational measures and personal actions to reduce greenhouse gas emissions. In order to achieve these goals, the City will proceed with a three-phased program which concentrates on developing a municipal action plan and a community outreach program.

The first step is to update the existing greenhouse gas emissions inventory and forecast with specific emphasis on municipal operations but which will also include community wide data. Then, through internal and external consultations, the City will establish an emissions reduction target for municipal operations and develop a comprehensive greenhouse gas emissions reduction strategy to meet those targets. Finally, an outreach program will be developed to circulate the municipal plan and promote the need for community–wide action to address the key issues associated with climate change.

The Climate Change Action Plan meets the administrative commitment as outlined in *Embracing Sustainability* (Chapter 2 – Climate Change and Air Quality). In addition, the plan will align with the Mayor's *Action Plan for a New Winnipeg* which commits to the adoption of a comprehensive energy efficiency plan for the City of Winnipeg.

2) City of Winnipeg Energy Management Plan

The Department of Public Works has developed an Energy Management Plan, with the goal of using energy and water more efficiently and substantially reducing the cost of operating civic facilities, while at the same time reducing harmful emissions that

contribute to acid rain, smog and other environmental concerns. The plan has been registered with Natural Resources Canada's Energy Innovators Initiative and with Canada's Climate Change Voluntary Challenge and Registry.

There are a number of elements to the plan, but one of the key elements is a partnership between the provincial electric and natural gas utility, Manitoba Hydro, and the City.

The *Power Smart Agreement* is implementing investment to improve the energy performance of City buildings – libraries, pools, arenas, administrative offices, fire stations and even City Hall - plus street lights and traffic signals. At least 170 civic facilities will experience energy efficiency upgrades that will save electricity, natural gas and/or water.

Under the Power Smart Agreement, Manitoba Hydro has committed to achieving annual savings of $800,000 to $1.2 Million by 2007. This is roughly 5% of annual utility costs. There are greenhouse gas reductions associated with these savings, and in the work done up to September 2004, this partnership has resulted in over 200 tonnes of CO_2 emissions reduced.

Facility operators and occupants are being trained to use new, more efficient technologies, and this awareness campaign is as valuable as the new equipment. Project-specific operator training and posters and brochures will inform and educate both City staff and the general public who use the facilities.

3) Winnipeg Fleet Management Agency

The Winnipeg Fleet Management Agency (WFMA) is carrying out a number of environmental initiatives, two of which are highlighted here.

Hybrid Evaluation
WFMA owns four hybrid sedans and two hybrid SUVs, which they are monitoring in order to assess vehicle performance and fuel efficiency. To date, the vehicles have performed well in all seasons and have proven to be the most fuel-efficient vehicles in the fleet. Once the evaluation is complete, the Agency will disseminate the performance and efficiency information to departments to assist them with their fleet acquisition decisions.

Repair our Air Challenge
Winnipeg Fleet Management Agency is participating in the 2005 Repair Our Air Challenge, a competition to encourage fleets across Canada to reduce their idling. The goal of the Challenge is to increase management and staff awareness of idling and reinforce the environmental benefits and financial savings that can be achieved by reducing the amount of emissions and fuel wasted as the result of unnecessary vehicle idling. Other Winnipeg-based competitors include MTS and Manitoba Hydro.

4) Upgrades to Winnipeg's water and wastewater systems

With public awareness of water issues rising, and the health of Lake Winnipeg increasingly in the spotlight, it is worth noting the work being done by the City to address water and wastewater issues.

One of the largest sections in the Embracing Sustainability document was the section dealing with water and wastewater treatment. A total of twenty initiatives were outlined in this section, and sixteen of them dealt with water supply and distribution and wastewater collection and treatment. Some of these initiatives are ongoing, but many are related to the City's plans to upgrade their water and wastewater treatment.

Winnipeg's City Council had long recognized the need for a new water treatment plant, and has been setting aside funds for many years. The new plant is currently being constructed at the Deacon Reservoir at a cost of nearly $230 million. In addition, as recommended by the Clean Environment Commission and as mandated by the Province, the City is moving more quickly to implement its long-term, $900 million plan to upgrade Winnipeg's wastewater treatment systems. The upgrades include disinfection plants at the NEWPCC and WEWPCC, effluent nutrient control, and a combined sewer overflow mitigation program. The City has also provided a grant to the Lake Winnipeg Research Consortium.

Once completed, these upgrades will improve the quality of the city's drinking water and reduce risk against waterborne pathogens, and reduce the impact that the City's wastewater has on waterways, and will also reduce the frequency, duration and magnitude of combined sewer overflows.

