CONSERVING EDMONTON'S NATURAL AREAS

A Framework for Conservation Planning in an Urban Landscape

Technical Report

Alberta Environmental Network

Community Services City of Edmonton

Westworth Associates Environmental Ltd. The Dagny Partnership IPS Consulting Ltd. The Land Stewardship Centre of Canada Environmental Law Centre

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February 2001

PREAMBLE

This report should be used as a tool to discuss future directions/policy changes with respect to the natural area planning and conservation process. At the time of the release of the report, the parent groups sponsoring this project including the Alberta Environmental Network, City of Edmonton and others such as the Urban Development Institute, etc., have not had the opportunity to review and consider what elements may be appropriate for implementation. Moreover, more discussion is necessary before the concepts could be brought forward for action. The report represents the views of the project Steering Committee and the Consulting Team and does not bind the parent organizations to any specific action. Further stakeholder consultation is required.

The report has been presented in three volumes:

Volume 1 – Executive Summary

Volume 2 – Technical Report

Volume 3 – Supplemental Information

Conserving Edmonton's Natural Areas

Acknowledgements

The study's success is in large measure due to the countless hours of time contributed by Steering Committee members and the helpful participation of the many individuals that took part in workshops and focus sessions or met with consulting team members to discuss various aspects of conservation planning. The Phair-Bolstad Committee was instrumental in initiating this project and a number of members of this committee were extremely helpful to the study team and Steering Committee during various phases of the project. To all of these individuals the study team extends its warmest thanks.

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Funding of this project was provided by the Edmonton Community Lottery Board

It is up to us to with vision. Our responsibility is to retain what treasure, because we are merely guests on those spaces of the earth that we inhabit. We should leave good impressions about our visit.

Steering Committee

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Conserving Edmonton's Natural Areas



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1

1 INTRODUCTION

1.1 Background

Over the past several decades the City of Edmonton has been one of the fastest growing communities in Canada. The rapid pace of residential and industrial land development that has accompanied this growth has dramatically changed the City's natural landscape, resulting in the loss of many of the wooded areas, wetlands and meadows that were once common around the city.

Concern over the loss of these natural areas led Edmonton City Council and the Administration to begin taking steps in the early 1990s to conserve some of these sites. These steps included an inventory of environmentally sensitive and significant natural sites and the passing of Policy C-467 in 1995 (Conservation of Natural Sites in Edmonton's Table Lands). Policy C-467 directed the Administration to conserve natural sites by encouraging voluntary conservation and corporate and private sponsorship of natural sites, by facilitating natural site conservation through the planning and development process, and by promoting increased awareness about conserving natural areas. This was followed by the establishment of a Natural Areas Reserve Fund to fund the acquisition of priority sites. These efforts were supported by

initiatives by the Edmonton Natural History Club and other environmental groups and individuals to promote community awareness and development of effective conservation programs.

Although these efforts did result in the conservation of several sites within the city, the failure of efforts to save the Little Mountain Natural Area from proposed development in the late 1990s highlighted deficiencies in the implementation of the existing policy framework and prompted City Council to direct the Administration to identify more proactive measures for implementing Policy C-467.

As part of this more proactive approach, an informal coalition of environmental interests, development interests and the Administration has been meeting regularly, facilitated and chaired by City Councilors Michael Phair and Allan Bolstad. One of the groups that has been at the table is the Alberta Environmental Network. The Alberta Environmental Network is a facilitating organization that brings together environmental interests for concerted action.

The Alberta Environmental Netwok in consultation with the City prepared a successful joint grant proposal to the Edmonton Community Lottery Board. The grant provided funding that was not otherwise available to initiate a project that would provide City Administration with information or tools to enable them to more effectively implement Policy C-467. In May 2000, a contract was awarded to a consulting team led by Westworth Associates Environmental Ltd. to undertake this project.

Although the primary purpose of the project was to develop more effective strategies or tools for conserving natural areas, the project was also expected to provide an important foundation for increasing awareness and building community support for this initiative. This is reflected in the project's vision statement:

Collectively amplify the City's efforts to conserve natural areas. The outcomes of this grant will enhance the ability of the City to achieve tangible evidence of conservation (e.g., site acquisitions, conservation easements, agreements to purchase, etc.) within the next two years. There will be an enhanced awareness and support for the conservation initiative that will be evidenced by growing financial support for the Natural Areas Reserve Fund and partnership arrangements for individual sites from environmental groups, individuals, the development industry and other stakeholders. Finally, all stakeholders will gain enhanced knowledge and a community support base upon which to continue to build the momentum generated by this important work.

Equally importantly, this project begins to shape a partnership arrangement between the City, Edmonton's environmental community, and the development industry that is integral to the overall success of conserving natural areas. This partnership is reflected in the Steering Committee that actively participated in the present study and dedicated many hours to ensuring the study's successful conclusion.

1.2 Goals and Scope of Study

Although the overall goal of the study was to increase the success of efforts to conserve natural areas, the study was designed to achieve four specific outcomes:

- Recommend a short list of sites on which to focus conservation efforts.
- 2. Recommend the establishment of site-specific conservation strategies for those sites.
- 3. Develop a strategy to enhance natural areas awareness and education.
- 4. Develop an appropriate fund-raising strategy.

The focus of the project was on developing an approach that could achieve tangible evidence of successful natural site conservation within the next two years. Although the project focuses on short-term needs, both the City of Edmonton and the Alberta Environmental Network view this as an initial step in the longer-term process of conserving important components of Edmonton's natural heritage.

1.3 Study Process

Throughout the project, the Consulting Team worked closely with a Project Steering Committee comprised of members of the Alberta Environmental Network, The City of Edmonton Community Services Department and the Urban Development Institute. These groups met on a frequent basis throughout the study to discuss approaches and review study findings.

The study process itself is illustrated in Figure 1. In developing this study plan, it was evident that all of the desired outcomes depended on first achieving a clear understanding of conservation issues, priorities, and constraints from the point of view of different stakeholders in the community. It was also

expected that differences in conservation opportunities and constraints between suburban areas, business and employment areas, and agricultural areas would likely necessitate somewhat different strategies and approaches to natural area conservation. A key element of the study strategy therefore involved the use of workshops or focus groups to develop this understanding from the point of view of the development community, landowners, environmental groups and a representative sample of the general public.

1.3.1 Information Review

The present study built on earlier efforts to inventory and classify natural sites in the city. Consequently, the study began with a review of all background and historical information pertaining to the project. Members of the study team contacted dozens of individuals representing both private and public sector organizations that are involved with planning, land development and natural area conservation in the Edmonton area. As well, the study team contacted members of other agencies and reviewed case studies from other cities in North America, to identify methods or approaches to natural area conservation that have been successfully used elsewhere.

1.3.2 Issues Scoping and Analysis

To achieve the desired study outcomes it was important to have a clear understanding of conservation issues, opportunities and constraints from the point of view of each of the principal stakeholders in the community. To obtain this information, the study team held a series of focus groups or workshops with groups representing land development

interests, environmental interests, and the community as a whole. These sessions did not represent a statistically accurate survey, but rather were intended to help the Consulting Team identify trends, common issues and concerns, and to gauge the intensity of support or opposition to various issues.

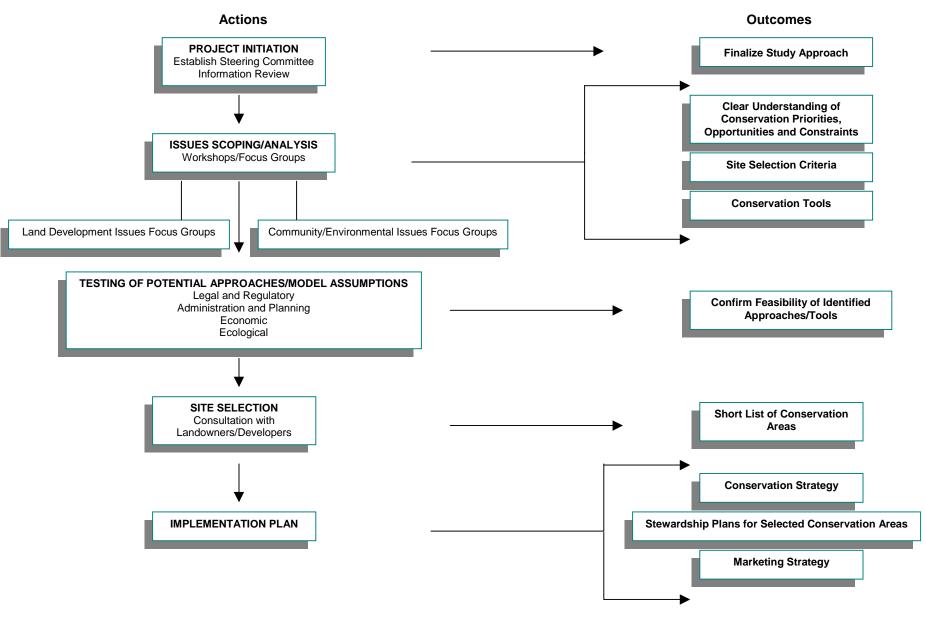
1.3.3 Community Focus Sessions

To determine the views within the community to natural area conservation, separate focus sessions were held with groups representing the general public and Edmonton's environmental community. Summaries of these focus sessions are provided in Appendices 1 and 2 respectively.

1.3.3.1 Focus Group Objectives

- To identify and understand the community's priority and criteria for land conservation within the City of Edmonton.
- To understand community attitudes towards what land qualities are most important to conserve and why.
- To probe for attitudes surrounding whom should own, operate, fund and have access to conserved land.

Figure 1. Study Process.



To probe the community's fiscal priority for this activity.

The discussion sessions were structured to probe stakeholders' priorities both within specific land conservation types and areas, stewardship priorities and issues as well as funding priorities within the context of other municipal service priorities. A secondary outcome of the workshops was to identify any opportunities where partnerships could emerge to assist in moving the project forward.

1.3.3.2 Focus Group Selection, Screening and Composition

To ensure that the participants in the general public session represented the "silent majority", we utilized the services of an independent recruitment firm to randomly select 12 citizens. Each participant was paid a small honorarium. The following chart outlines the screening criteria that were used to screen participants.

Screening Criteria

- Homeowners (taxpayers).
- Representative gender mix (50/50).
- Age bias (22-50) with no more than 2 seniors.
- Each quadrant of the City represented with a maximum of 1 per subdivision.
- City of Edmonton employees, students and environmental group members were screened out.
- Targeted 2-3 participants that purchased their house in the last year.

Participants in the environmental group focus session were selected from a list established by the Consulting Team with

additions and deletions recommended by the Steering Committee. Attempts were made to obtain individuals with an active and long-term affiliation in their respective organizations. The following environmental groups and organizations participated in the session:

Environmental Organization

- Edmonton Bird Club
- Canadian Parks and Wilderness Society
- FEESA, An Environmental Education Society
- Ducks Unlimited Canada
- North Saskatchewan River Watershed Alliance
- Environmental and Outdoor Education Council
- Capital City Health Authority
- Pembina Institute for Appropriate Development
- Alberta Conservation Association
- Edmonton Federation of Community Leagues
- Urban Sprawl Campaign/Sierra Club Prairie Chapter

A number of other environmental organizations were also invited to participate but did not send representatives. In addition, several members of the Steering Committee were present as observers.

Participants in an environmental focus session held at the offices of the Land Stewardship Centre of Canada. Conserving Edmonton's Natural Areas



1.3.4 Developer Workshops

The perspectives of the development industry to natural area conservation were explored during two workshop sessions arranged in conjunction with the Urban Development Institute. Participants consisted of senior representatives of a number of firms representing industrial, commercial, and residential land development interests. During the initial workshop, this group was asked to identify current obstacles to natural area conservation and conservation approaches that might work from a land development and economic perspective. During the second workshop the group provided input to the study team on a specific set of potential tools for achieving natural area conservation. Results of these workshops are summarized in Appendices 3 and 4, respectively.

