

# Durban Commitment for Biodiversity

## Supplemental Information

### Recommendation:

That the Transportation and Public Works Committee recommend to City Council:

That Mayor S. Mandel, on behalf of the City of Edmonton, sign the Durban Commitment for Biodiversity, including the Countdown 2010 Declaration and Edmonton's specific biodiversity goals.

### Report Summary

**This report responds to the Committee's request for further information about the Durban Commitment and Countdown 2010 Declaration.**

### Previous Council/Committee Action

At the June 24, 2008, the Transportation and Public Works Committee passed the following motion:

That the June 12, 2008, Asset Management and Public Works Department report 2008PW9176 be referred to Administration and return to the July 15, 2008, Transportation and Public Works Committee meeting with additional information on:

1. The City's commitments in both declarations to current policy and environmental initiatives.
2. Re-work the City of Edmonton's commitments to accommodate Council's vision.

### Report

This report presents the following information:

1. An overview of the Durban Commitment and Countdown 2010
  - As described in report 2008PW9176 (Attachment 1), Edmonton is one of 21 international cities participating in the International Local Action for Biodiversity (LAB) program.
  - Participation in the LAB initiative includes a commitment by each city to sign the Durban Commitment for Biodiversity (Attachment 2) and the companion Countdown 2010 Declaration (Attachment 3) in September 2008, in Durban, South Africa.
  - These are mutually-supportive declarations that mirror one another in terms of philosophy and scope. At their core, the declarations acknowledge the threats to urban biodiversity, and the importance of its conservation.
  - Both declarations are aspirational in nature, and have a significant focus on voluntary actions that may be taken to protect biodiversity. For example, all points within section 4.3 of the Durban Commitment can be made on a voluntary basis. All signatories of Countdown 2010 commit simply to taking "every practical opportunity" to fulfill the details of the declaration.
2. An overview of Edmonton's policy and environmental initiatives that support the Durban Commitment and Countdown 2010.

- As a leader in the conservation of biodiversity and natural areas, Edmonton currently exceeds all of the clauses listed in the Durban Commitment and Countdown 2010.
  - No additional funding is required for the City to meet the commitments outlined in the declarations.
  - Signing these declarations will position Edmonton as a global leader in supporting the highest standards of environmental preservation and sustainability.
  - Because the City is dedicated to continual environmental improvement, as outlined in the Environmental Strategic Plan, it will continue to find new and better ways to conserve biodiversity.
  - During the ICLEI World Congress in June 2009, Edmonton will be hosting meetings of LAB partner municipalities, in addition to delegates from around the world, and will be showcased as an environmental leader.
  - Attachment 4 outlines how Edmonton currently fulfils and exceeds each of the clauses and provides an index summarizing the City's biodiversity-related policies, plans, and initiatives. For instance, the City currently exceeds these clauses in the Durban Commitment through the following means:
    - Clause 4.3.1: Natural Area Systems Policy, Municipal Development Plan, *Natural Connections* Strategic Plan
    - Clause 4.3.2: Urban Parks Management Plan, Natural Area Management Plans
    - Clause 4.3.4: Integrated Pest Management Policy, Enviso systems
    - Clause 4.3.6: *EcoVision* Annual Report
    - Clause 4.3.7: Natural Areas Advisory Committee, Environmental Advisory Committee
3. An overview of Edmonton's proposed biodiversity goals.
- Through the process of signing the declarations, LAB cities are also invited to demonstrate local leadership by setting municipal goals or targets for biodiversity conservation.
  - The biodiversity targets listed in report 2008PW9176 have been reworked as less prescriptive biodiversity goals that accommodate Council's vision (Attachment 5).
  - These goals have already been identified in operating and capital budgets for 2008 and beyond.
  - Goal 1 will be achieved through the Natural Areas Reserve Fund, the Parkland Purchase Reserve Fund, and over the longer term, the Edmonton and Area Land Trust.
  - Goal 2 will be achieved through initiatives in Parks (i.e. Partners in Parks), Drainage Services (i.e. constructed wetlands), Recreation Facilities (i.e. John Janzen Nature Centre programs), and other biodiversity partner branches.

### **Policy**

This recommendation complies with the Natural Area Systems Policy (C-531) and the Environmental Policy (C-512).

### **Focus Area**

This report relates to the focus area of Environment and the strategic issue of Healthy Ecosystem.

### **Public Consultation**

The biodiversity goals are a subset of a much larger project for which a broad and extensive consultative process was implemented. The goals were then developed based on input by the Natural Areas Advisory Committee (NAAC), which is comprised of seven citizens-at-large, as well as representatives from the University of Alberta, the Wildlife Rehabilitation Society of Edmonton, Government of Alberta, and the Urban Development Institute.

### **Budget/Financial Implications**

No additional funding is required to meet the Durban Commitment, Countdown 2010, or Edmonton's biodiversity goals.

### **Justification of Recommendation**

Signing the Durban Commitment and Countdown 2010 and endorsement of the biodiversity goals affirms Edmonton's commitment to environmental excellence, and showcases the City as a global leader for the conservation of urban biodiversity.

### **Attachments**

1. Asset Management and Public Works Department report  
2008PW9176
2. Durban Commitment for Biodiversity
3. Countdown 2010 Declaration

4. Edmonton's Biodiversity Policies and Initiatives
5. Edmonton's Biodiversity Goals

### **Others Approving this Report**

- J. Tustian, Deputy City Manager

## Asset Management and Public Works Department Report 2008PW9176

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## Durban Commitment for Biodiversity

### Recommendation:

That the Durban Commitment on Biodiversity, including the Countdown 2010 Declaration and Edmonton's specific biodiversity targets, be endorsed.

### Report Summary

This report outlines Edmonton's commitment, as a member of the international Local Action for Biodiversity initiative, to endorse the Durban Commitment on Biodiversity, and by extension, the Countdown 2010 Declaration and Edmonton's specific biodiversity targets.