Financial Impact Statement

Date: November 25, 2005

Project Name:

Environmental Priority and Implementation Plan

First Year of Program **2005**

	2005	2006	2007	2008	2009
Capital					
Capital Expenditures Required	$ -	$ -	$ -	$ -	$ -
Less: Existing Budgeted Costs	-	-	-	-	-
Additional Capital Budget Required	$ -	$ -	$ -	$ -	$ -
Funding Sources:					
Debt - Internal	$ -	$ -	$ -	$ -	$ -
Debt - External	-	-	-	-	-
Grants (Enter Description Here)	-	-	-	-	-
Reserves, Equity, Surplus	-	-	-	-	-
Other - Enter Description Here	-	-	-	-	-
Total Funding	$ -	$ -	$ -	$ -	$ -
Total Additional Capital Budget Required	$ -				
Total Additional Debt Required	$ -				
Current Expenditures/Revenues					
Direct Costs	$ -	$ -	$ -	$ -	$ -
Less: Incremental Revenue/Recovery	-	-	-	-	-
Net Cost/(Benefit)	$ -	$ -	$ -	$ -	$ -
Less: Existing Budget Amounts	-	-	-	-	-
Net Budget Adjustment Required	$ -	$ -	$ -	$ -	$ -

Additional Comments:

There is no additional financial implications associated with the recommendations of this report.

The initiatives identified in the report have already been funded through current and/or capital budget. Any additional projects would be the subject of separate reports in which related financial implications would be presented.

(Original signed by R. Abeysekera)
Manager of Finance & Administration
Corporate Services Dept.

IN PREPARING THIS REPORT THERE WAS CONSULTATION WITH, AND CONCURRENCE BY:

Community Services (Office of the Director, Insect Control Branch)
Public Works (Engineering, Parks and Open Space Division)
Water and Waste (Engineering, Waste Disposal)
Planning, Property and Development (Planning and Land Use, Civic Accommodations, Transportation Planning, Housing Development)
Transit (Planning and Schedules)
Winnipeg Fleet Management Agency

THIS REPORT SUBMITTED BY:

Department: CAO Secretariat
Division: Strategic Management
Prepared by:
File No.:

APPENDIX A:

This is a chart outlining the status of each of the seventy-three initiatives contained in ***EMBRACING SUSTAINABILITY***.

Section One - Decision Making and Management	TIMELINE		
	Completed	2006	Ongoing
1.1 Environmental Initiatives Management Structure	X		
1.2 Plan Winnipeg Review		X	
1.3 Environmental Planning & Performance Reporting			X
1.4 New Deal			X
1.5 Establishment of the Planning Executive Advisory Committee (P.E.A.C.)	X		
1.6 Public Education – Assiniboine Forest			X
1.7 Public Education – Living Prairie Museum			X
1.8 Public Education – Zoo			X
1.9 Public Education – Living Prairie Museum Website	X		
1.10 Public Education – Naturescape Manitoba Partnership		X	
1.11 Public Education – Conservatory			X
1.12 Public Education – Recreation & Leisure Programming			X
Section Two - Climate Change and Air Quality	**TIMELINE**		
	Completed	**2006**	**Ongoing**
2.1 Climate Change Action Plan		X	
2.2 Idle Free Administrative Directive		X	
2.3 Climate Change Community Challenge (C4)	(Decision by the Province pending)		
2.4 Alternative Fuels for City of Winnipeg Transit buses			X
2.5 New Bus Purchases / Bus Engine Rebuilds			X
2.6 Brady Road Landfill Gas Project		X	

2.7 Support for Red River Valley Clean Cities Coalition Winnipeg Chapter Inc.			X
2.8 Smoking Regulation By-law	X		
Section Three - Urban Energy	**TIMELINE**		
	Completed	**2006**	**Ongoing**
3.1 Historical Building Green Strategy		X	
3.2 Energy Sense Program		X	
3.3 Energy Conservation Initiatives			X
3.4 Water and Wastewater Facilities			X
Section Four - Sustainable Land and Development	**TIMELINE**		
	Completed	**2006**	**Ongoing**
4.1 Green and Sustainable Buildings			X
4.2 Fort Rouge Yards Re-development Plan			X
4.3 Ecologically Significant Lands Plan			X
4.4 Downtown Design	X		
4.5 Parkway System Prioritization		X	
4.6 Inner City Infill Housing			X
4.7 Inner-City Housing Rehabilitation			X
4.8 Green Roof Study	X		
4.9 Heritage Buildings - Community Incentives to Promote Green Building Strategy		X	
4.10 Developing Brownfield Site			X
4.11 Millennium Library	X		
4.12 234 Young Street “Green Indicator” Project	X		
Section Five - Sustainable Transportation	**TIMELINE**		
	Completed	**2006**	**Ongoing**
5.1 Urban Transportation Showcase			X
5.2 Bus Rapid Transit		X	