1.3.5 Testing of Potential Approaches and Model Assumptions

To determine whether the various approaches or tools identified were feasible from economic, ecological, legal, and administrative/policy points of view, additional consultations were held with members of various civic departments, provincial government agencies, the development industry, and the legal profession. Information obtained from these

interviews was helpful not only in identifying barriers to natural area conservation but for determining the level of support for implementing changes that would favour these conservation initiatives in the future.

1.3.6 Site Selection

Site selection criteria developed during issues analysis and scoping were used to develop a short-list of potential conservation sites using a form of SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis. SWOT analysis is a useful tool for examining the interaction between conservation-based activities and development activities. The internal portion of the SWOT analysis examined the strengths and weaknesses of each of the 62 sites identified during previous studies. For example, this considered ecological factors such as size, potential linkages, biodiversity, and sustainability. Similarly, the external analysis looked at the opportunities presented by the development marketplace and the threats that face natural areas in that marketplace. This type of analysis also provided a practical method of incorporating community issues, such as the level of community support, educational opportunities and potential partnership/stewardship arrangements into the site selection process.

1.3.7 Consultation with Landowners/Developers

Natural area conservation ultimately depends on the willingness of landowners/developers to participate in these conservation initiatives. An important step in the final site selection process therefore involved one on one consultation with the owners of the short-listed sites to determine their

willingness to participate in natural area conservation and any conditions or constraints that would be associated with their participation. The intent was to arrive at a final list of 5-10 conservation areas for which there is a high potential for concluding successful agreements with the landowner/developer within the next two years.

1.3.8 Implementation Plan

1.3.8.1 Site Stewardship Planning

For each of the selected sites, an interim site stewardship plan was developed that describes the values or attributes of the site. conservation requirements, and management development opportunities and constraints, potential stakeholder support and partnership opportunities, communications requirements, and a long-term conservation strategy and goals. Landowners were interviewed to obtain information on current and previous land use and to determine their potential willingness to participate in conservation initiatives. Although the timing of the study precluded detailed site inventories, each site was visited to document current environmental conditions and important features.

1.3.8.2 Development of a Communications and Marketing Strategy

Appreciation and support for natural area retention by Edmontonians will be an essential factor in the sustainability of this project. An important goal of the study was to develop a targeted, strategic marketing plan that will provide insight and suggest concrete actions as to how such support can be fostered and enhanced. The steps that were involved with

development of the communications and marketing strategy included:

- An analysis of existing research including public attitude surveys, focus groups, other conservation/environmental program evaluation information, and government data sources;
- Interviews with staff, community leaders and potential community awareness partners;
- Results of the workshops and focus groups;
- Review of communication strategies of similar programs in other municipalities;
- Review of key preservation/environmental advocacy and education programs for relevant linkages; and
- Review of similar communities, identified by the Alberta Environmental Network and City of Edmonton, as having preferred "best practices" to identify successful tactics that may be applicable.

1.3.8.3 Identification of Funding Strategies

A thorough examination of local, provincial and national grant, foundation, corporate and other philanthoropic funding opportunities was conducted. Elements that are of key importance to potential funders were determined. All potential funding sources were assessed with respect to project requirements and ranked according to best, moderate and least potential. Information gained in the research phase was used to develop a strategic fund raising strategy, which included:

Funding priorities;

- Defined fund raising objectives and outcomes;
- Situational analysis, including assessment of what approaches will have the best potential for this project;
- Strategic approach to fund raising, based on the situational analysis;
- Key messages (with direct links to the communications plan);
- Action plan, including outline of potential funders, funding priorities and timelines; and
- Organizational information, including an outline of the roles and responsibilities involved with preparing and processing funding requests and a schedule of funders with their granting-funding timelines.

2

2 WHY CONSERVE NATURAL AREAS?

2.1 What Are Natural Areas?

It is important to begin with a common understanding of what natural areas really are. Policy C-467 defines natural areas in primarily administrative terms as sites that "contain vegetation, water or natural features" and meet the criteria identified in the "Inventory". The inventory conducted by Geowest Environmental Consultants Ltd. (1993) gave a number of criteria for identification of Natural Areas, Significant Natural Areas and Environmentally Sensitive Areas that were based on a policy document prepared by the City of Edmonton Planning and Development Department (1992) entitled Environmentally Sensitive and Natural Area Protection Within Edmonton's Table Lands: Policy and Implementation Background Study:

Natural Areas – Small sites (0.1-1.0 ha for wetlands and 1.0-2.0 ha for forested areas) that do not necessarily contain any special or unusual features.

Significant Natural Areas – Larger sites (more than 1.0 ha for wetlands and 2.0 ha for forested sites) that "have the potential to remain sustainable within an urban environment and are significant from an environmental perspective to

the community of Edmonton because of their size or features of the site".

Environmentally Sensitive Areas – Large sites (more than 1.0 ha for wetlands and 2.0 ha for forested sites) that are "undisturbed or relatively undisturbed" and which "because of their natural features have value to society and ecosystems worth protecting, but are susceptible to further disturbance". Sites classified as Environmentally Sensitive may provide habitat for rare species, exhibit high diversity, contain unique or sensitive landforms, or provide critical hydrological functions.

While these criteria might be useful in prioritizing sites, they do not provide the public with a good understanding of what a natural area actually is. In an urban setting, we need to consider natural areas in both ecological and human terms. This understanding began to emerge during our focus sessions with representatives of the environmental community and the general public, when we asked the groups to indicate their preferences and expectations with respect to natural site conservation. Both groups indicated that the essential consideration was the natural character of the area, clearly making the distinction that man-made parks and landscaped areas were not natural areas. Both groups also acknowledged the complexity of natural areas, noting that natural areas were in fact natural ecosystems, in which air, water, soil and living organisms, including humans, interact in exceedingly complex ways.

These distinctions are important if we are trying to preserve natural areas and to maintain the services that natural ecosystems provide. These systems have evolved over very long time periods and cannot be replaced by planners, biologists or landscape architects – we simply do not have sufficient knowledge of how natural systems work.

We also have to be careful using sustainability as a criterion for selecting or conserving natural sites. In an urban setting, where natural habitats have been fragmented and heavily modified by human land use, all of the remaining fragments may fail some of the commonly used tests of sustainability. This is evident by the fact that many species that once occurred on the landscape are no longer present here.

A more realistic goal might be to try to conserve sites that provide a good representation of the natural communities that once occurred throughout the Edmonton area and to take steps to maintain the integrity of the conserved sites. Karr and Dudley (1981) provide a definition of biological (or ecological) integrity that we think can be applied to an urban area:

Biological integrity is the capability of supporting and maintaining a balanced, integrated, adaptive community of organisms having a species composition and functional organization comparable to that of the natural habitat of the region.

2.2 Functions and Values of Natural Areas

Maintaining a system of parks and natural areas throughout our city not only beautifies our community but contributes to clean air and water, habitat for plants and animals, and a healthy environment. Natural areas serve as important sites for nature-related recreation and environmental education.

2.2.1 Direct Economic Benefits

There are not only aesthetic and ecological reasons for conserving natural areas; there are important economic reasons as well. Many of the ecological services that natural areas provide translate into direct cost savings to communities. For example, natural areas intercept rainfall and reduce stormwater runoff, resulting in potential reductions in requirements for stormwater infrastructure. The shade and shelter provided by treed stands can also result in energy savings. In addition, treed areas and wetlands benefit human society by removing air pollutants and sequestering and storing carbon. We know that tree foliage filters and removes a number of known air pollutants, including carbon monoxide, sulphur dioxide, nitrogen dioxide and ozone. Trees and other natural vegetation also remove carbon dioxide from the air, storing the carbon in their tissues. Increased levels of carbon dioxide in the atmosphere have been linked to the "greenhouse" effect and global warming.

Recently, efforts have been made to actually quantify these benefits. The City of Tampa, Florida, for example, conducted an Urban Ecological Analysis, in which models were developed to measure the benefits of trees in terms of stormwater runoff reduction, energy conservation, air pollution removal, carbon storage and sequestration and wildlife habitat (Campbell and Landry n.d.). Tampa is a city with about one-half the population of Edmonton. Although its climate is certainly different, it faces many of the urban environmental problems that Edmonton does.

The study showed that the economic benefits to the community are significant. The total economic value of trees

in terms of annual cost savings to the City of Tampa were calculated at over \$16 million US in 1999, or the equivalent of \$20 US per tree per year. Similar results have been reported in other cities in the United States (e.g., Boulder, Chicago) that have conducted this type of analyses.

2.2.2 Indirect Economic Benefits

While examples such as these provide an appreciation of the value of natural areas in monetary terms, they do not reflect the overall value of natural areas to communities. For example, these models do not determine the economic value of natural areas for non-marketed services such as recreation (wildlife viewing, nature photography, walking or hiking) or simply nature appreciation and enjoyment. Although economists have attempted to measure these services in terms of option values or existence values, we have not seen any data that apply directly to urban natural areas.

An indirect measure of the aesthetic and recreational value of natural areas can be obtained by examining the influence of natural areas on real estate market value. A number of studies have shown that proximity to preserved open space or natural areas increases property values, "particularly if the open space is not intensively developed for recreation purposes and if it is carefully integrated with the neighbourhood" (Fausold and Lilieholm 1996).

A review of the economic impacts of protected areas on real estate values in the United States (U.S. National Parks Service 1996) showed that proximity to protected open spaces increased property values by as much as 33% in some cases.

The highest increases in property values were recorded at sites which:

- Highlight open space rather than highly developed facilities;
- Have limited vehicular access, but some recreational access; and
- Have effective maintenance and security.

These enhanced real estate market values are important to the local property tax base, since they tend to offset the costs of open space preservation, which is often tax-exempt or taxed at a lower rate (Fausold and Lilieholm 1996).

2.2.3 Intrinsic Ecological and Social Value

This lengthy discussion of economic values should not diminish the importance of the intrinsic ecological and social values of natural areas, which should be the primary focus of the natural area conservation program. This includes going beyond the anthropocentric notion that natural areas exist only for the benefit of humans and recognizing the importance of providing habitats for other organisms on our planet. There is a need to recognize the spiritual and psychological benefits of maintaining these connections to nature and the relief that natural sites provide from urban pressures. Natural areas also contribute to our sense of pride in our community and represent an important legacy for future generations. These ideas are eloquently expressed by well-known Edmonton naturalist Patsy Cotterill, who writes:

Our local and regional natural ecosystems are a part of our heritage just as much as our social cultures are, in fact, they influence and sustain them. And biological diversity is now well recognized as essential to healthy ecosystems, a healthy environment. But living things are not static: they need room to live, move, exchange genes, disseminate and evolve if they are to perpetuate themselves. My (our) vision of conservation in a densely settled area includes planning for a network of natural areas and corridors within and beyond the framework of settlement such that plants and animals would have this freedom. Urbanites will find their lives enormously enriched by being able to engage with nature close to where they live.

2.2.4 Natural Heritage

Natural areas indeed are part of our heritage. Through its history, Edmonton has been defined by its natural setting. Unlike many major North American cities, where urban development has eliminated all traces of the natural environment, Edmonton is recognized for the green spaces associated with our river valley and the many remnant patches of forest and wetlands scattered across our table lands. These remnant natural areas have served as a tangible link with both the natural history and the human history of the region. A review of aerial photographs however, provides a vivid indication that our landscape has changed dramatically over the past two decades. In the absence of any effective programs to protect and conserve remaining natural areas, many of our most significant natural sites have been lost to development. We may be at a crossroads that will determine the future character of the city. Either we must move quickly to protect the natural features that we cherish and take for granted within the City of Edmonton or we will see the remaining fragments of our natural heritage lost forever.

Our natural ecosystems are a part of our heritage just as much as our social cultures are, in fact they influence and sustain them.

Patsy Cotterill

3

3 THE LAND DEVELOPMENT PROCESS IN EDMONTON

3.1 Introduction

Understanding the difficulties associated with natural site conservation in Edmonton requires an understanding of the ways in which land use planning and land development occur in the City. This will also ultimately point the way to a solution to the problem, since implementation of an effective strategy for conserving natural sites will need to occur within the framework of our existing planning and development system.

