

## **Beyond Habitat - Tools for a Biodiverse Community: Four Strategies to Advance Your Municipal Nature Conservation Program**



Placemaking: Cool Ideas for Locally Elected Leaders  
Progressive Governance Forum 2011  
at Harrison Hot Springs  
Friday March 25th-Saturday March 26th

Grant Pearsell, Director  
Office of Natural Areas  
City of Edmonton

[www.edmonton.ca/naturalareas](http://www.edmonton.ca/naturalareas)

## **Four Strategies**

1. Adopt a natural area conservation model that works for municipalities
2. Integrate biodiversity policy and outcomes into highest level plans
3. Adopt a performance measurement system
4. Join national or global biodiversity networks

## STRATEGY 1: **Adopt a Natural Area Conservation Model that works for municipalities**

"Organisms, ways of life, and interactions in the biosphere in general, exhibit complexity of such an astoundingly high level as to color the general outlook of ecologists. Such complexity makes thinking in terms of vast systems inevitable."

*Arne Naess (1912 - 2009)*



## **Edmonton's Evolution From *ad hoc* Conservation to Systems Thinking**

- Pre-1995: Isolated protected areas - opportunistic
- 1995-2007: Representation by “special” areas
- 2007-Present: Connectivity through ecological networks and a systems approach





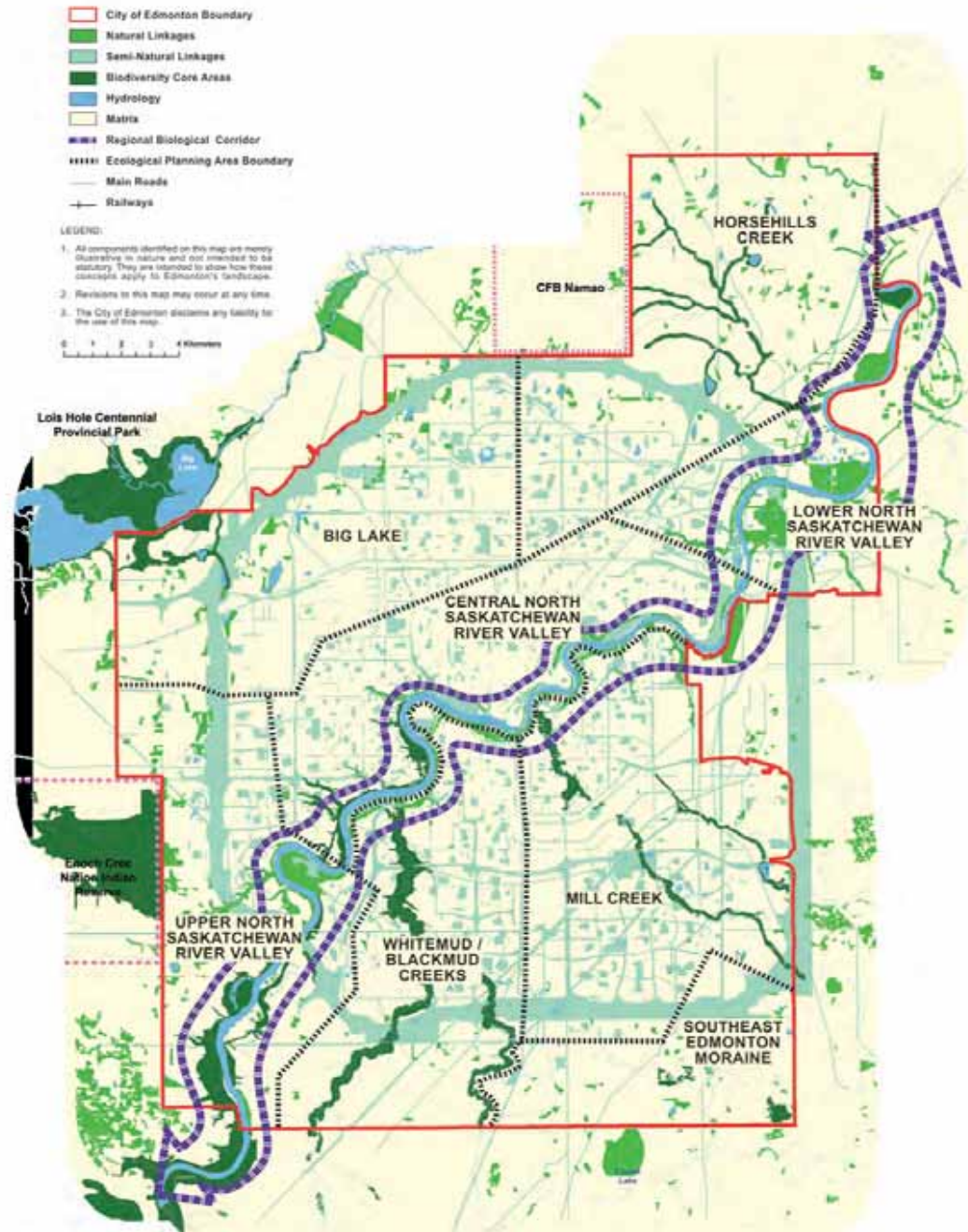
# A Functioning Ecological Network

Components of a **functioning ecological network**...