5.3 Transit Priority Measures			X
5.4 Promotional Transit Fare Initiatives			X
5.5 Improved Access to Transit Service information			X
5.6 Park and Ride Service			X
5.7 Bike Racks on Buses			X
5.8 More Transit Express Routes			X
5.9 DART Transit Service			X
5.10 Active Transportation – City of Winnipeg employees			X
Section Six - Solid Waste and Materials Management	**TIMELINE**		
	Completed	**2006**	**Ongoing**
6.1 User-Pay Solid Waste Management System			
6.2 City of Winnipeg Departmental Recycling - Building Waste Minimization			X
Section Seven - Sustainable Water and Wastewater Management	**TIMELINE**		
	Completed	**2006**	**Ongoing**
7.1 Combined Sewer Overflow (CSO) Management Strategy Study	X		
7.2 Leachate Management	X		
7.3 Nutrient Reduction of Phosphorus (P) and Nitrogen (N) in treated wastewater effluents.	X		
7.4 Water Conservation Program			X
7.5 Water Treatment Plant			X (to 2007)
7.6 Water Conservation – Maximum Performance Testing of Popular Toilet Models	X		
7.7 Effluent Ammonia Studies	X		
7.8 Sewer Renewals			X
7.9 Biosolids Management Program		X	
7.10 Innovative Construction Techniques			X
7.11 Retention Basins to Improve Run-off Quality	X		

7.12 Ultraviolet Light (UV) Disinfection Research Partnerships	X		
7.13 Disinfection of Treated Wastewater Effluents at the Wastewater Pollution Control Centres		X	
7.14 Watermain Cathodic Protection Program			X
7.15 Watermain Criticality Assessment Project			X
7.16 Watermain Renewal Program			X
7.17 Water Main Cleaning Program			X (to 2007)
7.18 Best Practices Handbook for City's Waterways		X	
7.19 Basement Flooding Relief Initiative – Combined Sewer Relief Program			X (to 2015)
7.20 Basement Flooding Relief Initiative – Sump Pits and Pumps		X	
Section Eight - Pesticides in the Urban Environment	TIMELINE		
	Completed	2006	Ongoing
8.1 Public Education – Insect Control			X
8.2 Partnerships - Insect Control			X
8.3 Insect Control: Environmentally Friendly Practices & Approaches			X (to 2007)
8.4 Public Education – Reduce Pesticide Use on Private Property			X
8.5 Weed Control Research and Experimentation			X

APPENDIX B:

This is the detailed report on each of the seventy-three initiatives contained in ***EMBRACING SUSTAINABILITY***.

Section One - Decision Making and Management

Section One refers to Decision Making and Management, including:

- Sustainable Governance and Corporate Management
- Fiscal Policy and Sustainable Budgeting
- Partnerships
- Environmental Education

Supportive Policy Direction can be found in the following sections of Plan Winnipeg:

- 5A-01 Promote Environmentally Responsible Decision-Making
- 2B-01 Commit to Sustainability
- 5A-05 Address Water, Air and Noise Pollution

1.1 Environmental Initiatives Management Structure

In 2004, the City decided to hire a new environmental coordinator and shifted the position over to the Chief Administrative Officer Secretariat. The position was filled in the summer of 2005.

1.2 Plan Winnipeg Review

This initiative referenced an important step in further integrating Plan Winnipeg's long-term vision into the City's major decision-making processes. Specifically, an important tool in this process is the generation of a land-use based development plan to provide a tangible set of strategies for proactively managing growth in accordance with Plan Winnipeg's vision. It is anticipated that this plan will evolve from the five-year review of Plan Winnipeg scheduled to begin in 2006.

1.3 Environmental Planning & Performance Reporting

Departments are now required to include a statement on the environmental impact of any recommendations. Since the position was filled, the City's environmental coordinator has also been working with departments to ensure that environmental issues are taken into account where appropriate.

In addition, this initiative will likely be enhanced as the City's climate change action plan is implemented. A system will be developed to monitor reductions in greenhouse gas emissions arising from the plan.