### Report

This report presents:

1. An overview of Edmonton's commitments through the Local Action for Biodiversity initiative.
2. An overview of the Durban Commitment on Biodiversity.
3. An overview of the Countdown 2010 Declaration.
4. An overview of Edmonton's proposed biodiversity targets.

#### 1. Local Action for Biodiversity

- Edmonton is one of 21 international cities participating in the Local Action for Biodiversity (LAB) program, an ICLEI (Local Governments for Sustainability) initiative to engage municipal governments in the conservation of urban biodiversity.
- Participation in the LAB initiative includes a commitment by each city to sign the Durban Commitment

(Commitment) on Biodiversity in September 2008, in Durban, South Africa. To date, eight of the 21 LAB cities have formally endorsed the Durban Commitment.

#### 2. Durban Commitment on Biodiversity

- The Durban Commitment is a declaration that acknowledges threats to urban biodiversity and the importance of its protection. (See Attachment 1).
- Cities that endorse the Commitment declare their intention to conserve and enhance urban biodiversity and to integrate biodiversity considerations into governance and planning.
- Through endorsement of the Commitment, cities also express their support for the Countdown 2010 Declaration.

#### 3. Countdown 2010 Declaration

- Countdown 2010 is an initiative of the International Union for Conservation of Nature (IUCN) with a target to halt or significantly reduce the loss of global biodiversity by 2010. (See Attachment 2).
- Cities that endorse the Countdown 2010 Declaration commit both to supporting this global target and to setting their own local targets to conserve biodiversity.

#### 4. Edmonton's Biodiversity Targets

The following local biodiversity targets are proposed for Edmonton:

By 2015, the City of Edmonton, working with our partners will:

1. Secure ten significant natural areas that contribute to the city-wide ecological network.

## Durban Commitment for Biodiversity

the ecological network, and foster a culture of stewardship. (See Attachment 3).

### Others Approving this Report

- J. Tustian, Deputy City Manager, Deputy City Manager's Office

### Policy

This recommendation complies with the Natural Areas Systems Policy (C-531) and the Environmental Policy (C-512).

### Focus Area

This report relates to the focus area of 'Environment' and the strategic issue of 'Healthy Ecosystem.'

### Public Consultation

The Natural Areas Advisory Committee (NAAC) provided extensive input into the development of Edmonton's biodiversity targets. The NAAC is comprised of seven citizens at large, as well as representatives from the University of Alberta, the Wildlife Rehabilitation Society of Edmonton, Government of Alberta, and the Urban Development Institute.

### Budget/Financial Implications

Funding needed to meet Edmonton's biodiversity targets will be acquired through the annual budgeting process between 2009 and 2015.

### Justification of Recommendation

The endorsement of the Durban Commitment for Biodiversity fulfills one of Edmonton's commitments as a member of the Local Action for Biodiversity initiative.

### Attachments

1. Durban Commitment: Local Governments for Biodiversity
2. Countdown 2010 Declaration
3. Edmonton's Biodiversity Targets

## Durban Commitment for Biodiversity

**The Durban Commitment: Local Governments for Biodiversity** was developed, founded and signed by 21 Local Action for Biodiversity Local Governments:

- Barcelona City Council (Spain)
- City of Amsterdam (Netherlands)
- City of Bonn (Germany)
- City of Cape Town (South Africa)
- City of Curitiba (Brazil)
- City of Edmonton (Canada)
- City of Johannesburg (South Africa)
- City of Joondalup (Australia)
- City of Nagoya (Japan)
- City of Tilburg (Netherlands)
- City of Zagreb (Croatia)
- eThekweni Municipality (South Africa)
- Ekurhuleni Metropolitan Municipality (South Africa)
- Île de France (France)
- King County (U.S.A)
- Leicester City Council (England)
- Liverpool City Council (Australia)
- Municipality of Walvis Bay (Namibia)
- São Paulo City Hall (Brazil)
- Seoul Metropolitan Government (South Korea)
- Waitakere City Council (New Zealand)

as a commitment and model by local government, for local government and the communities they serve, to protect and enhance biodiversity at the local level.

**1. By signing this Commitment, City of Edmonton** joins these leading local governments from across the world as a partner and we acknowledge accountability and responsibility for the health and well-being of our communities through protecting, sustainably utilizing and managing biodiversity and recognizing its role as the foundation of our existence.

This Commitment recognizes that biodiversity is the variety of life on earth on which human well-being is dependent and that biodiversity provides ecosystem services that underpin all of our community's needs. Furthermore, it recognizes that the value of biodiversity is multi-faceted—including ecological, economic, tourism, recreational, environmental, heritage, stewardship, spiritual, intrinsic, medicinal, nutritional, health, educational, scientific, cultural and social dimensions.

**2. Through signing this Commitment we acknowledge that:**

2.1 Biodiversity is increasingly under pressure with unprecedented rates of loss due to human activities including the over-consumption of natural resources;

2.2 Increasing global trends towards urbanization are placing increased direct pressure on biodiversity at both the local area level and globally through increased resource consumption and ecological footprints;

2.3 The impacts of climate change on biodiversity pattern and process will be significant and therefore we need to build appropriate programmes to address, mitigate and adapt to these changes;

2.4 Future sustainable development and human well-being are dependent on our ability to meet the biodiversity challenges we face;

2.5 Ecosystem services can play an important role in poverty alleviation and as a result the consequences of biodiversity loss and ecosystem disruption are harshest for the poor;

2.6 It is our collective responsibility to reverse the current trends of biodiversity loss; and

2.7 Local government, which works most closely with communities and biodiversity, has a critical role and responsibility (globally, nationally and locally) to ensure that biodiversity is conserved, protected, restored and sustainably used for the benefit of current and future generations.