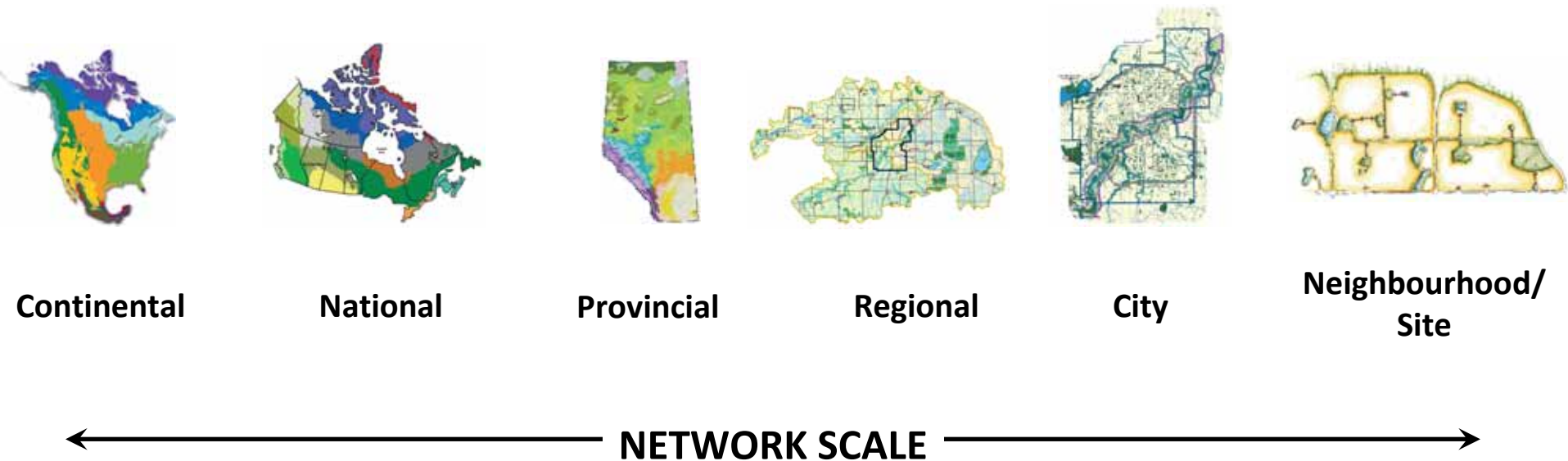
- A **wide vegetation corridor** along major watercourses
- Several large natural areas known as **core areas**
- **Connectivity** for movement of species among the core habitat areas, either through wide, continuous corridors or a series of 'stepping stones'
- A **diverse mixture of natural areas** throughout the developed parts of the city that can serve as wildlife habitat or connect other, larger natural areas

**Source:** Forman, 1995, Land Mosaics

## Edmonton's Ecological Network



# Ecological Network Approach Works At All Scales



# EDMONTON









## **Why Is This a Powerful Model?**

Places biodiversity decision making on the same footing as drainage networks and transportation networks

&

It provides greater resilience to the natural area systems



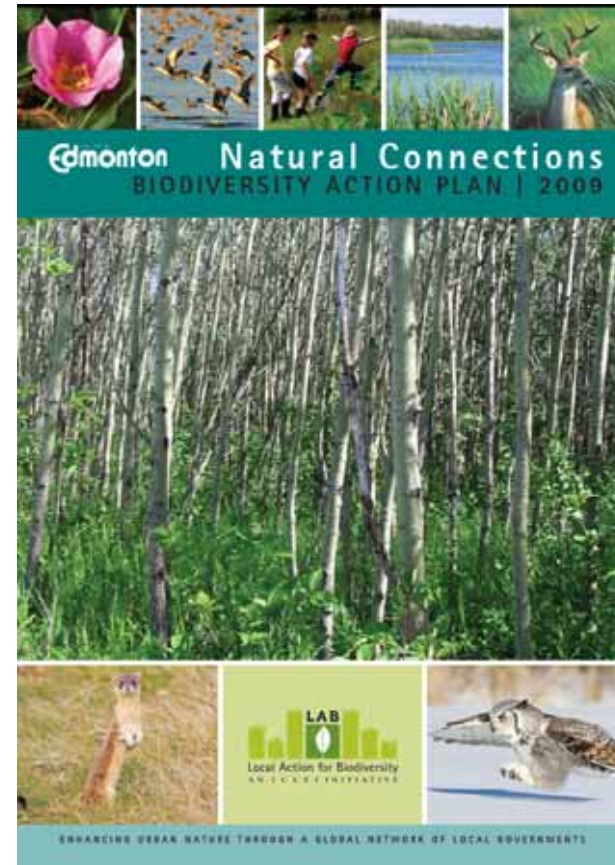
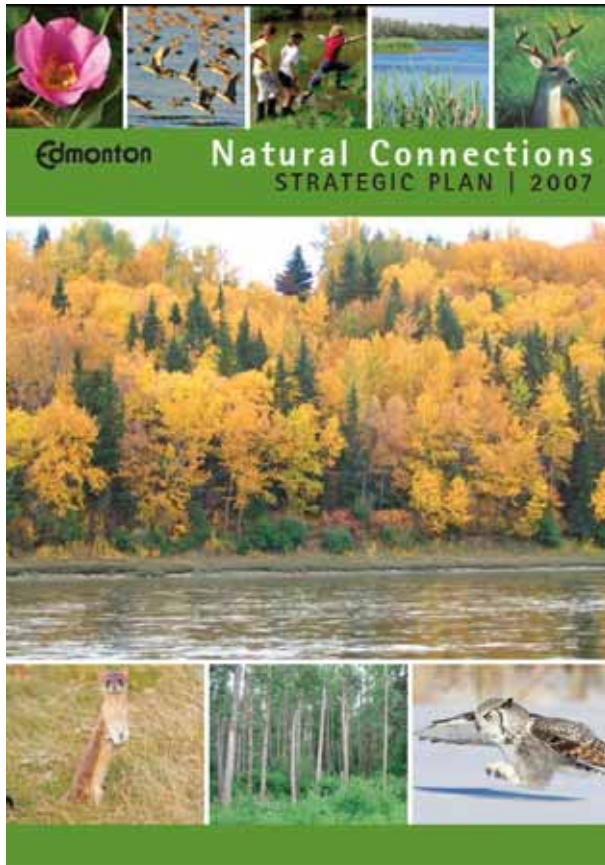
## Strategy 2: **Integrate Policy and Outcomes into Highest Level Plans**