The existing planning and development system is a complex process in Edmonton involving City Council, the civic administration, the development industry and the public. City Council establishes the overall direction for planning and development in the City, using decision-making powers conveyed up on it by the Government of Alberta through the *Municipal Government Act*. The *Municipal Government Act*, which came into effect in May 1995, replacing the earlier *Planning Act*, "provides City Council and the civic administration with the basic tools to encourage and facilitate the development and redevelopment of land in a systematic, orderly, economic and environmentally responsible manner" (City of Edmonton, Planning and Development, March 2000).

The most important of these tools is *Plan Edmonton*, Edmonton's Municipal Development Plan, which was approved by City Council on August 31, 1998. *Plan Edmonton* sets out the City's policies and priorities with respect to future land use and land development in the community. The City's growth and land development strategy is illustrated in Figure 2. *Plan Edmonton* also establishes a framework for planning of intermunicipal land use, transportation systems and infrastructure development with adjacent communities.

Plan Edmonton is implemented through a series of local land development plans, land use controls and regulatory measures. The Planning and Development Department assumes the primary responsibility for administering this process. The steps in the land development planning and approval process are shown in Figure 3. Public consultation is undertaken throughout the planning and development process through notices, advertisements, public meetings, open houses, surveys and design workshops.

The development industry is the major vehicle of land development in Edmonton. The industry, which is represented by landowners, developers, builders and others, initiates land development in response to market opportunities and economic conditions. As well as initiating development applications, the development industry plays a major role in the planning process. The development industry is responsible for preparation of

Figure 2. Edmonton's Growth and Development Strategy.

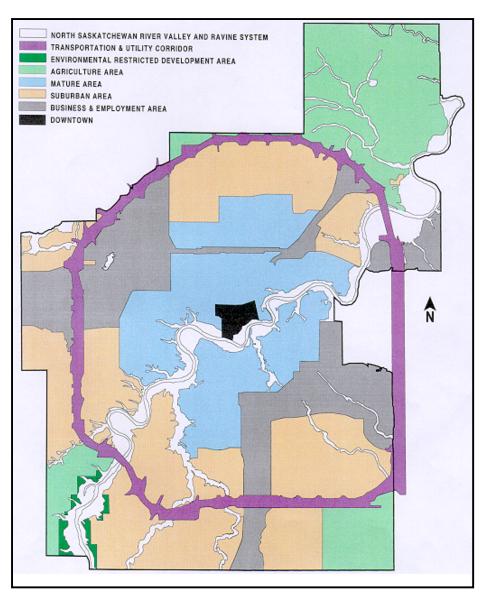
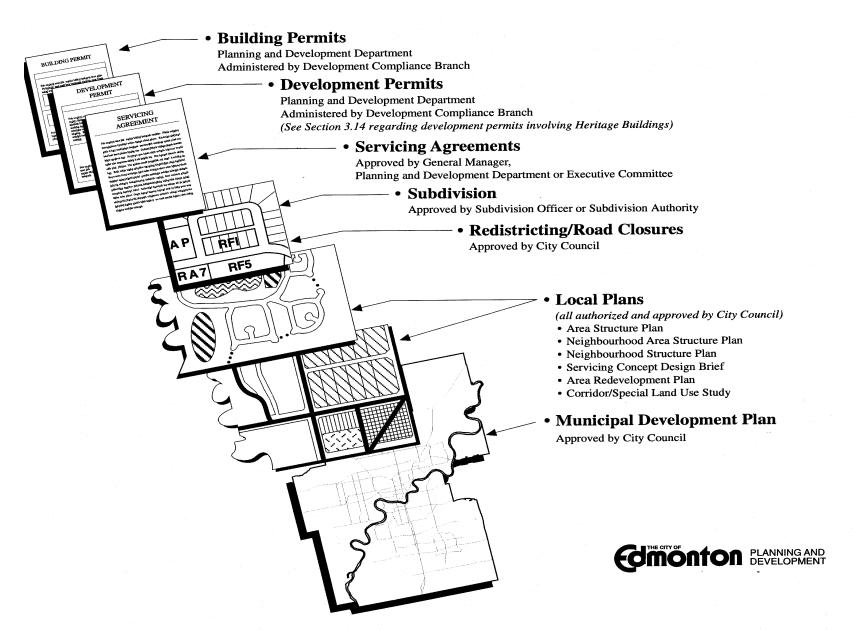


Figure 3. Edmonton's Land Development Planning and Approval Process.



Area Structure Plans, Neighbourhood Area Structure Plans, Neighbourhood Structure Plans, subdivision plans and various other development feasibility studies.

3.2 Edmonton – An "Urbural" Setting

With the massive annexation of 1982, the City of Edmonton grew from 350 km² to 700 km² (R. Higgins, Planning and Development, personal communication). Today about 400 km² or 57% of the city is urbanized. This leaves vast tracts of predominantly privately-owned land within city boundaries, which will remain in a rural or semi-rural state for years to come. This is clearly evident when one examines the City's growth and land development strategy (see Figure 2). This shows large areas of land to the northeast, southeast and southwest devoted to Agriculture. Also, within the categories of Suburban and Business and Employment Areas, there are also large tracts of land toward the city limits which remain in a rural or semi-rural state today, awaiting future urban development. Other key land use areas in the city include the North Saskatchewan River Valley and Ravine System, the Environmental Restricted Development Area and the Transportation and Utility Corridor.

The North Saskatchewan River Valley and Ravine System encompass lands which are owned by the city, private landowners, and the Province of Alberta.

The Transportation and Utility Corridor consists of lands owned by the Province which are designated for future development of a ring road, transmission lines, and underground pipelines/utilities.

The Environmental Restricted Development Area is located in the southwest corner of the city on either side of the North Saskatchewan River. It is part of a larger restricted development area which extends upstream of the City of Edmonton to the Town of Devon. These lands are under the control of Alberta's Minister of the Environment.

The two remaining land development areas designated in the Municipal Development Plan are Mature and Downtown Areas. As the names suggest, these are the oldest and most densely-developed urban areas within the City.

4

4 WHAT IS CURRENTLY BEING DONE TO CONSERVE NATURAL AREAS IN EDMONTON?

4.1 Background

Various environmental policies, guidelines and bylaws concerning conservation and protection of natural features within the City of Edmonton have been developed and incorporated into the municipal planning process over the last 25 years. Most notably, the Municipal Development Plan, Bylaw No. 11777, As Amended (Plan Edmonton 1998) establishes the basis for preservation and enhancement of the North Saskatchewan River valley, natural areas and open spaces and recognizes the importance of linkages within the urban fabric. Other relevant planning documents include the Land Use Bylaw (currently in revision), the North Saskatchewan River Valley Area Redevelopment Plan Bylaw (No. 7188), the Environmentally Sensitive and Natural Areas Protection within Edmonton's Table Lands Policy (Policy C-467), and the recently approved Integrated Service Strategy developed by the Community Services Department (Towards 2010, A New Perspective).

In 1995, Policy C-467 was passed by City Council directing Administration to save as many natural areas as possible. This policy was developed following extensive consultation with various stakeholders including environmental interest groups and the Urban Development Institute. While Policy C-467 has been somewhat successful, it has been generally acknowledged that further efforts are required to ensure that the City is more proactive in protecting sites from urban development.

In 1986, an inventory of urban natural history interpretative sites in and adjacent to Edmonton was conducted, resulting in the identification of 1,049 natural sites (Ealey 1986). The Planning and Development Department then undertook a policy and implementation study which proposed that natural sites within city limits be identified and classified as a basis for future recognition and protection (Planning and Development 1992).

An updated inventory of environmentally sensitive and significant natural areas was subsequently conducted in 1993 resulting in the identification of 311 sites (Geowest Environmental Consultants Ltd. 1993). Of the 311 sites, 85 sites located within the table lands of Edmonton were selected for further evaluation and ranking (Geowest Environmental Consultants Ltd. 1999). However, of the remaining 85 sites, 7 sites were considered severely impacted and were considered lost while an additional 16 sites have been either partially or fully conserved in some manner. The remaining 62 sites were prioritized using a non-weighted scoring methodology (Geowest Environmental Consultants Ltd. 1999).

The results of these studies clearly indicate that the City of Edmonton still contains a wide range of green spaces that provide habitats for a diversity of native fish, wildlife and plant species within its boundaries. It is also clear however, that the

pressures associated with an increasing human population and expanding industrial development have made protection of these natural features a challenging task. The following sections describe the policies that have been put in place by the City of Edmonton to protect natural sites and look at the effectiveness of these policies and procedures for protecting these resources.

4.2 Existing Policies for Conserving Natural Areas

4.2.1 Municipal Development Plan

Edmonton's *Municipal Development Plan*¹ ("Plan Edmonton") contains many provisions that support municipal action to conserve natural areas. These include:

- A statement in Vision, Mission and Commitment that the City is committed to sustain the quality of the physical environment for future generations. Plan Edmonton- p.5
- A statement in *Our Physical Growth Strategy* that "Our agricultural areas will be protected from premature fragmentation until they are needed for urban development. *Plan Edmonton - p.11*
- A statement in *Planned Growth* that "We will ensure that sufficient recreational facilities and open spaces are available for the enjoyment of our citizens. We will protect the North Saskatchewan River Valley and Ravine System and seek to conserve environmentally sensitive areas and natural sites for the benefit of future generations. *Plan Edmonton - p.12*

- A section in *Planned Growth* titled *Our Priority: Preservation and Enhancement of the Natural Environment and Open Spaces*. This section sets out a strategy to "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." The *Strategy* includes (*Plan Edmonton* p.12):
 - Developing a comprehensive, integrated plan for the river valley, natural areas and open spaces that: integrates and connects natural areas within the urban fabric to provide access; develops access and recreational use opportunities while protecting the natural environment; encourages the conservation and integration of natural areas that are sustainable and feasible; and re-defines the principle and practices of Municipal Reserve allocation to support the objectives of the open space plan.
 - Implementing policies for the conservation of natural sites in Edmonton's Table Lands and the North Saskatchewan River Valley and the Ravine System through the planning process.
 - Working pro-actively with the Provincial Government to ensure that Crown interests in water bodies are addressed prior to development.
- A statement in *Infrastructure Development and Maintenance* that the City's priority is *Protection of the Natural Environment*. The *Strategy* to achieve this priority includes protecting and maintaining City owned natural areas and green spaces. *Plan Edmonton p.52*

¹ Municipal Development Plan, Edmonton Bylaw 11777, August 31, 1998.

A statement in *Intermunicipal Planning*:

- to recognize that the scope of intermunicipal planning interests may include: the traditional fringe (the land ribbon along both sides of a shared border) and regional environmental corridors. *Plan Edmonton* p.68.
- that a **strategy** will be to work cooperatively with intermunicipal planning partners to achieve (among other things) protection of the environment. *Plan Edmonton p.71*
- to cooperate with municipalities in the Edmonton Capital Region, other levels of government and private landowners to protect the North Saskatchewan River Valley and Ravine System for the beneficial use of regional residents and to participate actively in organizations that work to protect, preserve and enhance the valley and ravine system for its recreational, aesthetic and natural resource values. *Plan Edmonton p. 73*

4.2.2 Land Use Bylaw

Edmonton's current Land Use Bylaw is over 20 years old however, the City is now developing a new Land Use Bylaw (draft). The following comments address the draft Bylaw, focusing on those elements of the Bylaw that are relevant to conserving natural areas.

4.2.2.1 Districts and Permitted Uses

The draft Bylaw continues the six categories of districts: Residential, Commercial, Industrial, Urban Service, Agricultural and Reserve and Direct Control. From a brief review of the draft Bylaw the writer did not find any permitted uses that specifically address matters relevant to the conservation of natural areas. For example, there is no district similar to Strathcona County's Conservation and Open Space District (see section 7.3.3.2).

Edmonton's draft Bylaw's Direct Control district could facilitate conservation of natural areas, but only in limited circumstances. The purposes of this district are: to provide for control of land to "... establish, preserve or enhance ... areas of unique character or special environmental concern, as identified and specified in an Area Structure Plan or Area Redevelopment Plan; or ... areas or sites of special... natural, scientific, or aesthetic interest, as designated under the Historical Resources Act".