**3. By signing this Commitment** we commit to promoting, increasing and enhancing biodiversity within our administrative area and recognize that our ecological footprint extends beyond our administrative area: we will therefore integrate biodiversity considerations into all aspects of our governance and development planning.

**4. By signing this Commitment we declare our intention to:**

4.1 Regularly publish *biodiversity reports* on the state of biodiversity within our administrative area and our progress in protecting biodiversity, which will stand as public record;

4.2 Contribute towards the formulation of globally relevant local authority biodiversity good practice guidelines;

4.3 Develop and implement a long-term local *biodiversity strategy* for our administrative area and governance practices, which will address, for example:

4.3.1 The consideration of biodiversity in all aspects of local planning including, amongst other things: land-use planning, mobility planning, economic development planning, and conservation planning;

4.3.2 The management of natural areas and green spaces, including the restoration and rehabilitation of degraded natural areas and the control of invasive species;

4.3.3 The provision of municipal services, including fresh and waste water treatment, energy generation and housing;

4.3.4 Public procurement strategies, including purchasing of eco-certified goods and services and the ban of hazardous products;

4.3.5 Social development including poverty alleviation and job creation;

4.3.6 Awareness-raising of the value of biodiversity and the need for its protection in all sectors of society;

4.3.7 Stakeholder participation in all relevant aspects of local biodiversity governance; and

4.3.8 The inclusion of biodiversity in city partnerships and cooperation projects with public and private partners.

4.4 Remain committed to ongoing implementation of that long-term local *biodiversity strategy* through the enactment of guiding policies;

4.5 Actively engage with, and ensure participation and involvement of all stakeholders; and

4.6 Actively participate in the ICLEI Local Action for Biodiversity Initiative as the global network of local governments for biodiversity.

**5. As a local government, we support** efforts to promote greater recognition by national governments and international bodies of the critical role local government plays in protecting biodiversity at the local and global level. We recognize our own role within the global environment and by signing this Commitment we entrench our dedication to global biodiversity. We recognize the need to contribute actively to the implementation of the objectives of the United Nations Convention on Biological Diversity and the objectives of the 2010 biodiversity target, adopted at the 2002 World Summit on Sustainable Development and a part of the Millennium Development Goals, aimed at reducing the rate of loss of biodiversity on our planet. We entrench our dedication to global biodiversity by becoming a formal partner to Countdown 2010 (if not already a partner) and by signing the Countdown 2010 Declaration, thereby committing to its targets, goals, objectives and principles.

## Countdown 2010 Declaration

Biodiversity - the web of life on earth - is essential to the quality of human well-being, and it is a crucial element in sustaining the social, economic and spiritual dimension of all societies worldwide. Yet, biodiversity continues to decline. Political commitments have been made to stop this trend by 2010. Further steps need to be taken to honour this commitment and to translate it into action.

### **We the undersigned will take every practical opportunity to:**

**Support** the commitments to halt or significantly reduce the current rate of biodiversity loss by 2010, made by:

- World Environment Ministers in the Hague Ministerial Declaration of the Conference of Parties to the Convention on Biological Diversity in the Netherlands 2002;
- World Heads of State in the Plan of Implementation at the United Nations World Summit on Sustainable Development in Johannesburg, South Africa in 2002;
- World Heads of State in the United Nations World Summit Outcome in New York 2005;
- a number of biodiversity related conventions and regional processes since 2001.

**Encourage** decision makers at all levels, in both the public and the private sector, to contribute to these commitments and to:

- Increase public awareness and participation for biodiversity conservation, including the promotion of exemplary activities towards the 2010 biodiversity target;
- Better integrate biodiversity considerations into all relevant sectors of public policy and economy;
- Undertake serious efforts to adapt human activities to the needs of natural systems;
- Support the development of suitable monitoring and indicator tools to assess the state of biodiversity.

**Commit** ourselves to encourage and assist decision makers and societies in achieving the 2010 biodiversity target, notably through:

- Actively promoting Countdown 2010 to focus attention and mobilise resources for achieving the 2010 biodiversity target;
- Significantly reducing our own impact on biodiversity.

**In particular**, we will: *(insert local biodiversity target(s) here)*

## Edmonton's Biodiversity Policies and Initiatives

The Durban Commitment	How does Edmonton satisfy this commitment?
<p>1. By signing this Commitment, ..... joins these leading local governments from across the world as a partner and we acknowledge accountability and responsibility for the health and well-being of our communities through protecting, sustainably utilizing and managing biodiversity and recognizing its role as the foundation of our existence.</p> <p>This Commitment recognizes that biodiversity is the variety of life on earth on which human well-being is dependent and that biodiversity provides ecosystem services that underpin all of our community's needs. Furthermore, it recognizes that the value of biodiversity is multi-faceted - including ecological, economic, tourism, recreational, environmental, heritage, stewardship, spiritual, intrinsic, medicinal, nutritional, health, educational, scientific, cultural and social dimensions.</p> <p>2. Through signing this Commitment we acknowledge that:</p> <p>2.1 Biodiversity is increasingly under pressure with unprecedented rates of loss due to human activities including the over-consumption of natural resources;</p> <p>2.2 Increasing global trends towards urbanization are placing increased direct pressure on biodiversity at both the local area level and globally through increased resource consumption and ecological footprints;</p> <p>2.3 The impacts of climate change on biodiversity pattern and process will be significant and therefore we need to build appropriate programmes to address, mitigate and adapt to these changes;</p> <p>2.4 Future sustainable development and human well-being are dependent on our ability to meet the biodiversity challenges we face;</p> <p>2.5 Ecosystem services can play an important role</p>	<p>Edmonton recognizes that a healthy, biodiverse ecosystem is the foundation of a sustainable city. Through many plans, policies, and initiatives (outlined below), the City has demonstrated its commitment to protecting and improving environmental quality, including the conservation of biodiversity.</p>