The materials of city planning are:  
sky, space, trees, steel and cement; in  
that order and that hierarchy.

*Le Corbusier*



## Natural Connections Conservation Plan



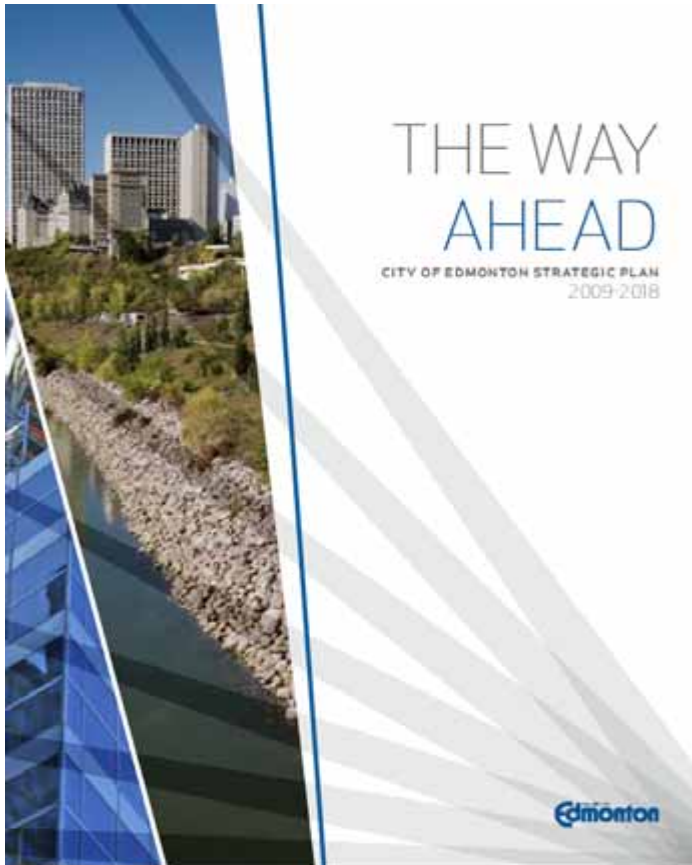


## **Moving to Action: Policy Integration**

City of Edmonton's Plan Hierarchy:

1. City Vision: The Way Ahead
2. Corporate Directional Plans: The Ways
3. Resource Plans
  - such as Natural Connections Strategic Plan and Biodiversity Action Plan