1.4 New Deal

A gas tax sharing arrangement has been reached with the Federal government that supports mutual interests in the environment while recognizing local priorities. The distribution formula in Manitoba is unique in that it dedicates a portion of federal fuel tax revenue to transit projects.

1.5 Establishment of the Planning Executive Advisory Committee (P.E.A.C.)

The PEAC is an ongoing mechanism to facilitate integrated cross-departmental discussions on a number of long-range issues related to planning. It continues to be a valuable component of the City's planning process.

1.6 Public Education – Assiniboine Forest

The City Naturalist's office continues to maintain and operate public education programs related to the Assiniboine Forest. Recent developments in this initiative include a new website, which is accessible through the City's own website.

1.7 Public Education – Living Prairie Museum

This is an ongoing initiative which is supported by the enhancement of the Living Prairie Museum website and virtual museum (see initiative 1.9).

1.8 Public Education – Zoo

The Assiniboine Park Zoo provides an array of conservation education on an on-going basis. The annual Animal Encounters program showcases animals brought to the Zoo from other facilities and typically not exhibited in our climate. Popular examples have included an Asian elephant, birds of prey, white tigers, and a pride of lions. Interpretive messaging of these emphasizes conservation species and ecosystems at risk from a local to a worldwide focus. Themed summer Zoo Camps allow young participants to learn about animals and experience how zookeepers care for them. Zookeeper led interpretive talks feature conservation messages as well as natural history information to Zoo visitors. Local media is a great supporter, publicizing Zoo events and special exhibits, averaging 250 print, radio and television interviews annually. Many of these are delivered with a strong conservation theme.

Assiniboine Park Zoo is also involved with over 50 international Species Survival Plans and Population Management Plans for threatened species. Staff serve on a number of Manitoba conservation organizations, such as the Ecological Reserves and Endangered Species committees, and the Manitoba Board of the Nature Conservancy of Canada.

1.9 Public education – Living Prairie Museum Website

This initiative is complete, and the Vitual Living Prairie Museum (called “Landscape Change: Landscape Loss”) is now on-line and active as of November 2005.

1.10 Public Education – Naturescape Manitoba Partnership

The City is partnering with a number of other organizations to develop the Naturescape Manitoba educational package. The package will enable private landowners to conserve and restore natural areas on their own properties. It will also include a wide range of projects that homeowners can undertake to add some nature to their yard. The Naturescape Manitoba Partnership has been delayed, and is now expected to be completed in 2006.

1.11 Public Education – Conservatory

The Assiniboine Park Conservatory models environmentally-friendly, least toxic horticulture in its everyday practices. The major role of conservatories is to educate the public about the beauty and vulnerability of the plant kingdom and to demonstrate the essential interconnectedness of plants with all life on earth. The Conservatory endeavors to communicate this message in all of its activities.

The Conservatory gives presentations and demonstrations on many topics, including Integrated Pest Management and techniques of environmentally sound practices. Conservatory staff serves on education-advisory committees such as the Green Space Management Program, the Prairie Horticultural Certificate Program and Master Gardening Program Certification.

1.12 Public Education – Recreation & Leisure Programming

Community Services continues to offer a number of environmental education initiatives through their recreation programming, such as workshops on composting, landscaping and straw bale construction techniques. Libraries also provide programming with community partners on topics such as composting, landscaping, etc that encourage environmental stewardship.

Section Two – Climate Change and Air Quality

Section Two refers to Climate Change and Air Quality. Supportive policy direction can be found in the following sections of Plan Winnipeg:

- 2B-02 Commit to the Reduction of Greenhouse Gas Emissions
- 5A-05 Address Water, Air, and Noise Pollution
- 3C-01 Provide Integrated Transportation Network

2.1 Climate Change Action Plan

The City is in the process of preparing a Climate Change Action Plan to address corporate greenhouse gas emissions. Staff are in the process of updating the City's greenhouse gas inventory, and an interdepartmental working group is being set up to determine emissions targets and reduction strategies. The plan will be submitted to Council in 2006.

2.2 Idle Free Administrative Directive

The Idle Free Zone signs are posted at civic facilities across Winnipeg, and signs in French have been posted in Francophone communities. Parallel to this, the Winnipeg Fleet Management Agency (WFMA) is testing technology to monitor idling in vehicles, along with monitoring other maintenance issues. Please see the Highlights section for more detail on this initiative.

In addition to the work being done at WFMA, Transit has developed the Energy Sense training program, which contains anti-idling measures as well. A report on this program is expected in 2006. The results of these efforts will provide insight to help develop an administrative directive on idling.

