

NATURAL VALUES:

Linking the Environment to the Economy

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URBAN NATURAL CAPITAL

Natural Values: Linking the Environment to the Economy was developed by Ducks Unlimited Canada (DUC) to improve the environmental and economic understanding of natural systems. In Canada, policy, legislation and regulation efforts must accelerate to protect our important resources. To view other instalments in this series, visit www.ducks.ca/consERVE/wetland_values/consERVE.html



WETLANDS, FORESTS, RIVERS AND OTHER GREEN SPACES PLAY AN INTEGRAL ROLE in contributing to the environmental and economic health of our towns and cities. This supply of urban natural capital provides urban residents with a connection to nature as well as other benefits including improved health, recreational and educational opportunities, increased property value and environmental benefits. These green areas also play a key role in encouraging tourism, improving aesthetics and attracting and retaining skilled labour and businesses.

With more than 80 per cent of Canadians now residing in urban areas, natural capital within these areas is growing in importance. Unfortunately, urban sprawl, growing populations and limited financial resources are making it increasingly difficult to protect and enhance these areas. However, many municipal governments are making progress in creating and retaining urban natural capital. For example, the City of Calgary recently developed a Wetland Conservation Plan which promotes no net loss of wetlands. The plan was put into place because to date, Calgary has lost 80-90 per cent of its pre-settlement wetlands.

Increasing access to urban natural capital led to a 25.6% increase in the number of people who exercise three or more times a week. ¹

Environmental Values

Urban natural capital:

- improves water quality
- removes greenhouse gases and other pollutants from the air
- provides habitat for numerous species of plants and animals
- captures and retains stormwater
- prevents flooding and reduces erosion
- moderates air temperature

Toronto's seven million trees store approximately one million tonnes of carbon and 1,500 tonnes of other pollutants that can cause respiratory problems. ²



Economic Values

Urban natural capital contributes to the economic health of our cities. When urban natural capital is lost or degraded there is a financial cost incurred to replace the lost ecological goods and services it provides, such as:

- ① increased illness and health care costs
- ② decreased property value
- ③ decreased revenues from tourism activities
- ④ decreased employee health and workplace productivity
- ⑤ decreased recruitment and retention of skilled labour
- ⑥ increased costs for municipal infrastructure

“Healthy urban forests contribute to healthy cities and improve the quality of our lives in many ways”

– Hon. Gary Lunn, Minister of Natural Resources³

DUC Recommends That:

- **Canadians** educate themselves on the economic and environmental importance of urban natural capital and support its protection and enhancement.
- **Urban developers** protect and enhance natural capital in new developments.
- **Educators** incorporate the value of urban natural capital into science, social studies, geography and economics courses.
- **Non-governmental organizations** recognize the benefits of and support the protection and enhancement of urban natural capital.
- **Governments** fund research to increase the understanding of the environmental and economic value of urban natural capital and use the results to implement policies and legislation that protects and enhances urban natural capital.

Important Links

- www.ducks.ca/conserve/wetland_values/conserve.html
- www.ducks.ca/aboutduc/news/archives/2004/041115.html
- www.cwf.ca/V2/cnt/9e3d69ef41d7d7ac87256e7c004d3d1a.php
- www.brbc.ab.ca/pdfs/Calgary's%20Wetlands%20-%20At%20Work%20for%20You.pdf

What's Next? Fact Sheet 14: Coastal Areas

The Value of Urban Natural Capital

The value of Toronto's urban forest has been estimated at over \$16 billion.⁴

The City of Québec recently spent \$160 million to renaturalize the banks of the St. Charles River in order to reduce erosion and runoff.⁵

Parks and green space increased the value of adjacent properties by as much as \$11,000 in Surrey.¹

In Windsor, houses located nine metres from a greenbelt were found to be worth approximately \$10,995 more than houses located an average of 428 metres from the greenbelt.⁶

In Portland, Oregon properties located 300 metres from a wetland were worth \$437 more than those located 1.6 kilometres from a wetland.⁷

Between 1972 and 1996 the City of Seattle lost 46 per cent of its heavy canopy tree cover and 67 per cent of its medium canopy tree cover. This loss cost the City an estimated \$1.3 million/year in rainwater storage and management capacity and \$226 000/year in health care costs related to air pollution.⁸

Endnotes

- 1 Wilkie, K and R. Roach. 2004. *Green Among the Concrete: The Benefits of Urban Natural Capital*. Canada West Foundation.
- 2 CBC News. 2005. Aging urban forests under threat. Accessed April 2007 at: http://www.cbc.ca/news/background/environment/urban_forests.html.
- 3 Environment Canada. 2007. News Release: Canada's new government provides \$1 million for Halifax's Point Pleasant Park Restoration. Accessed April 2007 at: <http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=FE3F73FB-7627-46CA-AA8D-EC595E3C4800>.
- 4 Government of Canada. 2004. Evolving urban forest concepts and policies in Canada. Accessed April 2007 at: http://policyresearch.gc.ca/page.asp?pagenm=v6n4_art_09.
- 5 Ville de Québec. 2007. Programme d'assainissement de la rivière Saint-Charles. Accessed April 2007 at: http://www.ville.quebec.qc.ca/fr/information/communiquer/amenagement_territoire_habitation/2698.shtml
- 6 Environment Canada. 2000. Community greenspaces are worth money. Accessed April 2007 at: <http://www.on.ec.gc.ca/community/greenspace/pdf/commgreenspace.pdf>.
- 7 Mahan, B.L., Polasky, S. and R.M. Adams. 2000. Valuing urban wetlands: A property price approach. *Land Economics* 76(1): 110-113.
- 8 City of Seattle. 2005. Urban Forest Management Plan (Public Review Draft). Accessed April 2007 at: http://www.seattle.gov/environment/documents/Draft_Forest_Plan-Final.pdf