## The Way Ahead 10 Year Goals



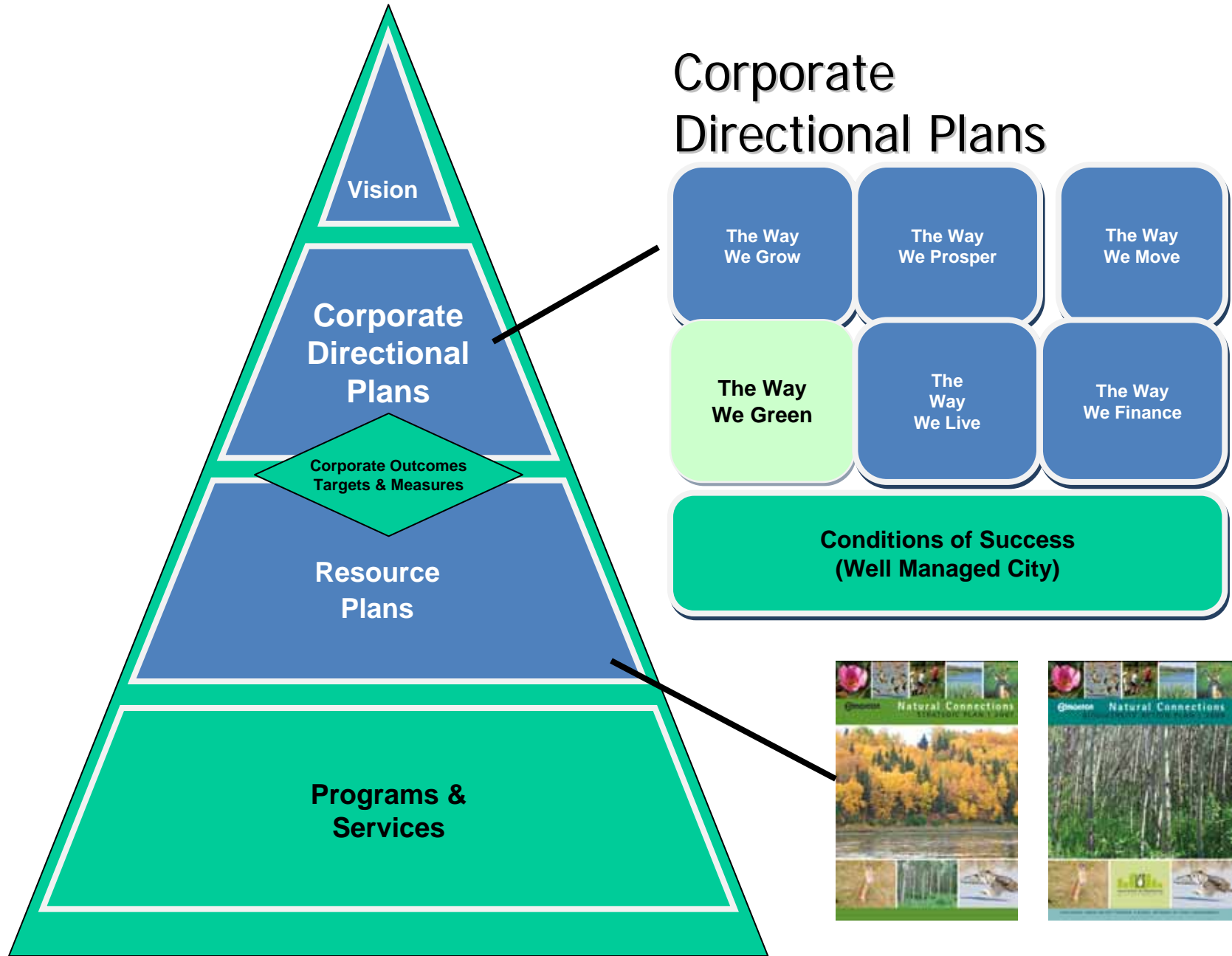
- Preserve and sustain Edmonton's environment
- Improve Edmonton's livability
- Transform Edmonton's urban form
- Shift Edmonton's transportation mode
- Ensure Edmonton's financial sustainability
- Diversify Edmonton's economy

## Transforming Edmonton

The Ways	Strategic Focus	Goal	Sponsor/Champion
The Way We Grow	Land Use	Transform urban form	Planning and Development
The Way We Move	Transportation	Shift transportation modes	Transportation
The Way We Green	Environment	Preserve and sustain environment	Office of the Environment
The Way We Live	Livability	Improve livability	Community Services
The Way We Prosper	Economy	Economic diversification	Planning and Development
The Way We Finance	Financial	Financial stability	Finance and Treasury



# EDMONTON



## STRATEGY 3: **Adopt a performance measurement system for natural areas**

You've got to be very careful if you  
don't know where you're going,  
because you might not get there.

*Yogi Berra*

An ounce of performance is worth  
pounds of promises.