2.3 Climate Change Community Challenge (C4)

Following an invitation by the Province of Manitoba, the City helped to facilitate an application to the C4 program by the Centennial neighbourhood. The application was turned down by the Province at that time; the application remains with the Province.

2.4 Alternative Fuels for City of Winnipeg transit buses

Transit assisted in the test of a hydrogen powered hybrid bus, and continues to monitor research in this field.

2.5 New Bus Purchases / Bus Engine Rebuilds

This is an ongoing initiative. Transit continues to replace older buses and rebuild older engines with more environmentally friendly technology each year.

2.6 Brady Road Landfill Gas Project

A report will be available in late 2006.

2.7 Support for Red River Valley Clean Cities Coalition Winnipeg Chapter Inc

Through the Fleet Management Agency, the City continues to support the Winnipeg Chapter of the Red River Valley Clean Cities Coalition (RRVCCC). The Coalition is now

developing a program for initiatives along a mid-continent trade corridor, and continues to increase awareness of alternative fuels and transportation.

2.8 Smoking Regulation By-law

The by-law is fully in place, and the Province of Manitoba has since enacted a similar by-law covering the rest of the province.

Section Three – Urban Energy

Section Three refers to Urban Energy including:

- Energy Conservation
- Sustainable Energy

Supportive Policy Direction can be found in the following sections of Plan Winnipeg:

- 5A-04 Encourage Energy Efficiency
- 2B-02 Commit to the Reduction of Greenhouse Gas Emissions
- 2B-01 Commit to Sustainability

3.1 Historical Building Green Strategy

The Historical Buildings Committee plans to examine the potential for developing a green building strategy for historical buildings in 2006.

3.2 Energy Sense Program

Transit will be reporting on the Energy Sense Program in 2006. It is expected that the program will demonstrate significant fuel savings and will reduce the City's greenhouse gas emissions as well.

3.3 Energy Conservation Initiatives

This is an ongoing initiative, and Transit continues to work towards reducing the consumption of energy at its major facilities.

3.4 Water and Waste Facilities

This is an ongoing initiative. Water and Waste routinely consults with Manitoba Hydro for PowerSmart assistance on new projects.

Section Four – Sustainable Land and Development

Section Four refers to Sustainable Land Use and Development including:

- Guiding Land Use Through Sustainable Urban Growth
- Parks, Open Spaces, and Natural Areas
- Developing Brownfield Sites
- Trails and Greenways
- Green Building
- Managing the Urban Forest

Supportive Policy Direction can be found in the following sections of Plan Winnipeg:

- 3A-01 Promote Orderly Development
- 3A-02 Promote Compact Urban Form
- 3A-03 Integrate Land Use, Urban Design, and Transportation Planning
- 5C-04 Protect Environmentally-Sensitive Lands
- 3B-02 Guide the Development of New and Existing Residential Areas
- 3B-05 Promote Commercial Densification
- 5E-03 Protect and Enhance Urban Forest

4.1 Green and Sustainable Buildings

The City continues to work towards increasing energy efficiency in civic buildings. As part of the PowerSmart agreement, Public Works will be developing projects at over 160 civic facilities to improve their energy efficiency and to conserve water. City staff will continue to monitor the reduction in energy consumption attributable to this initiative.

As one example, work on the City Hall complex started in July 2005. It is expected that the project will generate cost savings of approximately $76,000 annually, and will reduce the City's greenhouse gas emissions by approximately 180 tonnes per year.

4.2 Fort Rouge Yards Re-development Plan

The planning process is underway and the Plan Winnipeg amendment designating the Fort Rouge Yards as a Neighbourhood Policy Area was passed by Council in April of 2005. Water & Waste is currently undertaking infrastructure upgrades in the area to allow for further development.

4.3 Ecologically Significant Lands Plan

The Ecologically Significant Natural Lands Strategy (ESNL) is being developed by the Planning, Property and Development Department, with assistance from the City Naturalist and the Environmental Coordinator.

4.4 Downtown Design

The Downtown Winnipeg Urban Design guidelines were adopted by Council in September of 2004. One of the eleven principles is a recommendation for designers to practice sustainable design. To this end, the guidelines suggest the use of sustainable materials, innovative energy and material conservation strategies and recommends that designers consider and minimize environmental impacts. These guidelines are a component of the Architectural Design review process currently in place for projects.