The Durban Commitment	How does Edmonton satisfy this commitment?
<p>in poverty alleviation and as a result the consequences of biodiversity loss and ecosystem disruption are harshest for the poor;</p> <p>2.6 It is our collective responsibility to reverse the current trends of biodiversity loss; and</p> <p>2.7 Local government, which works most closely with communities and biodiversity, has a critical role and responsibility (globally, nationally and locally) to ensure that biodiversity is conserved, protected, restored and sustainably used for the benefit of current and future generations.</p>	
<p>3. By signing this Commitment we commit to promoting, increasing and enhancing biodiversity within our administrative area and recognize that our ecological footprint extends beyond our administrative area: we will therefore integrate biodiversity considerations into all aspects of our governance and development planning.</p>	<p>The following policies, plans, and initiatives integrate biodiversity considerations into Edmonton's governance and planning:</p> <ul style="list-style-type: none"> <li>• Natural Area Systems Policy (C531)</li> <li>• Environmental Policy (C512)</li> <li>• City Council Focus Areas</li> <li>• Municipal Development Plan</li> <li>• Environmental Strategic Plan</li> <li>• Natural Connections Strategic Plan</li> </ul>
<p>4. By signing this Commitment we declare our intention to:</p> <p>4.1 Regularly publish <i>biodiversity reports</i> on the state of biodiversity within our administrative area and our progress in protecting biodiversity, which will stand as public record;</p>	<p>Edmonton's progress in protecting biodiversity is regularly monitored and reported on through the EcoVision Annual Reports.</p>
<p>4.2 Contribute towards the formulation of globally relevant local authority biodiversity good practice guidelines;</p>	<p>Edmonton shares its biodiversity best practices on a global scale through:</p> <ul style="list-style-type: none"> <li>• The products of the Local Action for Biodiversity initiative will be shared with a global audience: Biodiversity Report, Biodiversity Action Plan and Biodiversity Demonstration Projects</li> <li>• Ecological Design Reports and Natural Area Management Plans are available to interested parties upon request</li> </ul>
<p>4.3 Develop and implement a long-term local <i>biodiversity strategy</i> for our administrative area and governance practices, which will address, <b>for example</b>:</p>	<p>Edmonton's long-term local biodiversity strategy is captured in:</p> <ul style="list-style-type: none"> <li>• <i>Natural Connections</i> Strategic Plan</li> <li>• Local Action for Biodiversity: Biodiversity Action Plan</li> <li>• Environmental Strategic Plan</li> </ul>

The Durban Commitment	How does Edmonton satisfy this commitment?
4.3.1 The consideration of biodiversity in all aspects of local planning including, amongst other things: land-use planning, mobility planning, economic development planning, and conservation planning;	Biodiversity considerations are incorporated into local planning through the following policies, plans, and initiatives: <ul style="list-style-type: none"> <li>• Natural Area Systems Policy</li> <li>• Environmental Policy</li> <li>• City Council Focus Areas</li> <li>• Municipal Development Plan</li> <li>• Transportation Master Plan</li> <li>• Corporate Business Plan</li> <li>• <i>Natural Connections</i> Strategic Plan</li> <li>• Environmental Strategic Plan</li> </ul>
4.3.2 The management of natural areas and green spaces, including the restoration and rehabilitation of degraded natural areas and the control of invasive species;	Edmonton manages biodiversity in its natural areas and green spaces through the following plans and initiatives: <ul style="list-style-type: none"> <li>• Urban Parks Management Plan</li> <li>• Natural Area Management Plans</li> <li>• <i>Natural Connections</i> Strategic Plan</li> <li>• Naturalization of constructed wetlands</li> <li>• Partners in Parks naturalization and planting initiatives</li> <li>• Good Growing Neighbours</li> <li>• Exotic Forest Pest Survey</li> <li>• Neighbourhood Park Development Program</li> </ul>
4.3.3 The provision of municipal services, including fresh and waste water treatment, energy generation and housing;	Edmonton considers biodiversity in its provision of municipal services, through: <ul style="list-style-type: none"> <li>• Environmental Strategic Plan</li> <li>• Enviso Environmental Management Systems</li> </ul>
4.3.4 Public procurement strategies, including purchasing of eco-certified goods and services and the ban of hazardous products;	Edmonton is continually reducing its reliance on hazardous products through: <ul style="list-style-type: none"> <li>• Enviso Environmental Management Systems</li> <li>• Good Growing Neighbours</li> <li>• Integrated Pest Management Policy (C501)</li> </ul>
4.3.5 Social development including poverty alleviation and job creation;	Several of Edmonton's biodiversity initiatives contribute to social development and community-building: <ul style="list-style-type: none"> <li>• Partners in Parks planting events and support for community gardens</li> <li>• Master Naturalist program and other naturalization-related outreach</li> <li>• Educational programs offered by Recreation Facilities (i.e. John Janzen Nature Centre, Valley Zoo)</li> </ul>
4.3.6 Awareness-raising of the value of biodiversity	Edmonton builds awareness about biodiversity