*Mae West*



## Performance Based Implementation





## ECOVISION ANNUAL REPORT 2009

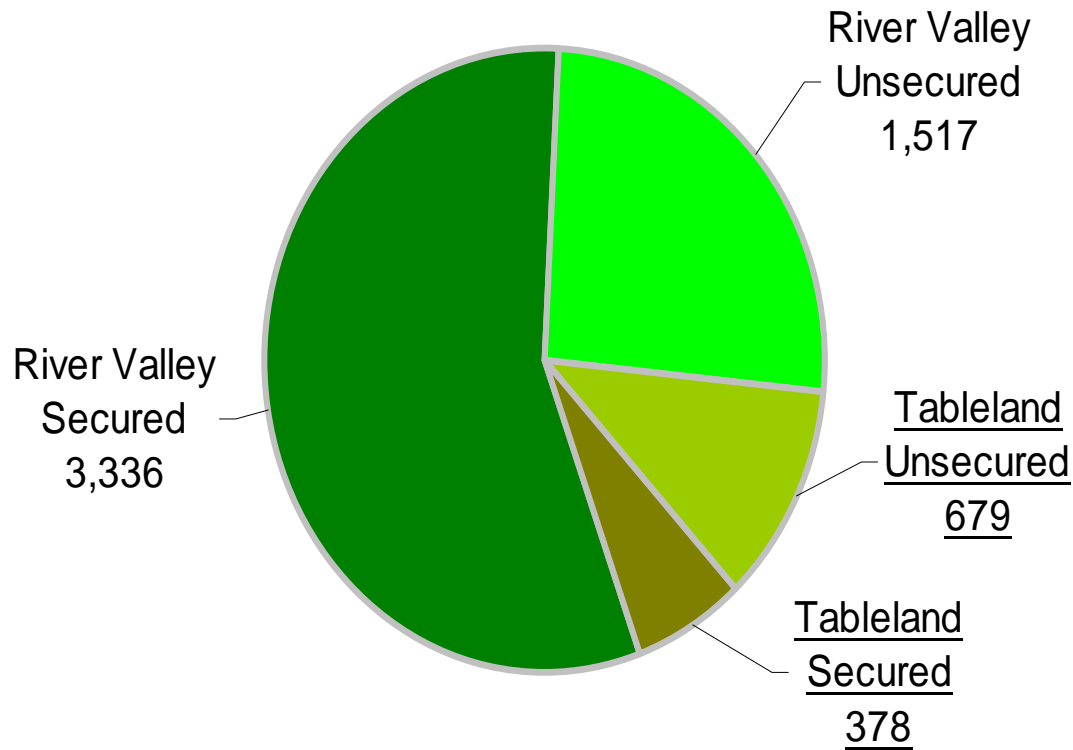
THE WAY WE GREEN



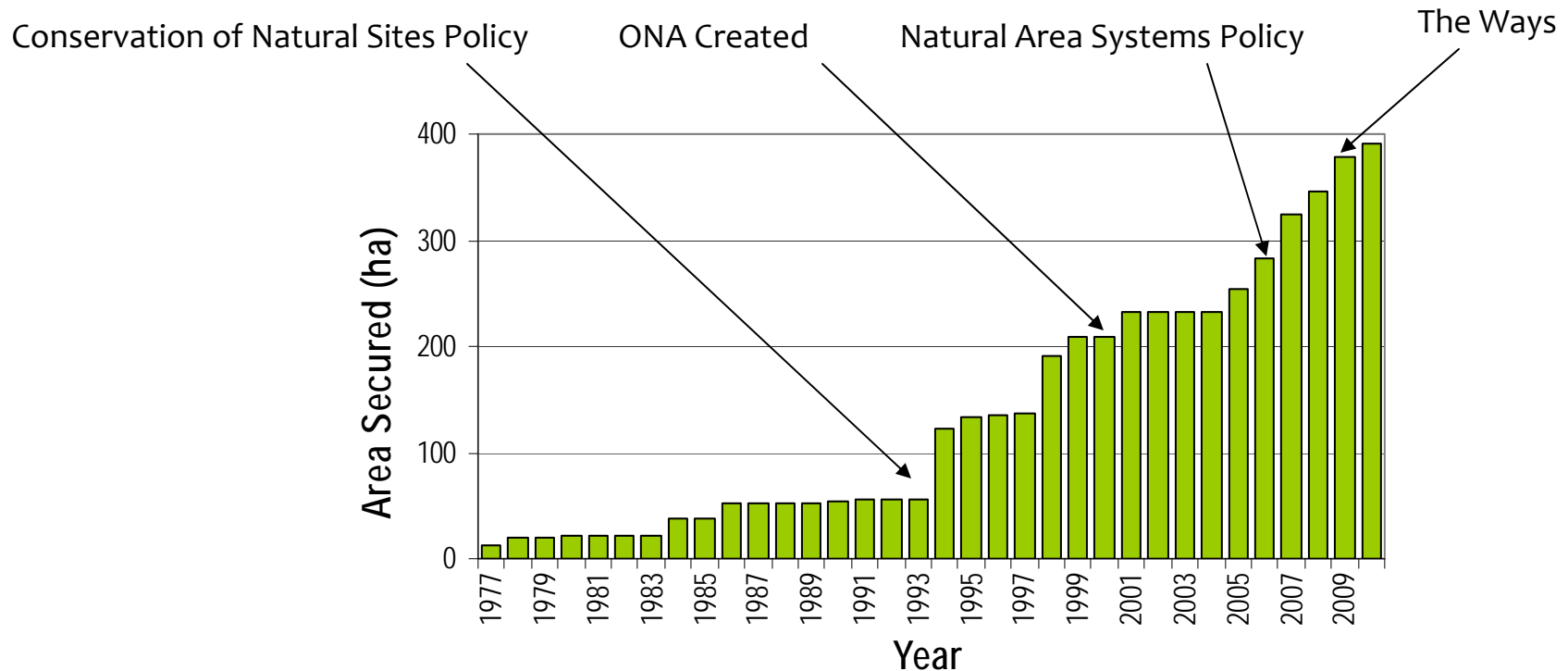
THE CITY OF  
**Edmonton**

TRANSFORMING **EDMONTON**  