4.5 Parkway System Prioritization

The Parkway System Prioritization Review has been completed, and the report is expected to go to the Standing Policy Committee of Planning, Property & Development early in 2006.

4.6 Inner City Infill Housing

Infill housing provides affordable, energy efficient homes for low- to moderate-income families while maximizing use of land already served by all city services. The City provided land and/or funding for 93 infill homes in 2004. The specifications for the houses include energy conservation initiatives such as the R2000 insulation standard.

4.6 Inner-City Housing Rehabilitation

The City, in partnership with the Province of Manitoba and CMHC, provides funding of up to $12,000 per unit for rehabilitation of housing that is either off the market, or is at risk of becoming vacant due to poor physical condition. The rehabilitated housing is generally more energy efficient and provides affordable housing opportunities for low- to moderate-income families in the city's core. In addition, it reduces waste that would be otherwise produced through demolition of these same properties.

4.8 Green Roof Study

The Centre for Indigenous Environmental Resources (CIER) submitted their Green Roof Study to FCM. The City acted as a co-sponsor of the project and provided technical advice to CIER with regards to combined sewer run-off. It was hoped that the results of the study would determine if green roofs are effective at reducing sewer run-off

The results of the study did not show significant benefits in reducing sewer run-off as compared to the costs of installing a green roof. However, this study represents an example of the City working in partnership with the environmental community. As such, it represents a model for future collaborative work on environmental issues.

4.9 Heritage Buildings - Community Incentives to Promote Green Building Strategy

As part of the work to examine the potential for a green building strategy (see 3.1), it is expected that the Historical Buildings Committee will look at the feasibility of promoting the strategy through existing City heritage conservation incentives.

4.10 Developing Brownfield Site

Planning, Property and Development is preparing an updated conceptual plan for the development of the Public Markets site.

4.11 Millennium Library

The City received a grant of $50,000 from the FCM to identify opportunities to reduce annual energy consumption by 50 per cent in the new portion and by 35 per cent in the renovated portion of the library. Additional support was provided by Manitoba Hydro. The Millennium Library was opened in November of 2005, and the building's energy use will be monitored to determine the cost savings.

This project represented the first application of this approach in a major renovation and expansion of a municipal building in Winnipeg. As such, it is a model for other municipalities and similar projects across Canada.

4.12 234 Young Street "Green Indicator" Project

This housing rehabilitation project was completed early in 2005. The West Broadway Development Corporation is monitoring the energy consumption and water usage of the house.

Section Five – Sustainable Transportation

Section Five refers to Sustainable Transportation, including:

- Transportation Demand Management
- Public Transportation
- Active Transportation

Supportive Policy Direction can be found in the following sections of Plan Winnipeg:

- 3C-01 Provide Integrated Transportation Network
- 3A-03 Integrate Land Use, Urban Design, and Transportation Planning
- 3A-02 Promote Compact Urban Form
- 3A-04 Protect Traffic Flows from Significant Increases
- 3B-05 Promote Commercial Densification
- 5A-04 Encourage Energy Efficiency
- 1A-06 Encourage Accessibility To and Within the Downtown

5.1 Urban Transportation Showcase

WINSMART, Winnipeg's entry into the Urban Transportation Showcase is currently on hold, pending a final decision by Transport Canada. The innovative projects identified in the proposal would have a direct impact on greenhouse gas emissions, and would support many other environmental priorities as well.

5.2 Bus Rapid Transit

The Rapid Transit Task Force Final Report was adopted by Council in October of 2005. An administrative review of the report is expected early in 2006.

5.3 Transit Priority Measures

Transit priority measures are used to improve the speed and reliability of bus service, usually in a congested downtown area or along major arterial corridors. Winnipeg Transit uses both bus lanes and transit priority signals, and there are currently 41 kilometers of bus lanes, and eight transit priority signals in operation (one of which is temporary).

In the future, likely in conjunction with the development of the "quality corridors" recommended in the Rapid Transit Task Force Report, bus lanes will be developed in critical segments along arterial corridors beyond the downtown area.

5.4 Promotional Transit Fare

Several new promotional fares have been introduced, including discounted seniors tickets and university passes. Transit continues to work with employers on the EcoPass program.

5.5 Improved Access to Transit Service Information

Transit continues to work on improving access to service information through their website, the Telebus service and their customer information centres. Opportunities for improvement are continuously explored.

5.6 Park and Ride Service

Since June of 2004, Transit has expanded their Park and Ride service to include Club Regent and the McPhillips Street Station, increasing the total number of spots by 70.