The Durban Commitment	How does Edmonton satisfy this commitment?
and the need for its protection in all sectors of society;	<p>through the following plans and initiatives:</p> <ul style="list-style-type: none"> <li>• <i>Natural Connections</i> Strategic Plan</li> <li>• <i>EcoVision</i> Annual Report</li> <li>• Local Action for Biodiversity: Biodiversity Report and Biodiversity Demonstration Projects</li> <li>• Master Naturalist program and other naturalization-related outreach</li> <li>• Educational programs offered by Recreation Facilities (i.e. John Janzen Nature Centre, Valley Zoo)</li> <li>• Carbon Dioxide Reduction Edmonton (CO<sub>2</sub>RE)</li> </ul>
4.3.7 Stakeholder participation in all relevant aspects of local biodiversity governance; and	<p>Stakeholders are involved in Edmonton's biodiversity governance through:</p> <ul style="list-style-type: none"> <li>• Natural Areas Advisory Committee</li> <li>• Environmental Advisory Committee</li> <li>• Public engagement process: <i>Natural Connections</i> Strategic Plan</li> <li>• Full disclosure of conservation planning documents on the City website</li> <li>• Public involvement opportunities offered through the current planning process</li> </ul>
4.3.8 The inclusion of biodiversity in city partnerships and cooperation projects with public and private partners.	<p>Edmonton works in partnership to protect biodiversity through:</p> <ul style="list-style-type: none"> <li>• Public/private restoration partnerships (e.g. funds donated for restoration of Maple Ridge wetland)</li> <li>• Ecological research partnerships with academic institutions</li> <li>• Establishment and participation as one of six partners in the Edmonton and Area Land Trust</li> </ul>
4.4 Remain committed to ongoing implementation of that long-term local <i>biodiversity strategy</i> through the enactment of guiding policies;	Edmonton's Natural Area Systems Policy and Environmental Policy ensure our commitment to the implementation of our biodiversity strategy.
4.5 Actively engage with, and ensure participation and involvement of all stakeholders; and	See 4.3.7, above
4.6 Actively participate in the ICLEI Local Action for Biodiversity Initiative as the global network of local governments for biodiversity.	<ul style="list-style-type: none"> <li>• Edmonton is one of 21 active partners in the Local Action for Biodiversity Initiative</li> <li>• Edmonton is hosting the ICLEI World Congress in June, 2009</li> </ul>
<b>5. As a local government, we support</b> efforts to promote greater recognition by national governments and international bodies of the critical role local government plays in protecting biodiversity	Edmonton is known globally as an environmentally-progressive leader, and has proven its commitment to excellence in biodiversity conservation through the many plans, policies, and initiatives described in

The Durban Commitment	How does Edmonton satisfy this commitment?
<p>at the local and global level. We recognize our own role within the global environment and by signing this Commitment we entrench our dedication to global biodiversity. We recognize the need to contribute actively to the implementation of the objectives of the United Nations Convention on Biological Diversity and the objectives of the 2010 biodiversity target, adopted at the 2002 World Summit on Sustainable Development and a part of the Millennium Development Goals, aimed at reducing the rate of loss of biodiversity on our planet. We entrench our dedication to global biodiversity by becoming a formal partner to Countdown 2010 (if not already a partner) and by signing the Countdown 2010 Declaration, thereby committing to its targets, goals, objectives and principles.</p>	<p>this report.</p> <p>The specific commitments of Countdown 2010 are described in the following section.</p>

Countdown 2010 Declaration	How does Edmonton satisfy this commitment?
<p>Biodiversity - the web of life on earth - is essential to the quality of human well-being, and it is a crucial element in sustaining the social, economic and spiritual dimension of all societies worldwide. Yet, biodiversity continues to decline. Political commitments have been made to stop this trend by 2010. Further steps need to be taken to honour this commitment and to translate it into action. We the undersigned will take every <b>practical opportunity</b> to:</p> <p><b>Support</b> the commitments to halt or significantly reduce the current rate of biodiversity loss by 2010, made by:</p> <ul style="list-style-type: none"> <li>• World Environment Ministers in the Hague Ministerial Declaration of the Conference of Parties to the Convention on Biological Diversity in the Netherlands 2002;</li> <li>• World Heads of State in the Plan of Implementation at the United Nations World Summit on Sustainable Development in Johannesburg, South Africa in 2002;</li> <li>• World Heads of State in the United Nations World Summit Outcome in New York 2005;</li> <li>• A number of biodiversity related conventions and regional processes since 2001.</li> </ul>	<p>Each of the listed conventions has made a commitment to Countdown 2010 (i.e. to halt or significantly reduce the current rate of biodiversity loss by 2010). Their support for Countdown 2010 does not require any specific action on the part of municipal partners.</p> <p>Edmonton supports Countdown 2010 through many policy, plans, and initiatives, including:</p> <ul style="list-style-type: none"> <li>• Natural Area Systems Policy (C531)</li> <li>• Environmental Policy (C512)</li> <li>• City Council Focus Areas</li> <li>• Municipal Development Plan</li> <li>• Environmental Strategic Plan</li> <li>• <i>Natural Connections</i> Strategic Plan</li> <li>• Local Action for Biodiversity: Biodiversity Action Plan and demonstration projects</li> <li>• Enviso Environmental Management Systems</li> </ul>
<p><b>Encourage</b> decision makers at all levels, in both the public and the private sector, to contribute to these commitments and to:</p> <ul style="list-style-type: none"> <li>• Increase public awareness and participation for biodiversity conservation, including the promotion of exemplary activities towards the 2010 biodiversity target;</li> </ul>	<p>See 4.3.6 of the Durban Commitment</p>
<ul style="list-style-type: none"> <li>• Better integrate biodiversity considerations into all relevant sectors of public policy and economy;</li> </ul>	<p>See 4.3.1 of the Durban Commitment</p>
<ul style="list-style-type: none"> <li>• Undertake serious efforts to adapt human activities to the needs of natural systems;</li> </ul>	<p>See 4.3.2 of the Durban Commitment</p>

Countdown 2010 Declaration	How does Edmonton satisfy this commitment?
<ul style="list-style-type: none"> <li>Support the development of suitable monitoring and indicator tools to assess the state of biodiversity.</li> </ul>	See 4.1 of the Durban Commitment
<p><b>Commit</b> ourselves to encourage and assist decision makers and societies in achieving the 2010 biodiversity target, notably through:</p> <ul style="list-style-type: none"> <li>Actively promoting Countdown 2010 to focus attention and mobilise resources for achieving the 2010 biodiversity target;</li> </ul>	Countdown 2010 will be promoted through Edmonton's hosting of the ICLEI World Congress in 2009. Edmonton's participation in the Local Action for Biodiversity project is also helping the City to promote and achieve the Countdown 2010 target.
<ul style="list-style-type: none"> <li>Significantly reducing our own impact on biodiversity.</li> </ul>	See 4.3 of the Durban Commitment

## Index of City of Edmonton policies, plans, and initiatives that relate to biodiversity

### **City Council Focus Areas**

Within the focus area of 'Environment' and the strategic issue 1.0, 'Healthy Ecosystem,' City Council has listed the following priorities:

- To minimize the impact of activities on our air, land, and water systems;
- To use our natural resources prudently; and
- To maintain biodiversity.