BRINGING OUR CITY VISION TO LIFE

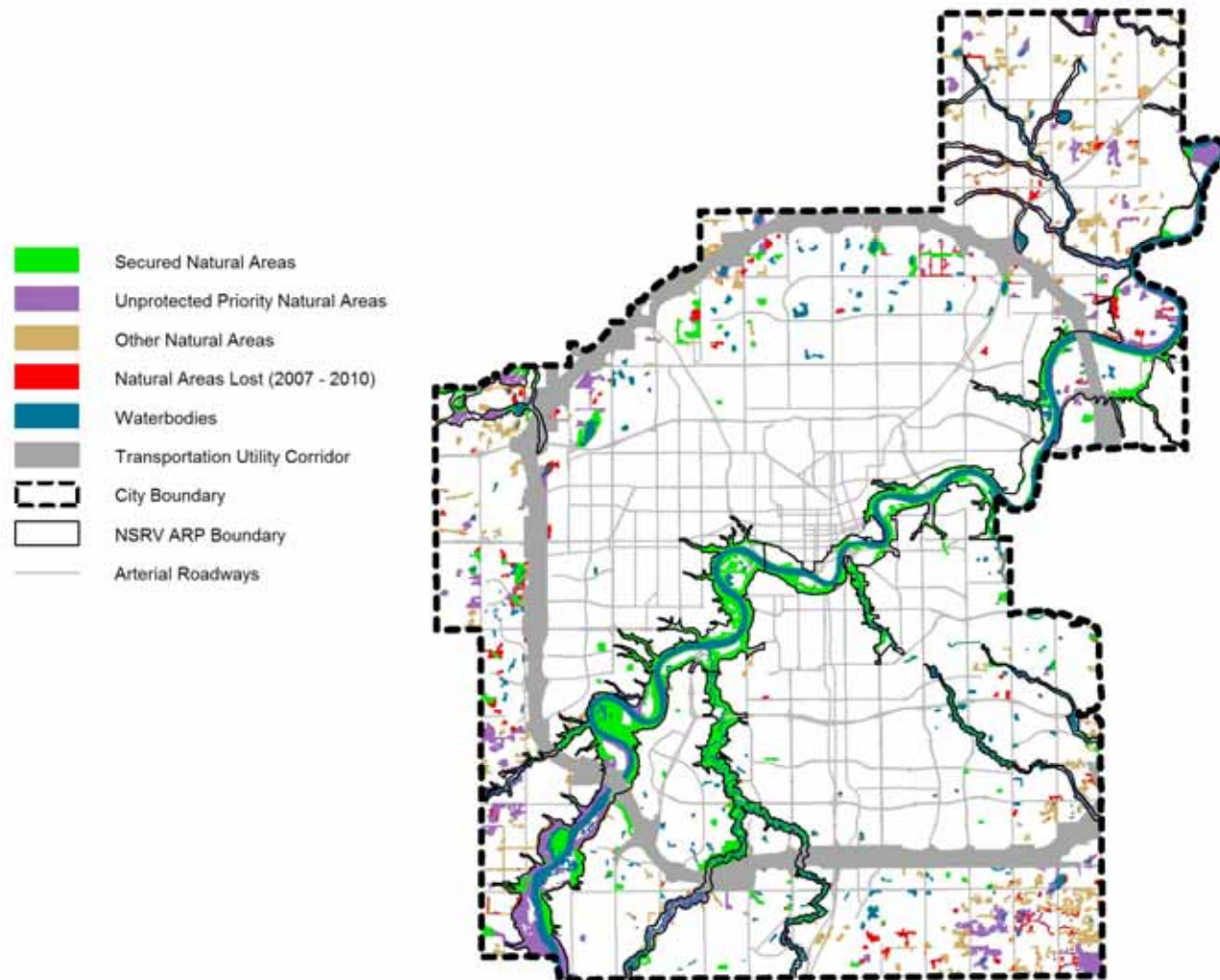
## Priority Natural Areas Securement Status



## Priority Natural Areas: Tableland Securement

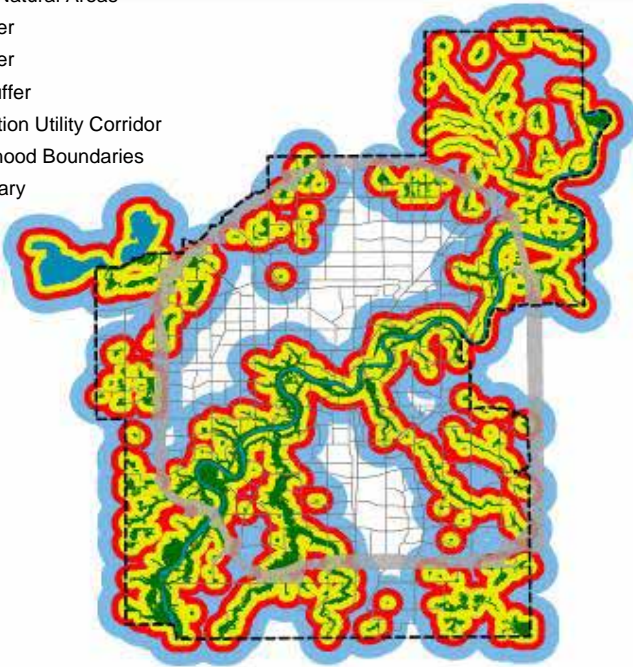
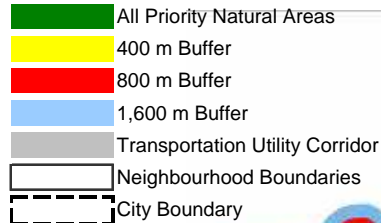