There are currently eleven lots around the city, with six "Special Event" lots for events such as football or hockey games. Transit is still negotiating with prospective private sector partners to establish three new lots elsewhere in the City.

5.7 Bike Racks on Buses

Utilization of the bike racks during their six-month season (May – October) continues to be fairly low, and Transit currently has no plans to increase the number of racks. They will continue to monitor the usage of the racks and make changes as necessary.

5.8 More Transit Express Routes

Transit now operates 22 Express routes, which is an increase from 12 routes in 2000. In addition, they have recently introduced the "Super Express" concept, where buses operate non-stop between origin and destination. There are currently four Super Express routes (U of M, Northwest, Richmond and Ness), and Transit is examining the possibility of introducing the service to the East and North Kildonan areas.

5.9 DART Transit Service

The demand-based DART service is ongoing, and continues to serve four communities in Winnipeg. Transit will continue to monitor the effectiveness of this service.

5.10 Active Transportation – City of Winnipeg employees

The City continues to encourage active transportation among employees through its support for the Commuter Challenge. Hundreds of civic employees participate in the annual challenge, held each June.

In addition, since June of 2004, bicycle racks have been installed at 1155 Pacific, and lockers are being installed as well. Planning, Property and Development will continue to work with civic building tenants to install racks and lockers as budgets and priorities allow.

Section Six - Solid Waste and Materials Management

Section Six refers to Solid Waste and Materials Management, including:

- Household Solid and Hazardous Waste Minimization
- Industrial, Commercial and Institutional (ICI) Waste Minimization

Supportive Policy Direction can be found in the following sections of Plan Winnipeg:

- 5A-02 Provide Solid Waste Management
- 5A-03 Address the Danger of Hazardous Waste
- 5A-05 Address Water, Air and Noise Pollution
- 2B-04 Provide Sound Municipal Management

6.1 User-Pay Solid Waste Management System

This initiative is not proceeding at this time.

6.2 City of Winnipeg Departmental Recycling - Building Waste Minimization

The Water & Waste Department is researching opportunities to expand the City's office recycling program. In addition, the recycling of construction material continues to be a policy where feasible, especially during demolitions. Concrete is crushed and used as road base or parking lot base. Concrete rebar and other metals are recycled where economically feasible.

Section Seven – Sustainable Water and Wastewater Management

Section Seven refers to Sustainable Water and Wastewater Management, including:

- Water Management and Conservation
- Wastewater Management
- Waterways, Shoreline Habitat and Surface Water Runoff

Supportive Policy Direction can be found in the following sections of Plan Winnipeg:

- 3D-05 Protect and Manage Potable Water Supply and Source
- 3D-06 Provide Wastewater Management
- 5A-05 Address Water, Air, and Noise Pollution
- 5A-07 Minimize Impact of Odour from Wastewater Treatment

7.1 Combined Sewer Overflow (CSO) Management Strategy Study

The study was submitted as part of a larger report to the Standing Committee on Infrastructure Renewal and Public Works in November 2004. Approximately $ 90 million will be spent over the next ten years to address CSO issues, and it is expected that work will be completed by 2030 at a total cost of about $400 million.

7.2 Leachate Management

The review of the City's leachate management has been completed, and has been submitted to the Province in preparation for a province-wide approach to deal with the issue of leachate management.

7.3 Nutrient Reduction of Phosphorus (P) and Nitrogen (N) in treated wastewater effluents.

The Province has adopted a Lake Winnipeg Management Plan that provides short term objectives of 13% reduction of nitrogen and 10% reduction of phosphorous by 2007.

The City will achieve these reductions by implementing nutrient reduction treatment facilities at its WEWPCC and on the centrate side stream at the NEWPCC. Both of these works have been mandated through Provincial Environment Act licences received for these facilities. Longer term effluent quality parameters have been established by the Province of 15 mg/l nitrogen and 1 mg/l phosphorous. These limits will be required to be met at the NEWPCC by 2014 and at the SEWPCC by 2012.

7.4 Water Conservation Program

The Water and Waste Department continues to operate and monitor the effectiveness of their water conservation program. This is an ongoing initiative, as is the department's annual support for the Fort Whyte Centre's "Slow the Flow" public education program.

7.5 Water Treatment Plant

Construction on the new Water Treatment Plant at the Deacon Reservoir has now started. The expected completion date for the entire project is by the end of 2007.