### **Corporate Business Plan**

This plan contains the following goals and initiatives that relate to biodiversity protection:

- Goal: Prudent stewardship of environment, infrastructure and technology.
- Initiative: Natural and built environment is protected, conserved and enhanced
- Initiative: Conserve natural sites in Edmonton's table lands, North Saskatchewan River Valley and ravine system.

### **Ecological Design Report**

An Ecological Design Report is a new planning tool that was first trialed in the planning process of Big Lake Neighbourhood One. This report helps to integrate ecological design principles into the early stages of the design of a neighbourhood, in order to protect biodiversity and reduce the neighbourhood's ecological impact. Recommendations from these reports may include innovative storm water management techniques, wildlife passages, building and roadway placement for conservation and connectivity of natural features, and opportunities for long term public education.

### **Ecological research partnerships with academic institutions**

The City of Edmonton collaborates both formally and informally with ecological researchers from a range of academic institutions. Recent examples include research on the movement of deer across roadways, and studies of biodiversity in constructed and natural wetlands.

### **EcoVision Annual Report**

The EcoVision Annual reports promote environmental awareness and accountability through yearly public reporting on the City of Edmonton's environmental achievements, challenges, and performance. Currently, the City's performance in protecting biodiversity is measured through indicators charting the protection of natural areas in the river valley, ravines, and tablelands (section 4.2 of 2007 report). Other indicators that relate indirectly to biodiversity include herbicide use (section 4.4), Eco-station use (section 4.4), and surface water quality (section 5.2).

### **Edmonton and Area Land Trust**

The City of Edmonton is the founder and one of six partners in the Edmonton and Area Land Trust (EALT). The other partners are the Edmonton Community Foundation, the Edmonton Nature Club, the Urban Development Institute, the Land Stewardship Centre of Canada, and the Legacy Lands Stewardship Society. The EALT is a not-for-profit charitable conservation agency, and uses a range of tools to protect natural areas, including donations of land and money, land purchase, and the use of conservation easement agreements.

### Environmental Advisory Committee

13 members of the public, including representatives from provincial and federal government agencies and academic institutions, meet regularly to support the implementation of the Environmental Strategic Plan, and to provide a public perspective on how particular environmental issues impact the community. The committee primarily focuses on the 10 environmental topics that form the Environmental Strategic Plan, including some that are directly related to biodiversity conservation (i.e. Natural Systems) and others that have an indirect link (i.e. Clean Air, Solid Waste Management, Toxics Reduction).

### Environmental Policy (C512)

This policy states, in part, that the City of Edmonton:

- Will exercise environmental stewardship of its operations, products and services, based on its commitment to: (a) prevent pollution, (b) continually improve its environmental performance by setting and reviewing environmental objectives and targets, and (c) meet or exceed applicable environmental legal requirements and other requirements to which it subscribes.
- Through its planning, decision-making process, and leadership, will promote the development of an environmentally sustainable community that functions in harmony with the natural environment.
- Will take a leadership role in protecting natural heritage and biodiversity within the municipality and region.

### Environmental Strategic Plan (ESP)

Each of the Environmental Strategic Plan's 10 focus areas relate directly or indirectly to biodiversity protection:

1. Clean Air
2. Climate Protection
3. Environmental Emergency Response
4. Natural Area Systems
5. Resource Conservation
6. Solid Waste Management
7. Sustainable Business Development
8. Sustainable Urban Planning/Development
9. Toxics Reduction
10. Water

The Plan's *Natural Area Systems Strategy* (section 4.0) includes specific commitments to:

4.2.1.1: Plan, develop, and protect an ecologically functional natural system within the city.

4.2.1.2: Protect and conserve existing designated natural areas within City boundaries, ensuring that these areas are managed to maintain their ecological integrity, protect and enhance regional biodiversity, and retain their natural character, while facilitating the possibility of minimum disturbance, low-impact outdoor recreation and nature appreciation in selected areas.

4.2.1.3: Acquire additional Environmentally Sensitive Areas and Significant Natural Areas and associated linkages for protection as natural areas in Edmonton at sufficient number and rate to prevent the loss of ecologically unique and sensitive land areas, and to expand the base of protected natural areas in step with, or in advance of, the overall growth of the City and the conversion rate to developed urban land.

4.2.2.1: Initiate, develop and support partnerships with landowners of environmentally sensitive or ecologically valuable lands and with community groups to protect and manage those lands to maximize their ecological value and maintain biodiversity.

4.2.2.2: Motivate and inspire Edmontonians to support the conservation of the City's biodiversity and natural areas, appreciate nature within the City's boundaries, and undertake corporate and residential initiatives to protect habitat or enhance biodiversity.

4.2.3.1: Establish an effective network of linkages and protected areas that links natural areas in the greater Edmonton region and protects biodiversity.

### **Enviso Environmental Management Systems**

Edmonton's nine Environmental Management Systems provide a structure through which the City is improving its environmental performance, preventing pollution, and complying with regulations. Many of the initiatives carried out through Enviso help to conserve biodiversity, both directly and indirectly. For instance:

- *Pesticide Reduction*: Parks has environmental management programs dedicated to achieving continual reduction in the use of synthetic pesticides in City operations and by the public.
- *Improved Snow Storage Facilities*: Streets Engineering has implemented infrastructure improvements to reduce the harmful effects of releasing large amounts of potentially contaminated spring meltwater into the North Saskatchewan River.
- *Improved Wastewater Management*: Drainage Services has an ongoing monitoring program to detect hazardous releases into lakes, creeks, and the river. The branch also has multiple programs aimed at eliminating discharges into the river, including combined sewer overflow, mercury, and ammonia.