## Natural Area Loss and Protection





## Measurements That Citizens Can Relate To: Walkable Nature

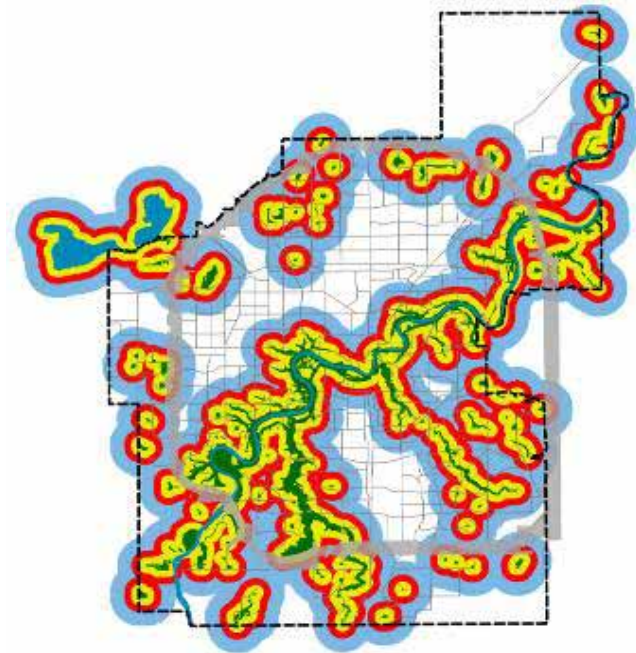


### Best Possible Condition

5 minutes = 43%

**10 minutes = 66%**

20 minutes = 87%



### Secured 2009

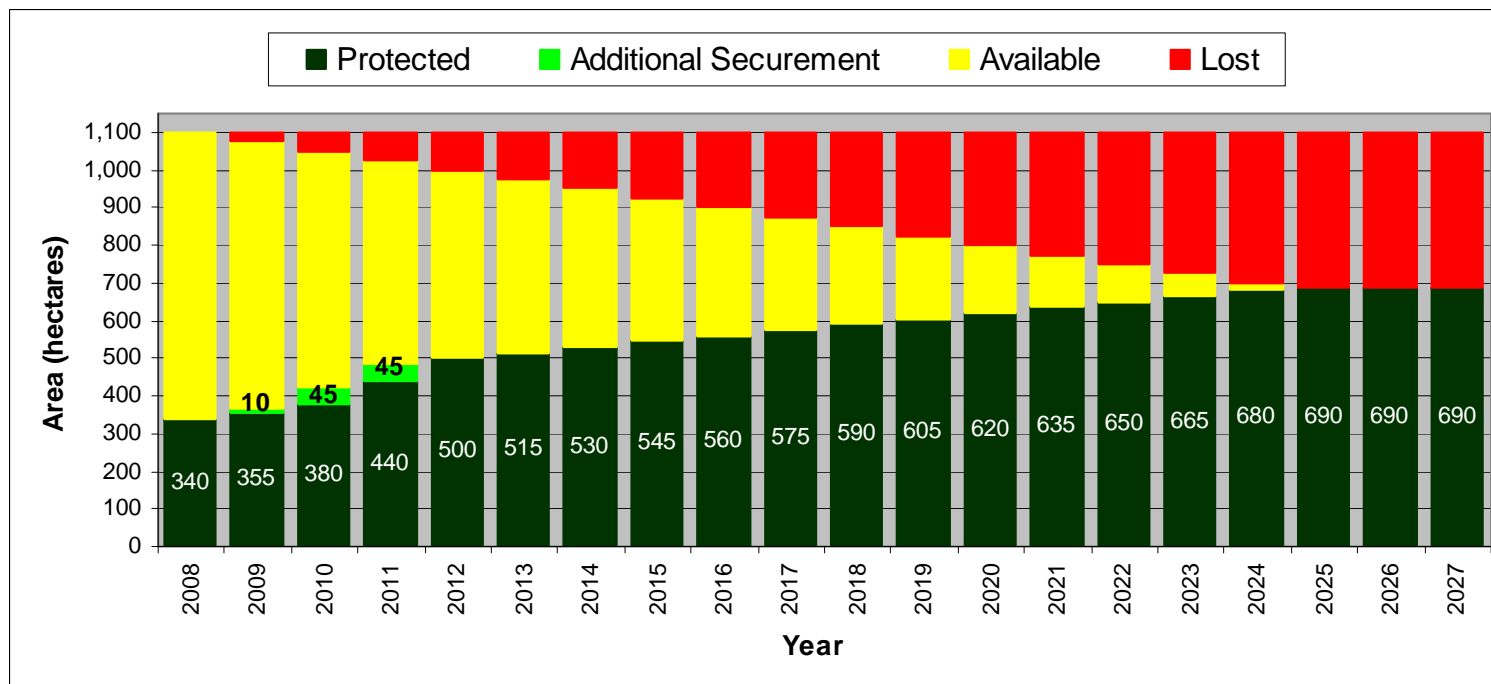
5 minutes = 27%

**10 minutes = 47%**

20 minutes = 74%

## Tablelands Priority Areas: Approved Securement Strategy

- Complete Current Negotiations (\$9.7 M)
- Inject Remaining Funds (\$10.3 M) in Unplanned Areas



Hectares Protected	Hectares Lost	Year to Completion
690	410	2025

Strategy 4:  
**Join National or  
Global Biodiversity  
Networks**





# ICLEI: Local Action for Biodiversity



**Barcelona City Council (Spain)**  
**City of Amsterdam (Netherlands)**  
**City of Bonn (Germany)**  
**City of Cape Town (South Africa)**  
**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)**

**Abu Dhabi Municipality (United Arabs Emirates)**  
**Bergrivier Local Municipality (South Africa)**  
**Brussels Capital Region (Belgium)**  
**Cape Wineland District Municipality (South Africa)**  
**Jerusalem Municipality (Israel)**  
**Mexico City (Mexico)**



## LAB – 5 Step Program

Step 1: Production of a biodiversity report

Step 2: Acceptance of the Durban Commitment

Step 3: Production of a Biodiversity Strategy and Action Plan (LBSAP)