4.2.3 North Saskatchewan River Valley System Bylaws

Many Edmontonians believe that the North Saskatchewan River Valley is somehow protected from development. This blanket statement is not true, although there are bylaws in place to limit development and to conserve many natural areas. The following two sections describe these bylaws.

4.2.3.1 North Saskatchewan River Valley and Ravine Protection Overlay Bylaw

The North Saskatchewan River Valley and Ravine System Protection Overlay² offers limited protection from development of privately owned land in the North Saskatchewan River Valley and Ravine System. Although the Overlay Bylaw allows the permitted and discretionary uses in the underlying districts, it requires all developments to maintain a minimum 7.5 m setback from the river valley and ravine system as shown on a schedule to the Overlay. A Development Officer may allow a variance to the setback requirements in certain circumstances.

4.2.3.2 North Saskatchewan River Valley Area Redevelopment Plan Bylaw

The 1985 North Saskatchewan River Valley Area Redevelopment Plan Bylaw³is a comprehensive Plan that sets out policy and implementation directives for land uses in the City's river valley. The Plan's concept for the major portion of the river valley is for environmental protection and use as urban and natural parks. For the Central Area of the City (Rossdale and Cloverdale) the Plan envisions a "sensitive mix of land uses — residential, recreational, institutional and commercial...". The Plan also contemplates limited use for residential, transportation, public utility and institutional development. The Plan's overall concept is that there be an "... open space system, interspersed with recreational activity nodes" ... a "linear system [that] offers open space edges in the framework of Edmonton's urban development and [that]

provides maximum visual impact and physical accessibility to the valley". $^{\rm 4}$

The Plan sets out objectives and goals to realize the concept. Implementation primarily is through a number of policies. Policy groups include: Environmental Protection Policies; Transportation Policies; major Facility and Natural Resource Development Policies; Agricultural Land Use Policy; Residential Land Use Policies and Central Area Land Use Policies.

The following sets forth key points of Policy Groups of interest to this report⁵. Italicized comments are those of the writer.

Parkland Development Policies include:

- To manage areas of significant ecological value or having unique natural features as nature conservation areas (Note: no direction given as to how this is to be done).
- To develop low to high range of recreational activities for the river valley areas.
- That the City "may acquire through subdivision: environmental reserve dedication (Note: this is allowed by the Municipal Government Act).
- That environmental reserve lands be managed as parks and open spaces.

² Edmonton Bylaw 5996.

³ Edmonton Bylaw 7188.

⁴ *Ibid.*, section 2.1.

⁵ *Ibid.*, Part 3.

- That a trail system be the primary travel system through the river valley.
- That accessory land uses such as cafes, restaurants and like establishments be encouraged provided they are "complementary to recreational and open space opportunities and harmonious to the natural environment".

Environmental Protection Policies include:

- To identify environmentally sensitive lands.
- To require environmental impact screening and assessment of all proposed development by public bodies and development on public land.
- That when a development application is received, the Development Officer determines whether the subject lands are environmentally sensitive. If it is, the Officer may require additional information. The policy contemplates the Officer consulting with other departments and environmental agencies to determine what mitigation conditions, if any should be required (Note: the policy does not require that applications be denied if there is a significant adverse environmental effect, nor does the policy require mitigation).

Transportation Policies include:

- That all existing and future transportation facilities be reviewed with the objective to eliminate or minimize negative effects.
- That all upgrades of approved transportation corridors and facilities be subject to an environmental impact assessment.
- No direct river or ravine crossings unless deemed essential by City Council.

Major Facility and Natural Resource Development Policies include:

- No such development in the river valley unless deemed essential by City Council.
- To require environmental impact screening and assessment to all proposed development by public bodies and development on public land.
- That the City will not support applications for facility development to the Energy Resources Conservation Board (Note: now called the Energy and Utilities Board) for resource extraction in areas identified as having unique environmental features.
- That all design considerations for buffering extractions are a condition of resource extraction operations.
- To employ stormwater management techniques to reduce adverse impacts.
- To monitor and regulate water quality and flows where possible.

Agricultural Land Use Policies include:

 That existing agricultural activity may continue subject to environmental reserve dedication potential in the subdivision process.

Residential Land Use Policies include:

- Existing residential development and those lands presently (in 1985) districted for residential development outside the Central Area is recognized.
- Other than above, no additional residential lots may be created, except in the Central Area.

4.2.4 Table Lands Zoning

The natural areas that are the primary subject of this report are located in the table lands that the City of Edmonton annexed from surrounding municipalities in 1981. The current Land Use Bylaw retained the district regulations from the County Bylaws that existed at the time of annexation. The Edmonton draft Bylaw assigns their closest equivalency to an existing Edmonton district. ⁶

4.2.5 Conservation of Natural Sites in Edmonton's Table Lands Policy

4.2.5.1 Policy Elements

In 1995 the City of Edmonton adopted the *Conservation of Natural Sites in Edmonton's Table Lands Policy (C-467).*⁷ This Policy states:

The City of Edmonton will encourage the conservation and integration of as many environmentally sensitive and significant natural areas into Edmonton's future urban environment as are sustainable and feasible. The identification of environmentally sensitive areas and significant natural areas has no legal implications for the respective owners and, with the exception of the information requirements, participation in this policy is voluntary.

The Policy directs a number of City officers to carry out their duties with the aim of conserving Natural Sites. For example, it directs the General Manager, Planning and Development, to co-ordinate and provide guidance to ensure that the Policy plays a role in planning applications and major planning projects.

The Policy includes a "Toolbox" of mechanisms to aid in realizing policy objectives. These include suggestions for Financial Tools, such as the creation of a natural sites conservation fund, Operational Tools, such as creating a new land use district for conserved sites, and Management Tools, such as allowing homeowner association/bare land condominium owners to own and manage natural sites.

4.2.5.2 Policy Implementation

A "Conservation Coordinator", appointed by the City Manager, was to be responsible for implementation of the Policy. The Policy sees the Conservation Coordinator as being proactive and facilitative in realizing Policy objectives. The Conservation Coordinator position has not yet been funded.

The Policy envisions implementation at two stages: Daily Operations-Corporate Activities, and Daily Operations-

The Policy applies to "Natural Sites" which it defines as any environmentally sensitive area, significant natural area or natural area that meets certain criteria set out in an inventory prepared by Geowest Environmental Consultants Ltd. (1993). Edmonton's table lands were the study area of the inventory.

⁶ City Shaping, Edmonton Zoning Initiative, Annexed Land Zoning Explanation, July 2000, at 3.

⁷ Edmonton Policy C-467 (1995).

Development Process. The bulk of the Policy document concerns the latter stage – the Development Process.

4.2.6 Community Services Department's Integrated Service Strategy

The *Integrated Service Strategy* for the Community Services Department (Towards 2010, A New Perspective) was approved by City Council on July 4, 2000. It sets out the department's long range plan for delivering programs handled by Community Services, including programs for management of the City's system of parks and natural areas.

Part E of the Strategy (Ribbons of Green and Blue) is directly relevant to natural areas. It contains a number of provisions that support municipal action to conserve natural areas, including:

- A commitment to establish an integrated and linked parks and open space system.
- A commitment to work with surrounding municipalities and community partners to develop a regional integrated plan for the river valley, natural areas and open spaces along the North Saskatchewan River between Devon and Fort Saskatchewan.
- A commitment to balance preservation of natural landscapes with intensive use.
- A commitment to develop an integrated environmental protection strategy in partnership with corporations, the province and neighbouring municipalities to improve air

and water quality, promote conservation and preserve Edmonton's green spaces.

- Implementation of the "Natural Areas Preservation Strategy" through identification, land acquisition, assembly and education.
- Commitments to prepare "Resource Management Plans" and to develop an "Urban Wildlife Management Strategy" to assist in park and natural area planning.
- Actions to deliver various public education programs that would address aspects of habitat protection and management of green spaces.

4.3 How Well Do Existing Policies and Procedures Protect Natural Sites in the City?

In reviewing the various policies and programs put in place by the city to address the goal of natural site conservation, and discussing these policies and programs with various civic departments, it became apparent that considerable uncertainty exists about the extent to which existing policies and procedures are providing effective protection to natural sites in different land use and development zones of the City.

As noted in its policy statement, Policy C-467 is intended to provide a vehicle for conservation and integration of sensitive and significant natural areas "into Edmonton's future urban environment". Much of the land on Edmonton's table lands however, does not face short-term pressures for urban expansion and in some cases may never be developed for residential or commercial uses. Although natural sites within these areas may not be threatened by residential development

⁸ City Policy C-467, sections 4.01 and 4.02.

within the foreseeable future, the threats to conservation of these sites may be no less real and no less immediate. These threats are many including, for example, agricultural expansion, aggregate extraction, oil and gas development, timber harvesting, rural residential development, and golf course development.

There is legitimate concern that Policy C-467 does little if anything to protect these sites, beyond its broad mandate to foster awareness about the value of conservation within civic departments and among the community at large. For example, although the Information Requirements under the Policy apply to new residential development (Area Structure Plans, Neighbourhood Area Structure Plans, Neighbourhood Structure Plans and Servicing Concept Design Briefs), no such information requirements exist for proposed industrial developments or rural resource development activities.

Although it is critical that Policy C-467 be implemented at the development stage, it also is very important that the Policy be implemented at the corporate activities stage. If policy implementation efforts concentrate on the development process stage, the Policy's main impact will be felt when an owner applies to the City for a change in use of land. Since by this time owners usually have already planned sites for development, the City's efforts to conserve natural sites may be seen as an intrusion on private plans and could be frustrating both for City administrators and the landowner.

At the corporate activities stage, there is greater potential for the City to carry out activities within its jurisdiction to monitor and conserve sites. At this stage, there is room for landowners and the City to develop and calmly and rationally assess options. There is opportunity for landowners to appraise information on their site and appreciate why it is important in the larger ecological picture. There is also time to incorporate conservation of natural sites into development plans before the landowner has invested time and money.

At the corporate activities stage there is time to develop partnerships among the City, conservation organizations, the landowner and others to develop and implement mutually satisfactory and beneficial conservation strategies. example, the landowner and the City or a non-governmental land trust might negotiate a conservation easement or a land purchase of a natural site without the pressure of impending development plans forcing hands. In this regard, outside of the development process there is greater potential for a landowner to obtain federal income tax benefits for donations of interests than once the development process has commenced. This is because in order to obtain a tax benefit, the transfer to the Municipality or other qualifying organization must be a *gift* of capital property. Gifts must be voluntary and must be made without the receiver giving money or other consideration to the donor. Canada Customs and Revenue Agency might justifiably view with suspicion, grants of conservation easements or larger parcels made in the context of the subdivision and development process.

Similarly, there are concerns that *Bylaw No. 7188, The North Saskatchewan River Valley Area Redevelopment Plan,* may not prevent the loss of valuable natural areas within the river valley system. The Bylaw, which was put in place to "ensure the preservation of the natural character and environment of the North Saskatchewan River Valley and its Ravine System", contains a number of policies for protecting the river valley

environment. One of the major tools that is used to implement this policy is the requirement for environmental impact screening assessments for proposed facility development, if that facility is "publicly owned or is developed on public lands".

It would appear that this requirement may not necessarily apply to private development proposals on privately owned land. As a result of the City's policy to acquire lands within the river valley and ravine system as Environmental Reserve through the subdivision process, most of the river valley lands in the 'built-up' area of the city are now publicly owned. However, lands within the river valley beyond the current urban development area are predominantly privately owned and natural areas within these zones may not be protected from the effects of agricultural expansion or other incompatible development.

Successes and Failures -The Case of Little Mountain

Support for these arguments is reflected in our recent track record. Although increased efforts to conserve natural areas have resulted in some successes (Poplar Lake, Kinokomau Lake, Graunke Park [Weinloss Tree Stand], Star Blanket Park and Falconer Kettles), public attention has focussed on our failures. Most notable among these was the loss of the Little Mountain Natural Area in 1999.

Little Mountain was a natural parkland (woodland and grassland) covering a 17 ha site in northeast Edmonton. The site (NE8093) was included in the City's inventory of environmentally sensitive and significant natural areas (Geowest Environmental Consultants Ltd. 1993). The site provided habitat for a number of rare plant species and a

diversity of wildlife species, and was recognized for its natural heritage and education value.