### **Exotic Forest Pest Survey**

The Parks branch is a member of a cooperative, regional monitoring program for the early detection of invasive insects and diseases, especially those that threaten the urban forest (such as Dutch Elm Disease). The program's goal is to avert the establishment of invasive tree pests in order to minimize pesticide use and reduce tree loss in the urban forest, thereby maintaining habitat and biodiversity.

### **Good Growing Neighbours**

Through this program, Parks has committed to reducing the use of synthetic pesticides in their operations, and to educating Edmontonians about pesticide alternatives. Some of the initiatives of this program include:

- Designating herbicide-free parks and implementing no-spray buffer zones around daycares and playgrounds
- Spraying only temporary water bodies and targeting mosquitoes at larval stage
- Public extension programs and presentations

### **Integrated Pest Management Policy (C501)**

This policy states, in part, that:

- All forms of pest management activities on City property will follow the principles of Integrated Pest Management.
- A variety of preventive and non-chemical pest management strategies are used or considered before using the least toxic approved pesticide.

### **Local Action for Biodiversity**

Edmonton's participation in Local Action for Biodiversity, an international project spearheaded by the organization ICLEI (*Local Governments for Sustainability*) provides a venue to share our successes in

biodiversity conservation, and to learn from other international leaders in this field. Some specific products of our involvement include:

- *Biodiversity Report*: Describes the state of Edmonton's biodiversity and our conservation governance structure
- *Biodiversity Action Plan*: Sets a 10-year plan for the conservation of local biodiversity across City departments
- *Biodiversity Demonstration Projects*: 21 projects that showcase City efforts to conserve biodiversity

### **Master Naturalist program and other naturalization-related outreach**

The Office of Natural Areas is currently developing a suite of initiatives that build on existing efforts to engage the public in biodiversity conservation. These include a Master Naturalist program to train people in natural areas conservation and provide opportunities for volunteer stewardship, in addition to improved educational materials and resources that focus on naturalization and build appreciation for Edmonton's natural areas.

### **Municipal Development Plan**

Edmonton's MDP, Plan Edmonton, includes two priority areas specific to biodiversity conservation:

- *Preservation and Enhancement of the Natural Environment and Open Spaces*: Preserve and enhance the river valley, natural areas and open space within the urban landscape; recognize these areas as critical aspects of successful planned growth of the City; and, link them to the extent possible.
- *Protection of the Natural Environment*: Develop an integrated environmental protection strategy in partnership with the Province and neighbouring municipalities designed to improve air and river water quality, promote conservation, and ensure effective preservation and management of the City's green spaces.

Within these priority areas lie specific strategies that are linked to biodiversity protection, including:

1.1.3a: Incorporate the protection of natural areas systems in planning for communities, for the ecological, recreational, educational, economic and health benefits they provide.

1.6.1: Develop a comprehensive, integrated plan for the river valley, natural areas and open space land that ...encourages the conservation and integration of natural areas that are sustainable and feasible.

1.6.4: Acquire and restore natural areas of ecological value (identified in the *Natural Connections* Strategic Plan) as well as critical natural linkages and buffers to ensure they remain sustainable in an urban environment.

### **Natural Area Management Plans**

These plans are developed for natural areas in Edmonton that are to be conserved. They provide a baseline description of the natural area, in addition to site-specific management goals, objectives and strategies. They also identify roles and responsibilities for biodiversity management before, during and after development, including the protection of water resources, habitat quality, wildlife, vegetation, and naturally and culturally significant features.

### **Natural Area Systems Policy (C531)**

This policy states, in part, that the City of Edmonton:

- Is committed to conserving, protecting, and restoring our natural uplands, wetlands, water bodies, and riparian areas, as an integrated and connected system of natural areas throughout the city.
- Will balance ecological and environmental considerations with economic and social considerations in its decision making and demonstrate that it has done so.
- Will direct Administration to (b) conserve natural area systems in discharging their duties, and (c) require ecological information to support planning and development applications.
- Will conserve, protect, and restore natural area systems through the physical planning and development process; according to the provisions of municipal, provincial and federal policy and legislation.

### **Natural Areas Advisory Committee**

The City's Natural Areas Advisory Committee (NAAC) is a citizen committee that advises Administration on natural areas issues at the policy level. NAAC was created in 2002 and includes 11 members of the public, including seven citizens-at-large, one Government of Alberta representative (currently Sustainable Resource Development), one conservation organization representative (currently the Wildlife Rehabilitation Society of Edmonton), one University of Alberta representative, and one Urban Development Institute representative.

### ***Natural Connections Strategic Plan***

*Natural Connections*, completed in 2007, is the City's strategic conservation plan. It applies an outcome-based, ecological network approach to the conservation of Edmonton's natural areas systems and includes the following goals and strategic directions (from section 3):

#### *Goals*

- The City of Edmonton will secure a protected and functional ecological network.
- The City of Edmonton will manage Edmonton's ecological network effectively and will work collaboratively with other conservation agencies to do so.
- The City of Edmonton will work with the community to support conservation goals, and will form partnerships with conservation leaders in the community.

#### *Strategic Directions*

- Using the means available to it, the City will expand Edmonton's ecological network by securing and restoring natural systems, and by supporting and partnering with others in this work in the areas where it is appropriate to do so.
- The City will ensure that conservation is given equal weight to other considerations in the planning process and that decisions concerning natural systems are based on the best available conservation science.
- Using the means available to it, the City will increase capacity for ecological stewardship by implementing programs and practices that establish clear management roles and responsibilities, support the efforts of conservation organizations and private corporations, and reflect a watershed approach to the management of Edmonton's natural systems.
- The City will work within its means to establish a well-connected network of conservation partners, including conservation and other community groups, landowners, the development and academic communities, adjacent municipalities, and other orders of government, to foster the sharing of information and expand organizational capacity.