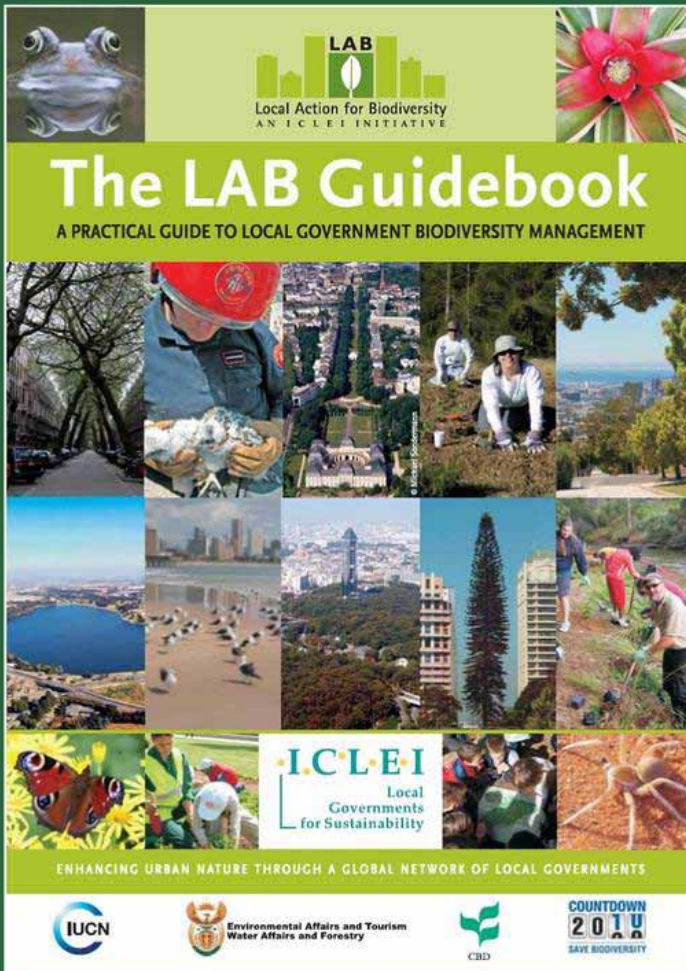
Step 4: Acceptance of a commitment to the LBSAP

Step 5: Implementation of five new or improved biodiversity initiatives



# EDMONTON

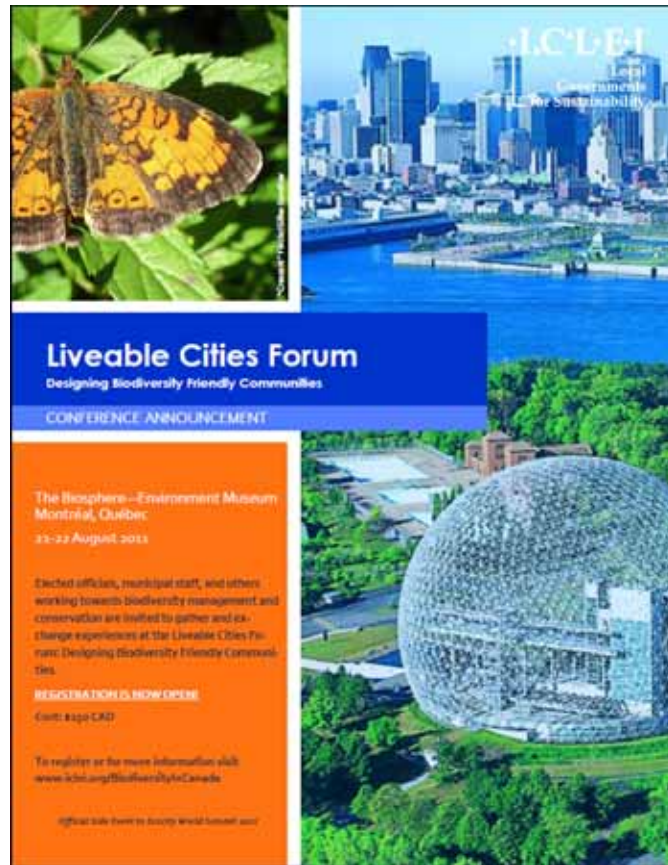
Announcing a new publication...



## Cities and **Biodiversity** Case Study Series

Canadian Best Practices in Local Biodiversity Management

## Liveable Cities Forum: Designing Biodiversity Friendly Communities



The Biosphère  
Environmental Museum,  
Montréal

August 21-22, 2011





# EDMONTON

Strategy	Why is it important	Addresses these questions
1. Adopt a natural area conservation model that works for municipalities	Provides a framework for a sustainable and resilient system	What is our current state of nature and what do we need to conserve for a sustainable future?
2. Integrate biodiversity policy and outcomes into highest level plans	Articulates community values: Sets direction	What is important for the community? What is our strategic direction?
3. Adopt a performance measurement system	Measures progress in meeting goals	What is working? What is not working? Do we need to adjust?
4. Join national or global biodiversity networks	Allows you to benchmarking your performance and identify good approaches	How can I increase out organizations capacity? What are we missing?



**These four strategies are  
necessary...  
but not sufficient**

## Four Strategies + Four More

1. Adopt a natural area conservation model that works for cities
2. Integrate biodiversity policy and outcomes into highest level plans
3. Adopt a performance measurement system
4. Join national or global biodiversity networks
1. Develop a community engagement strategy
2. Enact a governance model for biodiversity
3. Create a securement strategy
4. Develop a natural area management plan