In 1998, the Edmonton Natural History Club led a campaign to save the site, which was proposed for residential development under the Brintnell Neighbourhood Structure Plan. The campaign drew widespread public support and the support of several city councillors. The City Administration (Planning and Development, Community Services, Asset Management and Public Works) began working with the developer and stakeholders to find ways to conserve the site. The developer initially agreed to a land-swap involving an adjacent parcel of city-owned land. The obstacle was the cost of the city-held land that was acquired for development purposes which, together with the lost opportunity costs for those lands and the potential costs of servicing charges for the conserved land, may have resulted in a cost to the City of over \$3 million. In the end, the City was unwilling to give up this asset without compensation and fund-raising efforts by the Edmonton Natural History Club proved unsuccessful. The site was cleared in December 1999 amid widespread media coverage and public outrage. The failure of efforts to save the Little Mountain Natural Area underscored a number of weaknesses in our approach to natural site conservation and the application of Policy C-467 in particular. These included:

- The difficulty in conserving sites on lands that are ripe for development and for which the land and servicing costs have become prohibitive.
- The adversarial nature of the planning process when development is imminent.

- The absence of a funding mechanism to support acquisition of natural sites.
- The ineffectiveness of the Policy C-467 as a mechanism for conserving large sites through the development approval process.
- The lack of an effective administrative framework for coordinating and managing natural area conservation in the City.

Although the controversy surrounding Little Mountain may have served to garner public support for natural area conservation, it also gave a very clear message to developers and land speculators – one way of avoiding these problems is to get rid of the natural area before preparing a development application. This certainly appears to have been the case with SW6001. SW6001 was a 25 ha mature mixedwood forest site in southwest Edmonton that was described as "the best example within the Edmonton table lands of a mature mixedwood forest of sufficient size to maintain ecological integrity" (Geowest Environmental Consultants Ltd. 1999). The site was cleared by the landowner earlier this year, shortly after the Little Mountain controversy and after the site was identified as a potential conservation area in the Heritage Valley Servicing Concept Design Brief.

Blame for these failures does not rest solely with landowners or developers. Critics are quick to point out the failures of the City to comply with its own policies. An embarrassing example involves NE 8094/8095 (Mayliewan Parkland Complex), a 53 ha complex of native aspen parkland that was identified as an important natural area in 1993 (Geowest Environmental Consultants Ltd. 1993) and received the highest overall

ranking among the 62 sites evaluated in 1999 (Geowest Environmental Consultants Ltd. 1999). In 1998, the City passed a bylaw to enable the drainage and filling of a large, permanent wetland on NE8094, without the authorization of the Province of Alberta, who legally owned the bed and shores of the waterbody. The province is currently in discussion with the City regarding compensation for the wetland. Clearly, actions such as this are inconsistent with Plan Edmonton and Policy C-467, which call for the protection of valued natural sites. They also impact on the City's credibility when it comes to dealing with other stakeholders and landowners.

Hopefully this (loss Little Mountain) will be the last time we will have to go through something like this. This is a style of development that has outlived its time. We can't keep continuing to destroy these natural areas and still hope to have an environment that we are proud of.

Allan Bolstad

Conserving Edmonton's Natural Areas

5

5 PERSPECTIVES ON NATURAL AREA CONSERVATION IN EDMONTON

Results of the focus sessions and subsequent stakeholder consultations pointed out some very interesting similarities and differences among various stakeholders in the community with respect to their attitudes toward natural area conservation.

5.1 The General Public

During the focus session involving representatives of the general public (Appendix 1), there was **strong support** for conserving more land, particularly in those areas of the City that do not have access to the river valley or much other "green space" or mature landscaping. Some participants felt that Edmontonian's enjoyed a lot of conserved land, particularly noting the river valley area; however, all the participants felt that natural spaces were an important component of creating a good place to live throughout the City.

5.1.1 Keeping Green Space

The concept of green space creating a bit of "mental breathing room" in busy urban lives emerged. The group expressed the idea that "a bit of nature" provided balance to the built-up environment. Some participants indicated that it might be more important to conserve land in newly developed areas

because all the other landscaping was so young and underdeveloped. One comment reflected the general feeling of the group, "Why tear down all the mature trees and simply plant young ones? Why not leave the mature ones until the others have grown up?"

Most of the group supported the conservation of land to ensure that our city develops in a manner that future residents can enjoy. This attitude was summed up in the following way: "We don't want to be an LA, concrete sprawl for miles. That's not the kind of City I want to leave for my kids". The group concurred that conserved land and green space contributes to a healthy environment.

They noted that some neighbourhoods of the city have a lot of natural areas and easy access to green space (Whitemud, Blackmud and North Saskatchewan River valley areas), whereas communities in the southeast, northwest and northeast do not. There was support for the concept that areas that currently have less access to natural areas should receive priority in future conservation programs.

5.1.2 Access

A common theme that emerged from the discussions with this group was the importance of having access to these sites to take advantage of the recreational and educational opportunities that they provide. Participants recognized that access if not controlled and limited could "spoil" the habitat, but also felt that without some access the public would not appreciate the value of natural areas. It was noted that without public appreciation, public financial support would be very difficult to secure.

We don't want to be an LA concrete sprawl for miles. That's not the kind of city I want to leave for my kids.

5.2 The Environmental Community

Like the public group, all of the participants in the environmental group focus session identified a need to conserve more natural sites within the City of Edmonton (Appendix 2). The most frequently expressed reason was to preserve the ecological functions these areas provide, including their importance for conserving biodiversity and sensitive species, their watershed value (water quality and quantity), and their ability to provide connectivity between natural areas. One comment summarized the feelings of most of the group: "Society depends on biodiversity and ecosystem health and a fundamental shift in municipal priorities from the present focus on increased growth is required to conserve these values".

5.2.1 Education Value

Several participants also spoke of the educational value of natural areas, commenting that "it is important for children to have the opportunity to experience natural communities first hand ". One of the participants, who was a school teacher, noted that the ecology of native woodlands and wetlands is currently part of the elementary school curriculum. Another noted that, in contrast to constructed or landscaped areas, natural areas provide a "touchstone or baseline for what the natural world really is".

5.2.2 Health and Wellness

Several also recognized the value of natural areas in terms of human health and wellness. Functions related to this include improvement of air and water quality, recreational pursuits such as walking and birdwatching, and the quality of community life. A number of participants also identified the aesthetic value of retained natural areas, particularly in inner city neighbourhoods.

5.3 The Development Industry

Although there appears to be growing awareness within the development industry of the value of natural areas as marketable assets, many in the industry still view conservation as an impediment to development and a potential threat to profitability and affordability. Confrontations between developers and community or environmental groups are still commonplace, with widely publicized incidents such as the recent Lakeland Ridge development in Sherwood Park, serving to polarize attitudes among stakeholders.

There are clear indications however, that the industry wishes to avoid these types of confrontations and is willing to work with interested stakeholders in resolving conservation issues. The participation of the Urban Development Institute in the

present study and the recent efforts of a developer to work with community interests and the City in conserving the Poplar Lake natural site serve as evidence of the industry's interest in participating in community-wide conservation initiatives.

During two workshop sessions held with members of the Urban Development Institute (Appendices 3 and 4), industry representatives identified a number of major issues concerning the existing planning and development process as it applies to the conservation of natural areas in the City of Edmonton. These were:

- Who pays for it?;
- Process costs;
- Process/regulatory authorities;
- Site selection and urban compatibility; and
- Public expectations/acceptance.

5.3.1 The Issue of Fairness

At issue with respect to costs is fairness, with developers indicating that the costs of acquiring and maintaining natural areas should be aligned with groups that directly benefit from natural areas or with public agencies that have a mandate for natural area conservation. A need was identified to establish an "analytical framework" to evaluate the various costs associated with natural area conservation, including onsite costs, offsite costs, over-expenditures/permanent area contributions and any incremental costs associated with natural areas (e.g., planning costs, environmental studies). It was pointed out that inclusion of a natural area within a

neighbourhood has the potential for increased housing and development costs through process delays, increased permanent area contributions/levies, lost opportunity costs, and increased salable land unit and development costs.

We were told that there needs to be a declared intention by the City to preserve specific natural areas as a matter of public record. This might be achieved via the City's *Municipal Development Plan* where a map showing major, sustainable natural areas is included along with citywide environmental management policies. A key consideration is whether or not the retention of these major natural areas is voluntary or not. Where it is *not* voluntary and where it is not covered by provincial legislation (e.g., *Public Lands Act, Water Act, Municipal Government Act*), then some form of compensation may be required (lease, purchase, etc.). Where it *is* voluntary, then some incentives for the landowner may be appropriate (e.g., deferral of *municipal property tax* owing on the portion of land that is natural area).

5.3.2 Timing Affects Cost

The importance of timing to cost was also noted. For example, it is easier to acquire/preserve natural areas long before they are required for urban development. To wait until lands are ripe for development can mean raw land values are as high as \$50,000 - \$60,000 per acre and the lands have already been included in offsite cost levy calculations. These offsite cost levies can add substantially to the raw land costs, ranging from \$10,000 - \$20,000 per acre for storm, sanitary, and transportation facilities combined.

The earlier that these major natural areas are identified, the more likely that they can be excluded initially from these offsite levy calculations or that the original offsite levy numbers can be adjusted to exclude the natural areas. Also, early identification means that the desired sites can be acquired for much less money and that lands purchased by developers for suburban development can be appropriately discounted.

5.3.3 Urban Compatibility and Public Acceptance

A continuing theme throughout the discussions with members of the Urban Development Institute was urban compatibility and sustainability of natural areas along with ongoing stewardship responsibilities. The importance of such things as an environmental management plan, which provides for sustainability and stewardship while also providing for different levels of public interaction, was seen as critical to the success of a natural area program by the City.

Public education as to the value of natural areas was also seen to be important, particularly for wetlands. Without public respect and acceptance, the best intentions to preserve natural areas by landowners, developers and the City may go for naught if the general public view wetlands as nuisances (e.g., safety hazard for children, breeding ground for mosquitoes, noisy frogs, etc.) or wooded areas as potentially unsafe environments (e.g., personal security, fire hazard, etc.).

6

6 SITE SELECTION

6.1 Introduction

A goal of the present project was to develop a short list of sites on which to focus conservation efforts over the next two years. Although it was recognized that the 62 sites prioritized during a recent study (Geowest Environmental Consultants Ltd. 1999) represents a substantial distillation of the 1,049 natural sites identified in 1986 (Ealey 1986) and 311 sites evaluated during a subsequent inventory in 1993 (Geowest Environmental Consultants Ltd. 1993), the Steering Committee felt that a short list of 5 - 10 sites would be consistent with the level of funding and other resources expected to be available over this short-term time frame. This in no way reflects the longer-term goals of the program and the Steering Committee made it clear that all of the 62 sites previously identified remain important and should be conserved if possible. The mandate of the present study was to identify some sites for near-term action where success was a realistic outcome.

The short list developed during the present study was primarily drawn from the list of 62 sites identified by (Geowest Environmental Consultants Ltd. 1999), although a number of additional sites were also considered at the suggestion of the Steering Committee or the Consulting Team. These included

several potentially significant sites identified in earlier inventories and sites that were deleted from the 1999 list (Geowest Environmental Consultants Ltd. 1999), because they were considered "fully or partially" conserved, but for which the study team felt that additional conservation opportunities existed. In total, 66 sites were evaluated.

The 1999 study (Geowest Environmental Consultants Ltd. 1999) considered a number of criteria for prioritizing sites on the basis of their conservation potential and threat. These criteria were related to the biophysical features, ecological integrity, ecological uniqueness, geographical distribution and land use pressures associated with each site. In developing a short list of sites, the present study employed a site selection process that tried to balance environmental, economic and social and community factors.

6.2 Site Selection Criteria

The specific criteria considered were based in large part on input obtained from the various stakeholders involved in the focus sessions and workshops. During the sessions held with representatives of the environmental community and the general public, participants were asked to identify criteria that they felt were important in selecting potential conservation lands and to indicate the relative level of support for each criterion by allocating coloured dots to each of the criteria identified by the group. The results of this 'dotmocracy' exercise are summarized in Table 1.