- The City will develop education programs that increase Edmontonians' recognition and appreciation of the value of Edmonton's natural areas systems and the ecological processes they support, and will establish internal processes to capture and integrate the local ecological knowledge of community members.
- The City will strive to establish Edmonton as a leading municipality in conservation, and will pursue innovative approaches to secure and manage its ecological network.
- The City is committed to increasing the accessibility of all natural areas systems information, within the corporation and from the community, and to ensuring that this information is current and comprehensive.

### **Naturalization of constructed wetlands**

In keeping with City's Water Quality Strategy, the Drainage Services branch strives to use ecological restoration principles to develop naturalized wetland facilities and enhance the natural treatment of stormwater prior to discharge into creeks and into the North Saskatchewan River. To date, the City has constructed three wetlands and continues to plan for more in the future. Under the City's guidance, private developers have built an additional eight constructed wetlands to provide for stormwater management in new residential areas.

### **Neighbourhood Park Development Program**

The Neighbourhood Park Development Program (NPDP) recognizes naturalization, landscape and habitat improvements as eligible projects for community partnership funding. Community partners define their project needs and expectations, and project assistance is available for site planning, plant material selection and project development.

### **Partners in Parks**

Through the Partners in Parks program, the City encourages community involvement in beautification. The contributions of partners provide for an enhanced level of service: annuals are planted, areas naturalized, weeds eliminated and litter removed from public green areas. Some Partners in Parks volunteers are actively involved in the stewardship of natural areas.

### **Transportation Master Plan**

The current Transportation Master Plan (TMP) includes sections on air quality, vehicle emissions, and greenhouse gas emissions, and emphasizes adherence to the River Valley Bylaw. In addition, the plan includes the following strategic goal and companion policies:

#### *2.2.7 Support initiatives which encourage the reduction of transportation-induced impacts on Edmonton's natural environment.*

- Develop the transportation system in a manner which is consistent with the preservation of the North Saskatchewan River Valley and its tributaries, as per the North Saskatchewan River Valley Bylaw.
- Provide an improved range of travel choices in order to encourage travel behaviour which reduces energy consumption, vehicle emissions and environmental degradation.
- Consider environmental impacts in the evaluation and selection of transportation system improvements.
- Develop and adopt operating practices which may be required to meet emerging environmental regulations or standards.

### **Urban Parks Management Plan**

The Urban Parks Management Plan (UPMP) outlines the City's strategic direction for acquiring, maintaining, and preserving Edmonton's parks, including those that contain natural areas. The plan identifies principles, action steps, and site development/operational guidelines for Edmonton's parks. The UPMP's Parkland Classification includes natural areas as a specific type of park, and lists guidelines for their acquisition and maintenance; describes requirements regarding buffers, location, access, and configuration; and lists acceptable types of development such as trails, signage, and park furniture (section 5.2.5).

## Glossary

**Biodiversity:** Biodiversity, or biological diversity, refers to the variability among living organisms - within species (genetic diversity), between species (species diversity), and in ecosystems (ecosystem diversity).

**Conservation Planning:** An approach to planning that integrates the conservation of biodiversity into decision-making.

**Eco-Certified Goods and Services:** Goods and services that meet strict environmental certification standards, such as the EcoLogo standard developed by the Government of Canada.

**Ecological Footprint:** An ecological footprint is a measure of the demands humans place on nature. The ecological footprint measures what we consume from nature, for individuals, organizations, cities, regions, nations or humanity as a whole. It shows how much biologically productive land and water we occupy to produce all the resources we consume and to absorb our waste

**Ecological Network:** A coherent system of natural and/or semi-natural landscape elements that is configured and managed with the objective of maintaining or restoring ecological functions as a means to conserve biodiversity.

**Ecological Services:** Services which humans derive from ecological function such as photosynthesis, oxygen production, and water purification.

**Hazardous Product:** A product that poses a risk to the environment, human health, or public safety.

**Invasive Species:** Plants, animals, and micro-organisms that have been relocated to environments outside of their natural past or present distribution. They are harmful species whose introduction or spread threatens the environment, the economy or society.

**Natural Area:** An area of land or water that is dominated by native vegetation in naturally occurring patterns. Such areas could include grasslands, forests, wetlands, peatlands or riparian areas. Areas such as groomed parks, sports fields and schoolyards are not considered natural areas.

**Natural System:** A network of natural and/or semi-natural landscape elements that is configured and managed with the objective of maintaining or restoring ecological functions as a means to conserve biodiversity while also providing appropriate opportunities for education, research and passive recreation.

**Species:** A group of organisms (plants, animals, or micro-organisms) capable of interbreeding and producing fertile offspring.

**Sustainability:** Satisfying lives for all within the means of nature.

## Edmonton's Biodiversity Goals

Edmonton's Biodiversity Goals	How will Edmonton reach this goal?
<p>The City of Edmonton, working with our partners, will:</p> <ol style="list-style-type: none"> <li>1. Secure significant natural areas that contribute to our city-wide ecological network.</li> </ol>	<p>Funding and resources needed to secure natural areas will be obtained through the Natural Areas Reserve Fund, the Parkland Purchase Reserve Fund, and over the longer term, the Edmonton and Area Land Trust.</p>
<ol style="list-style-type: none"> <li>2. Engage Edmontonians in demonstration projects that showcase how we can support biodiversity, strengthen our ecological network, foster a culture of stewardship, and support Edmonton's City Vision.</li> </ol>	<p>Biodiversity demonstration projects will be achieved through initiatives in Parks (i.e. Partners in Parks), Drainage Services (i.e. constructed wetlands), Recreation Facilities (i.e. John Janzen Nature Centre programs), and other biodiversity partner branches.</p>