7.6 Water Conservation – Maximum Performance Testing of Popular Toilet Models

The Canadian Water and Wastewater Association (CWWA) conducted this study to identify how well popular 6 litre toilets performed using a realistic test method to grade each toilet model based on performance. Water and Waste contributed $5,350.00 towards this study, which has been completed and is available on the CWWA website. This information is of value to customers seeking uniform, third party performance testing of popular 6 L toilets.

7.7 Effluent Ammonia Studies

This study was completed, and determined that ammonia, a nitrogen compound, would be less of an issue in light of the improvements recommended in 7.3.

7.8 Sewer Renewals

The Water and Waste Department has an ongoing program to identify sewers that are judged to be in serious distress or have deteriorated to a state of impending failure that require some form of rehabilitation or complete renewal. The sewer renewal program is currently funded from the Sewer Renewal Reserve, which is supported by the Sewer Maintenance frontage levy at an annual rate of $11.5 Million. A sewer-cleaning and televising program is also conducted annually and is used to remove debris that has settled on the bottom of the sewer and greatly diminished the hydraulic capacity of the sewer. The televising information is used to assign a sewer pipe condition grade that determines when and how a pipe will be rehabilitated.

7.9 Biosolids Management Program

A review of the WinGro program is currently underway, and public consultations are expected to begin in 2006.

7.10 Innovative Construction Techniques

The City continues to encourage innovative construction techniques which have proven more cost effective than conventional construction techniques. This is an ongoing initiative.

7.11 Retention Basins to Improve Run-off Quality

Guidelines for more naturalized retention basins have been adopted.

7.12 Ultraviolet Light (UV) Disinfection Research Partnerships

The research partnerships helped Winnipeg to secure considerable funding towards a pilot study on Ultraviolet Light disinfection. As a result of the study, it was determined that the UV light disinfection facility would be built as the first phase in the construction of the new water treatment plant at the Deacon Reservoir.

7.13 Disinfection of Treated Wastewater Effluents at the Wastewater Pollution Control Centres (WPCCs)

All WPCC's will disinfect their wastewater effluents by 2006/07.

7.14 Watermain Cathodic Protection Program

This is an ongoing initiative, linked to 7.10.

7.15 Watermain Criticality Assessment Project

This is an ongoing initiative, linked to 7.10 and 7.16.

7.16 Watermain Renewal Program

This is an ongoing initiative, linked to 7.10, 7.15 and 7.10.

7.17 Water Main Cleaning Program

The Water & Waste department expects that this initiative will be completed in 2007, in time for the opening of the new water treatment plant. This will result in all City watermains having been cleaned once prior to the in-service date for the

water treatment plant. Investigations are underway to determine the frequency for the next cleaning cycle.

7.18 Best Practices Handbook for City's Waterways

The Best Practices Handbook was completed in 2005, and was forwarded to the Riverbank Management Committee where it was reviewed on November 17, 2005. The document will be reviewed by the Standing Policy Committee on Planning, Property and Development by the end of 2005 or early in 2006.

7.19 Basement Flooding Relief Initiative – Combined Sewer Relief Program

A status report on the basement flood relief program will be provided to Council in 2006.

7.20 Basement Flooding Relief Initiative – Sump Pits and Pumps

This is an ongoing initiative, and a report to Council will be provided in 2006.

Section Eight - Pesticides in the Urban Environment

Section Eight refers to Pesticides in the Urban Environment, including:

- Insecticides and Larvicides
- Herbicides and Fungicides

Supportive Policy Direction can be found in the following sections of Plan Winnipeg:

- 5A-06 Provide Safe and Effective Pest and Weed Control

8.1 Public Education – Insect Control

TEAAM (Targeted Environmental Action Against Mosquitoes) is a cost shared initiative between the City of Winnipeg and the Province of Manitoba. TEAAM staff did 796 complete yard audits in 2005 and distributed mosquito control and personal protection information to over 10,000 homeowners.

8.2 Partnerships – Insect Control

The Insect Control Branch continues to collaborate with other agencies on an ongoing basis.

8.3 Insect Control

A three-year phased in integrated pest management plan was approved by Council in March of 2005.

8.4 Public Education – Reduce Pesticide Use on Private Property

The City continues to provide financial support for organic pest control workshops through the Manitoba Eco-Network.

8.5 Weed Control Research and Experimentation

Public Works monitors best-practice research at the institutional level. There is some promising research which may become commercially available soon, but at this time there is not a viable commercial alternative available. This is an ongoing initiative.

Next Steps

This document is the first annual report on the City's environmental progress, and it is based on the *Embracing Sustainability* document. The final report on the initiatives outlined in *Embracing Sustainability* is due at the end of 2006.