Cost was identified as an important criterion by the public group and by representatives of the development community. Several members of the public focus group pointed out the need for cost effectiveness, to enable us to get the "most bang for our buck". The public group also highlighted the need to consider issues, such as location with respect to other natural areas and potential development threats, in directing natural area conservation efforts. Potential liability and maintenance or management issues were identified as important considerations by the members of the development group.

Table 1. Results of focus sessions showing level of support (%) for various natural area site selection criteria.

Criteria –	Focus Groups		
Criteria	Public	Environmental	
Size and Diversity	18	24	
Location	9	4	
Linkages	9	14	
Ecological Importance	19	35	
Educational Value	8	8	
Recreational Value	0	1	
Buffer	0	4	
Development Threat	9	5	
Partnership/Stewardship Opportunities	0	4	
Accessibility	3	1	
Cost	19	0	
Type of Habitat	6	0	
Maintenance/Management	0	0	
Liability	0	0	
Totals	100	100	

While the specific list generated by each focus group was slightly different, there was a consistent theme in the top priorities. Each of the groups stressed the need for land parcels that were large enough to be ecologically sustainable and were linked to other natural systems. The community and environmental representatives also concurred that the inherent ecological value of a site,

expressed in terms of its natural features, watershed value, and importance as habitat for native species of plants and animals, should be the principal consideration in natural area site selection.

When the groups were asked what types of natural areas should be conserved, the environmental group expressed the view that all habitat types had conservation value. The highest level of support (42%) was expressed for complex sites containing both wetlands and upland habitats. Wetlands, including all types of wetlands, ponds, and creeks ranked second at 15%, while wooded areas were third at 6%. One participant indicated that natural area conservation programs should also consider restoration of disturbed sites.

The public group also supported conservation of all types of natural areas, although the highest level of support was shown for wooded areas (30%) and streams (28%). This compared to 16% for sites comprised of native grassland or shrub, 14% for open water marsh, and 12% for emergent wetlands.

While wetlands with open water were seen as appealing because they attracted more birdlife, they were also seen as a potential safety concern for children. The group recognized that wetlands and surrounding areas were very important to support wildlife and also contributed to improving the quality of the watershed.

Although the purpose of the developer workshops was somewhat different, participants in these sessions also identified a number of criteria that should be considered in evaluating the merits of particular conservation sites. These

included size and diversity, linkages to other natural areas, costs, and maintenance and liability issues.

6.3 Site Selection Process

The site selection criteria used are indicated in Figure 4 and the site selection process is illustrated in Figure 5. In short listing the sites, a decision was made to first screen the sites on the basis of the ecological criteria identified. In this way, we tried to ensure that the sites with greatest ecological merit were considered.

An effort was then made to assemble all pertinent information (e.g., previous inventories, aerial photographs, development plans) for the 25 highest ranking sites. This information was assessed by the Consulting Team in conducting the SWOT analysis. Results of this process are summarized in Appendix 5.

6.4 About the Short-Listed Sites

This analysis resulted in the identification of 13 sites (Table 2) that were deemed to have high conservation potential within the terms of reference of the present study. These include many of the largest and most diverse natural habitats remaining in the City. They include native woodlots, wetlands, and complexes of wetlands, meadows and remnant forests. Photographs of the sites identified are shown on the following pages.

The sites are distributed fairly evenly around the city. Most are located on privately owned land, although several include land that is owned by either the City of Edmonton or the Province of

Alberta. Subsequent contact with the landowners indicated that, in a majority of cases, *a high potential exists for achieving conservation goals within the next one to two years* using one or more of the conservation tools identified in this report.

Again it should be emphasized that the short-list of sites is not the focus of Policy C-467. It simply represents a targeted list of high priority sites that should receive *immediate action*. These sites represent a snapshot in time and the list may change over time as opportunities present themselves.

The remaining sites are also important and efforts should be made to conserve them as the program evolves. There may be opportunities to conserve some of the smaller sites through the normal planning process (for example as Municipal Reserve dedication, as Community Services did in the case of Star Blanket Park and Falconer Kettles, or through a Local Improvement Bylaw, which was used to save the Weinloss Tree Stand in Graunke Park), while larger sites should be acquired on an opportunistic basis, using one or more of the tools described in this report.

Although prioritized lists of sites can be useful for focussing our conservation efforts, it should also be recognized that lists can be very misleading. Lists may lead to the conclusion that sites that are not on the list are not important, which is not correct. Although size and diversity were identified as important criteria for prioritizing conservation sites, each of the stakeholder groups also pointed out that small sites had value as educational or aesthetic features within communities. A representative of the Edmonton Federation of Community Leagues noted that "even small stands are important to

communities on the table lands because not all people have access to ravines." Another participant in the environmental focus session commented that, despite their lower ecological value, small, "postage stamp", natural sites should be conserved wherever possible because of their educational value.

In their "Guide to Urban Habitat Conservation Planning", Barnes and Adams (1999) discuss the use of urban natural areas by children. They note that children are among the most frequent users of neighbourhood open space and that their favourite areas are "wild lands" and undeveloped sites that offer greater opportunity for personal investigation and hands on contact with nature. Large areas are not essential for children since, unlike adults, who are usually more interested in birds or mammals, children are more interested in collecting or observing "creepy-crawly" animals such as amphibians, reptiles and insects. They also note that wildlife habitats that work best for children are centrally-located within residential communities and are buffered by residences rather than roads.

Table 2. Priority sites recommended for initial conservation efforts in the City of Edmonton.

Site *	Site Number	Type Of Natural Area	Location	Significance
Wepayoos Natural Area	NW7035	Aspen Forest	NW	Local
Sandpiper Wetland	NW7018	Wetland	N	Local
White Birch Woodland	NW384	Poplar-Birch Forest	SW	Local
Henry Singer Wetland	HENRY SINGER SPORTS FIELD	Wetland complex	NW	Local
Winterburn Pond Natural Area	NW7010	Wetland-woodland complex	W	Local
Muskakosi Natural Area	MCDONAGH PEATLAND	Tamarack-black spruce bog	W	Local
Ezra Moss Natural Area	SE5007	Upland-wetland complex	SE	Regional
Knob and Kettle Natural Area	SE5004	Morainal upland-wetland complex	SE	Regional
William Rowan Natural Area	SE5010	Large wetland	SE	Regional
Papastew Natural Area	NE8002	Forest-wetland complex	NE	Local
Moran Lake	MORAN LAKE	Large Wetland	NE	Regional
Lower Horsehills Creek	HORSEHILLS CREEK	Riparian-ravine system	NE	Regional
Oxbow Natural Area	RIVERBEND	Riparian forest	NE	Regional

^{*} Please Note: The names identified above are "working names" included to provide a more user-friendly "handle" for each site. The names were selected by the Steering Committee to reflect ecological elements present at each site, local geographic names, or names of important researchers in the field. If the sites are conserved, formal approval of site names by City Council or another body may be required. That process would consider a more detailed history of the site and approvals of any person or entity chosen for the naming.



Wepayoos Natural Area (NW7035)



White Birch Woodland (NW384)



Sandpiper Wetland (NW7018)



Henry Singer Wetland (Henry Singer Sports Field)



Winterburn Pond Natural Area (NW7010)



Ezra Moss Natural Area (SE5007)



Muskakosi Natural Area (McDonagh Peatland)



Knob and Kettle Natural Area (SE5010)



William Rowan Natural Area (SE5010)



Moran Lake



Papastew Natural Area (NE8002)



Lower Horsehills Creek



Oxbow Natural Area (Riverbend)

RECOMMENDATIONS:

- First priority on the use of Natural Areas Reserve Funds should go to the 13 priority sites identified, keeping in mind that purchase is just one of a number of tools that can be used to conserve sites.
- Efforts should be made to conserve remaining natural sites both through the normal planning process and on an opportunistic basis, as funding becomes available.
- The City of Edmonton should move quickly to secure these sites as a number of the sites are at high risk for development and could be lost in the near future. Conservation should take place before the development process renders retention of sites too costly in terms of both land and servicing costs.

Figure 4. Site Selection Criteria.

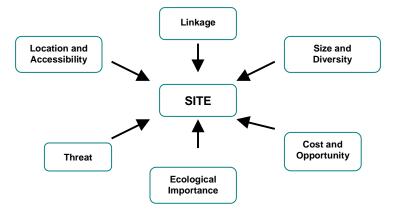
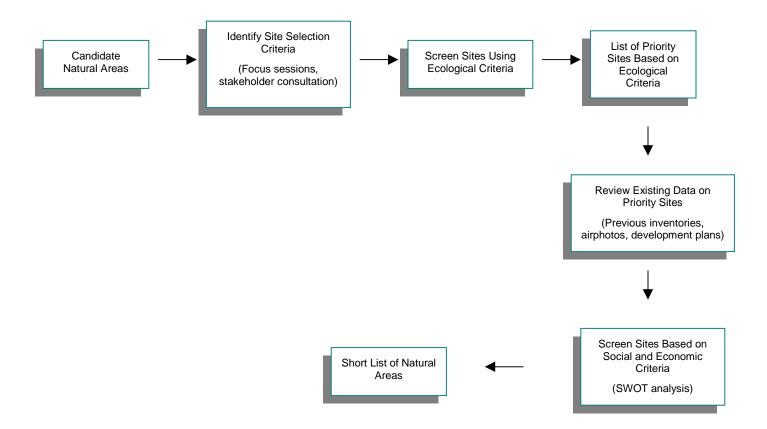


Figure 5. Overview of Site Selection Process.



Conserving Edmonton's Natural Areas



7 DEVELOPING A STRATEGY TO CONSERVE NATURAL AREAS

7.1 The Need for a Long-term Strategy

Although the focus of the present study was on identifying a short-list of natural sites on which to focus initial conservation efforts, and on developing a short-term communication and fund raising strategy to move the initiative forward, input from the various groups that participated in this study raised a number of other issues related to the City's long-term goals for conservation and management of natural lands. These issues included:

- The expectation that these initial efforts to conserve shortlisted sites represent only a starting point and that effective conservation of valued natural areas will be reflected in Edmonton's future growth and development strategy.
- The adversarial nature of the planning process when development is imminent and the need to identify and protect valued natural sites well in advance of development.
- The need for a comprehensive inventory of remaining natural sites.

- Concerns about whether the City's goals and policies for conservation of natural areas are being effectively implemented within the administration.
- The lack of an effective strategy to coordinate internal and external resources interested in conserving natural areas.
- The lack of an effective internal mechanism to manage natural area conservation within the administration.
- The need to ensure that an administrative framework is in place and that sufficient resources are committed to ensure effective stewardship of conserved land.
- The need to develop and test a wider range of 'tools' for conserving natural areas.

Resolving all of these outstanding issues is beyond the scope of the present study; however, the following sections broadly outline some of the mechanisms that we feel could be used to achieve more effective conservation and stewardship of natural sites, both now and in the future.

7.2 Elements of an Effective Natural Area Conservation Strategy

7.2.1 The Role of the City of Edmonton

Although Edmonton's environmental community is providing the impetus for change, the ultimate success of natural area conservation initiatives will depend on the City's willingness to implement a meaningful conservation program and to work with the development industry and other stakeholders in overcoming current obstacles to natural area conservation. There is a clear need for the City of Edmonton to take a leadership role. Although the City has received widespread

acclaim for its forward-thinking policies to protect the North Saskatchewan River Valley and Ravine System (the Ribbon of Green), its track record in protecting other important natural areas has been questioned. The failure to save the Little Mountain Natural Area and the recent loss of SW6001, the largest and most pristine woodland that existed on the table lands, serve as visible reminders that an effective framework is not yet in place to protect remaining natural areas.

At this point it is not entirely clear whether these failures reflect weaknesses in existing policies or whether an adequate administrative and planning framework is not in place for delivering an effective natural area conservation program. Recognition that natural space conservation is important to our quality of life is reflected in *Plan Edmonton* and in City Council's Vision for Social Well-Being and Quality of Life, and broad strategic direction for natural area conservation is provided by Policy C-467 and the Integrated Service Plan. The establishment of a Natural Areas Reserve Fund also provides tangible evidence of the City's desire to protect some of these natural sites, although there are concerns that current levels of funding are not realistic with respect to the goals of Policy C-467. However, beyond this it appears that the City's efforts to implement a meaningful natural area conservation program may be limited by the absence of an effective natural area planning framework and the failure to commit the staff resources necessary to deliver the program.

Implementation of Policy C-467 depended heavily on the function of a Conservation Coordinator. The Coordinator position held responsibility for coordinating conservation efforts among civic departments and for implementing private conservancy programs to conserve sites that would not

otherwise be protected through the planning and development process. When City Council decided not to fund that position, the effectiveness of the policy was compromised from the outset. Currently the only avenue for implementing the policy is through the development process (review of Area Structure Neighbourhood Area Structure Plans Neighbourhood Structure Plans) and, as we have pointed out earlier, this is really too late to conserve sites in urban development areas and does nothing to protect natural areas in rural areas. During our consultations with members of the Urban Development Institute, it was also pointed out that the absence of a final administrative authority for implementing Policy C-467 is viewed as a limitation of the policy by the development industry.

In discussing the problem with representatives of various civic departments, it was also evident to us that different departments may currently be working at cross purposes and that a need exists to develop a consistent approach and common mandate for natural area preservation. Within the Administration, there is not a common understanding of how far the City intends to go in implementing Policy C-467. Some of the individuals that we consulted during the study indicated that all 62 of the identified sites were considered important and that current policy was to try to conserve them, whereas others expressed the view that conservation efforts would or should end with securement of the short-listed sites identified in the present study.

There is also a need to ensure that city zoning and subdivision regulations are consistent with our policies for conservation of natural areas. It is recognized that options for conserving natural areas are limited at the zoning or subdivision stages;

however, adoption of some of the conservation zoning and subdivision principles that are now being used elsewhere (see *Growing Greener – Putting Conservation into Local Plans and Ordinances* by Randall Arendt 1999) may provide developers and planners with *more flexible options* for conserving natural sites at the Area Structure Plan or Neighbourhood Structure Plan stage.

Before asking other landowners to comply with our policies for natural area conservation, it is important to ensure that the City is consistently complying with the intent of the policy on lands that it owns. Earlier in the report we pointed out examples where this did not appear to be the case. It is very important that the City lead by example.

RECOMMENDATIONS:

- A corporate Steering Committee should be struck to evaluate how current practices impact natural area planning and how we might collectively change our approaches to the goal of implementing Policy C-467. This should include clarification of the respective roles of the City Managers Office, Community Services, Planning and Development, the Office of the Environment and other civic departments in relation to natural area conservation.
- The City should appoint a full-time conservation coordinator to facilitate implementation of Policy C-467 through partnerships with the community/land trust and corporate partners.

7.2.2 Partnerships and Community Participation

Although the City must take a leadership role, it cannot do the job on its own. Natural area conservation should be viewed as

a collaborative effort within the community. Civic leadership should provide the catalyst for change, with the development industry and the environmental community becoming 'partners in conservation'. The need for a unified partnership and clear public policy positions on natural area conservation are discussed in detail in Section 8.0.

Partnerships bring resources and expertise to the table that might not otherwise be available. There are examples within our community where this has been effective. For example, the collaboration of Ducks Unlimited, a private conservancy, and Inland Cement and CN Rail, two corporate partners were integral to the conservation of the Kinokomau Lake natural area in northwest Edmonton.

It became evident during the course of our study that many other opportunities exist to work with different public and private organizations in realizing our conservation goals. For example, lands owned by the Province of Alberta within the Restricted Development Area or the Transportation and Utility Corridor may provide an opportunity for public and private sector agencies to work together in maintaining the sustainability of natural areas within these corridors. Some environmentally sensitive lands in the Transportation and Utility Corridor have already been declared surplus and transferred to Agriculture, Food and Rural Development, Public Lands for management. Initial discussions with that agency indicate an interest in working cooperatively with the City in the conservation and stewardship of these sites.

There is also a need for broader consultation with all stakeholders in the community on our policies and approach to natural area planning. Community participation was fundamental to all of the successful natural area conservation initiatives that we reviewed. As the coordinators of the West Eugene Wetlands Program (2000) in Oregon noted, "Involving citizens from start to finish led to a plan with strong community support, clearly articulated goals and policies, and a strong implementation program".

RECOMMENDATIONS:

- The Administration should continue to work in partnership with community leaders and stakeholders, including groups representing the development industry and the environmental community, to develop more effective programs to promote and conserve remaining natural areas.
- Lines of communication should be maintained with the Province and other organizations regarding opportunities for joint conservation and stewardship of wetlands and other natural sites.
- A proactive public outreach program should be initiated to keep citizens informed and involved. Some of the communication tools that could be used are described in Section 8.0.

7.2.3 The Need for a Green Spaces Master Plan

We feel that a need exists for an overall plan that would translate the City's goals and policies for natural areas into a clear vision that balances future development and conservation needs. Although Edmonton's *Municipal Development Plan* calls for the development of "a comprehensive, integrated plan for the river valley, natural areas and open space lands", such a plan is not yet in place

we understand however, the recently approved *Community Services Integrated Service Strategy* includes reference to an integrated open space plan. This type of plan may be essential if the goal is to develop an interconnected network of sustainable natural areas rather than to simply conserve a handful of sites scattered across the city.

Although a growing number of communities are recognizing the value of greenspace master plans and comprehensive inventories of potential conservation lands, many still regard the goal of establishing community-wide conservation networks as unrealistic and unattainable (Arendt 1999). In his highly regarded review of conservation planning principles 'Growing Greener', Randall Arendt discusses this attitude:

Based on the range of land-use planning tools traditionally available to local officials, such a pessimistic assessment of conservation potential is understandable. For decades planners have been coloring maps green and essentially crossing their fingers, hoping that a combination of landowner charity, density incentives for developers, and the occasional state or county grant for land acquisition would enable at least a few properties to be saved, in whole or in part. However, when a truly comprehensive inventory of natural and cultural resources is combined with an imaginative vision of what could be conserved---and when these two elements are linked with a set of practical regulatory tools providing the means for local officials to implement that vision---a community's long-term future suddenly looks much brighter.

The City of Edmonton has developed master plans to assist civic departments with long-range, strategic planning related to

transportation, drainage and other service areas. A similar need exists to develop long-range plans for conserving our *ecological infrastructure*. This should begin with a comprehensive inventory of remaining natural areas within the City. Although these sites have been previously listed and categorized, very few of these sites have received detailed ecological inventories. Under Policy C-467, inventories and assessments of natural areas are required as part of development proposals; however, there is no provision for conducting inventories of remaining sites.

Detailed inventories are essential for conservation planning purposes. At the planning stage they are required to identify resources in need of protection and to determine boundaries for the protected area. They are also needed to develop effective stewardship plans and to provide a baseline for monitoring the effectiveness of stewardship programs.

In our view these steps are essential. Without a complete inventory of our ecological resources and long-range plans for conserving natural areas, we will inevitably lose the links to our natural environment that help to keep our communities vibrant and healthy.

RECOMMENDATIONS:

- In consultation with community stakeholders and adjacent municipalities, develop a "green space" master plan that sets out the City's long-term strategy for conservation of natural areas and integration of conserved sites with the river valley and open space lands.
- Conduct detailed inventories of potential natural areas within the City of Edmonton, including remaining sites on

the table lands and sites within the North Saskatchewan River Valley and Ravine System.

7.2.4 Maintaining the Ecological Integrity of Protected Sites

7.2.4.1 Linkages

There is a need not only to acquire and conserve significant natural areas in the city, but also to take steps to ensure the future ecological viability of these sites. The only way in which many of the basic ecological functions of smaller, remnant natural areas can be maintained is by maintaining connectivity with the broader natural landscape. The North Saskatchewan River Valley and Ravine System provides an important ecological linkage that spans the city, providing a corridor for the movement and dispersal of natural organisms. greatest threat to the integrity of this natural corridor has been transportation infrastructure development, which causes fragmentation of natural habitats and restricts wildlife movements along the valley. Although the integrity of this natural corridor has been altered by previous development, the diversity of wildlife that still exists through much of the river valley is evidence that functional ecological linkages still exist, at least in portions of the river valley.

The challenge is not only maintaining ecological linkages with the river valley system but also establishing or maintaining connectivity to remaining natural sites on the table lands. The only planning approach that has proven successful in addressing this requirement in other urban areas is "greenway" development. **Greenways** refer to linear corridors of land maintained in a natural or semi-natural condition. Some

greenways follow natural watercourses or ravines, while others take the form of linear features that connect natural areas, agricultural lands, parks and other open spaces to create corridors through which wildlife can move. Greenway corridors can incorporate restored or naturalized sites. Greenways provide a means of developing an interconnected network of natural areas that maintain some of these ecological functions and counter the effects of habitat fragmentation. Greenways also serve as important aesthetic and recreational features for people, providing natural buffers between communities or developments and opportunities for interconnected trail systems. Greenways are becoming widely used throughout North America as an effective means of maintaining networks of natural areas within urban landscapes.

The North Saskatchewan River Valley and Ravine System should be viewed as the "core" or "backbone" of a community-wide greenway system, providing a functional, ecological corridor across the city and the framework for linkages to remaining natural areas on the table lands. It can be argued that maintaining functional ecological corridors throughout our river valley and ravine system should be our highest conservation priority.

7.2.4.2 Buffers

An important consideration in maintaining the integrity of natural areas is the need for buffers. Buffer areas are one of the most important factors related to sustainability of a protected area since they ultimately determine the 'effective' size of that area. Plans that mistakenly delineate the boundaries of protected areas at the physical edge of woodlots or the wetted perimeters of wetlands fail to recognize the

critical ecological function of buffers. Buffers that separate protected habitats from adjacent incompatible land uses are important for maintaining the ecological integrity of protected areas. Failure to provide adequate buffers is often evident around wetlands, where development frequently takes place to the edge of the shoreline. Vegetated upland buffers around wetlands perform a number of ecological functions including providing critical nesting and foraging habitat for wetland wildlife, providing movement corridors for wildlife, filtering stormwater runoff and allowing infiltration and recharge of underground aquifers.

Stephens (n.d.) provides the following principles as part of a buffer model developed for co-managing the boundaries between urban and natural areas:

- Ecological edges of a protected area can be divided into a natural ecological edge, representing the extent of area inhabited by a species within the protected area and generated edge which represents the tangible boundary that reflects changes in human behaviour along and across that boundary.
- If external forces (urban influences) acting on the protected area are greater than the internal forces (conservation management), the generated edge may move into the natural area.
- The existence of a buffer zone around a protected area is useful as it enables populations to stabilize when there is a disturbance. A co-operative approach between landowners on either side of the boundary is encouraged as this can help manage the gradient between the conservation and urban areas (Schonewald-Cox and Bayless 1986).

- Optimally, each natural area should contain a protected core area surrounded by a buffer zone that protects the boundaries and reduces the effects of steep generated gradients caused by the boundary (Schonewald-Cox and Bayless 1986).
- In the context of an urban area, the three broad components of the buffer model are: (1) the adjacent external area, (2) buffer zones with varying degrees of conservation status where co-management schemes between adjacent landowners or authorities are developed, and (3) a pristine core zone.
- Pressure on the boundaries of protected areas, caused by negative external influences from an urban area, can reduce the effective size of the conserved area (Murphy 1988, Dearden and Berg 1993).
- A well-managed buffer zone along the boundary of the protected area absorbs many of these negative effects, allowing the generated edge to fall beyond the boundary of the protected area (Schonewald-Cox and Bayless 1996). This increases the area available for conservation but introduces questions for management and significant implications for the affected communities (Neumann 1997).
- Implementing the buffer model may be problematic if there are private landowners in the area. The activities of residents on their property may conflict with conservation objectives and it may be difficult to enforce conservation management guidelines.
- However, if the area is able to fulfil specific criteria, a
 feasible solution to these problems may be found in the
 buffer model. It is important that the buffer model is
 negotiated and accepted by the community, for its
 success depends largely on their commitment.

Relating these principles to the current study would indicate that buffers should be included when the identified natural areas are acquired. An example would be the vicinity of a major wetland, where the opportunity to work with owners and lessees of the surrounding area, exists to add to the current narrow strip around the wetland. The key is to discuss the rationale and importance of the buffer with adjacent land users to obtain their consent.

BUILDING BLOCKS

NATURAL AREAS Relatively undisturbed sites

supporting native vegetation communities representative of Alberta's natural heritage.



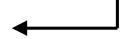
GREENWAYS Continuous or no

continuous vegetation corridors that link natural areas and open spaces, allowing for the movement of wildlife and people.



OPEN SPACES

Undeveloped or minimally developed sites that do not meet the criteria for natural areas but still provide habitat and allow for movement of wildlife. Open spaces can include farmland, parks, golf courses and utility corridors.



To establish buffers in other areas, purchase or securement by easement or agreement may be necessary. Acquiring an area larger than the protected area and allowing native vegetation to expand ensures that the 'generated edge' boundary will not encroach into the natural area. In some cases where natural buffers no longer exist, it may be desirable to plant buffers using a mixture of native herbaceous and woody species. The minimum effective width of buffers will vary depending on site factors such as slope steepness and soil permeability, but as a general rule should not be less than 30 m.

7.2.5 The Role of a Conservation Land Trust

It became apparent from our discussions with various stakeholders that a need exists for a mechanism that would provide more flexible options for persons or organizations that wish to sell or donate land for conservation purposes, that would enable us to respond more quickly to conservation opportunities, and that would provide a vehicle for generating funds through various partners. One approach that has proven successful in other areas is the establishment of a conservation land trust.

Conservation land trusts are private, charitable organizations whose primary role is to protect land under their stewardship from undesirable change (Arendt 1999). Land trusts can hold either fee simple titles on conserved lands or conservation easements. Typically, land trusts also assume some responsibilities for maintenance and monitoring to ensure that all restrictions are observed (Arendt 1999). The costs of performing these maintenance and monitoring functions is usually covered through some form of endowment funding.

In certain instances holding conserved natural areas in a land trust may have advantages over municipal ownership. Because conservation land trusts are created expressly to hold and manage conserved natural lands they may provide a more effective vehicle for stewardship of retained natural areas. They may also be viewed by some as providing greater long-term security for conserved sites, since they are less likely to be influenced by changes in political leaders or policies.

There are numerous examples of land trusts in Alberta. These include organizations such as the Nature Conservancy, Ducks Unlimited Canada, the Southern Alberta Land Trust, and the Land Stewardship Centre of Canada. To be a Land Trust, a not-for-profit society must be incorporated for this purpose. As well, the corporation must be a charity registered with Canada Customs and Revenue Agency to allow it to issue tax receipts to donors wishing to donate land or an interest in conservation lands.

If the City elects to establish a land trust, it could either incorporate a new organization or enter into a contract agreement with an existing charitable organization to hold or manage land on the City's behalf. For example, an organization such as the Edmonton-based Land Stewardship Centre of Canada, which already performs similar conservation and land stewardship functions, might be interested in assisting with the establishment or management of a conservation land trust. If the City decides to incorporate a new organization it should be noted that it takes at least a year to effect this.

RECOMMENDATION:

• The City of Edmonton should establish an independent land trust to hold and manage conserved sites.

7.2.6 The Need for Effective Tools for Conserving Natural Areas

Policy C-467 includes a "tool kit" of financial, operational and management tools for promoting conservation of natural areas. However, results of the focus group sessions with members of the Urban Development Institute and subsequent contacts with individual developers, landowners and city officials led the Consulting Team to the conclusion that the lack or lack of awareness of effective tools for conserving these sites remains a major obstacle to natural area conservation in Edmonton. As one developer who participated in the focus sessions noted "When we went to the toolbox, we found it was empty". The industry as a group indicated that a need existed for tools that provide incentives for conserving natural areas or that are at least 'cost neutral', in that they do not financially penalize a landowner or developer that has a natural area on their land.

As part of the present study, some research was done on land conservation tools that may be appropriate for use in Edmonton. This entailed a review of legal tools that are currently available to the City of Edmonton, examination of some of the conservation tools being used by other jurisdictions in North America, and consultation with members of the Urban Development Institute to obtain feedback on potential obstacles or opportunities associated with the use of these tools from an economic and land development perspective.

7.3 What May Edmonton Do, As a Municipality, to Conserve Natural Areas?

7.3.1 Acting Within Legislative Authority

Edmonton is a municipality. The *Municipal Government Act* ⁹ (MGA) is the statute that creates municipalities such as Edmonton and gives them their main powers. Under the MGA every municipality has two sources of powers. The first source is its "natural person" powers from the MGA's declaration that municipalities are "natural persons". This means that unless limited by statute, a municipality may do anything a natural person may do. For example, like other natural persons a municipality may borrow money, lend money, buy land, sell land, enter into leases and so forth without specific legislative authority. Edmonton, as a municipality, may do any of these things to conserve natural areas.

Municipalities' second source of powers enables them to do things that other natural persons cannot do. The statutes, regulations and municipal by-laws and plans give these powers. Although municipalities get most of their powers from the MGA, other statutes also give them powers. For example, the *Alberta Environmental Protection and Enhancement Act* authorizes municipalities to be granted conservation easements --something most natural persons cannot do.¹⁰

Like all statutory creations, municipalities have no authority beyond the powers expressly or implicitly conferred by legislation. If a municipality acts beyond these powers, an

⁹ Municipal Government Act, S.A. 1995. c. M-26.

¹⁰ Environmental Protection and Enhancement Act. S.A. 1992, c.E-13.3.

affected person may ask a court to judicially review the action, and to nullify it. The court will comply if it finds that the municipality or its delegates acted beyond the authority given by the legislation in question. In other words, it will find the municipal action to be *ultra vires* legislative authority, and consequently of no effect. Accordingly, to understand what the City of Edmonton, as a municipality, may and may not do in regards to natural area conservation, one must look at how laws authorize and restrict municipal action.

7.3.1.1 Acting Within Municipal Jurisdiction

Provincial legislation other than the MGA may give a person or body specific power to regulate some matter. For example, Alberta Environment has primary right to authorize or prohibit many activities that can affect environmental quality under the *Alberta Environmental Protection and Enhancement Act*. As Sections 7.3.2 and 7.3.3 below show, the MGA also allows municipalities to pass bylaws that deal with many environmental matters. Nevertheless, municipal bylaws cannot act beyond municipal jurisdiction and regulate matters within the sole jurisdiction of some other level of government. For example, a Toronto court found that a municipal bylaw that regulated exhaust fume emissions was *ultra vires* municipal jurisdiction since it conflicted with a provincial environmental law regulating exhaust fumes.¹¹

However, just because legislation other than the MGA specifically gives some person or body other than municipalities

¹¹ Toronto (City) v. Toronto Transit Commission (1992, 12 M.P.L.R. 190, Ont. Gen. Div.) See discussion in Felix Hoehn, Municipalities and Canadian Law,

(Saskatoon: Purich Publishing, 1996) at 10-12.

authority to regulate some matter, it does not follow that municipalities may not also regulate some aspects of that matter. For example, the Alberta Court of Appeal has held that a municipal body may consider environmental, health and water quality issues in exercising its planning and development authority even though specialized environmental legislation confers regulatory authority over these issues to other persons or bodies. ¹²

7.3.1.2 Consistency with Provincial Board Decisions

The MGA states that a license, permit, approval or other authorization granted by the Natural Resources Conservation Board or the Alberta Energy and Utilities Board prevails over any statutory plan, land use bylaw or planning decision. Although the actual scope of this provision is not clear, it at least means that if one of these boards approves a project, a municipality may not prohibit the project or add new conditions with respect to issues covered by the board.

7.3.1.3 Acting within Provincial Powers

The Canadian Constitution Act divides legislative and regulatory powers between the federal government and the provinces. The Act does not confer powers on municipalities. Municipalities are created under provincial legislation in which provinces delegate certain provincial regulatory powers to them. Powers delegated to municipalities may not exceed powers that a province

¹² Hutterian Brethren Church of Starland v. Starland (Municipal District No. 47) (1991, 6 M.P.L.R. 2(d) 67 (Alta. C.A.). See discussion in Frederick Laux, Planning Law and Practice in Alberta, 2nd ed. (Toronto: Carswell, 1996) at 3-11 [hereinafter Laux second edition].

constitutionally could validly carry out. For example, since the Constitution gives the federal government jurisdiction over divorces, a municipality could not pass its own divorce regulation.

7.3.1.4 Consistency With Provincial Land Use Policies

The MGA authorizes provincial cabinet to establish land use policies for the province. The Act requires that every statutory plan, land use bylaw and any action by a municipal planning commission, subdivision authority, development authority or appeal board be consistent with the policies. Although generally neutral regarding conserving natural areas, the provincial *Land Use Policies* of 1996 do urge intermunicipal co-operation and involvement for shared ecosystems.¹³ This provision is relevant where ecosystems or natural areas extend across the City's boundaries.

7.3.2 Natural Areas Conservation and General Municipal Bylaw Authority

Part 1, Division 1 of the MGA gives municipalities considerable general powers to pass bylaws. Division 1 may be contrasted with the specific bylaw passing authority given by Part 17 of the MGA, regarding land use planning and development, discussed later in Section 7.3.3. The MGA intends that the Part 1, Division 1 powers be construed broadly and to "enhance the ability of councils to respond to present and future issues". 14 Compared

to municipal legislation in other provinces, according to one expert, this means that Alberta municipalities may be more flexible and may better respond to local needs.

The following lists some the MGA's general bylaw making powers¹⁵ of municipalities. The italicized comments indicate some ways that the power could be relevant to conserving natural areas in Edmonton, if the City passed appropriate bylaws.

 Bylaws respecting the safety, health and welfare of people and the protection of people and property.

This power might be used, for example, to regulate off road vehicles (safety, welfare and property) or to protect wetlands for their pollution assimilation properties (health).

Bylaws respecting transport and transportation systems.

Construction may be timed for no, or minimal impact on natural areas. Road siting and roadwork may be planned to avoid adverse effects on natural areas.

 Bylaws respecting services provided by or on behalf of a municipality and bylaws respecting public utilities.

The manner and siting of municipal services and public utilities may have more or less affect on natural areas.

 Bylaws respecting wild and domestic animals and activities in relation to them.

^{13.} See Alberta Municipal Affairs, Land Use Policies (Edmonton: 1996), for example, 3.0, Planning Cooperation; 4.0 Land Use Patterns and 5.0 The Natural Environment.

^{14.} MGA, s. 9.

^{15.} These bylaw powers are from the MGA s.7.

Although this power primarily is used to regulate private ownership of domestic animals and some wildlife management (e.g., beaver control), it could be interpreted to authorize regulation of the interface between domestic animals

 Bylaws respecting people, activities and things in, on or near a public place or place that is open to the public.

> Always being careful not to over step jurisdiction, under this power a municipality might try to remedy some of the disincentives for private landowners allowing public access to a conservation easement area. For example, suppose a developer and a municipality enter into conservation or environmental reserve easement and the municipality would like the owner to allow restricted public access to the easement area. A municipality might pass a bylaw limiting access to the area to foot access, or nonmotorized transport. Or, for example, it could prohibit any domestic animals or unleashed animals from entering the area. If the bylaw provides for a stiff fine for violation, and if it is enforced, the owner might feel more comfortable about allowing the public to enjoy the area.

bylaws respecting nuisances and unsightly property.

In law, a nuisance is the unreasonable interference with the occupation and enjoyment of property. A noise bylaw is a common example of a nuisance bylaw. However many potential natural area related activities could amount to nuisances, for example,

alteration of a slope or wetland which affects water levels on a neighbour's property.

7.3.3 Natural Areas Conservation and Municipal Planning and Development

7.3.3.1 Introduction

The MGA gives municipalities considerable mandate to regulate private land use. The Act requires municipalities to map out its land use objectives. It charges municipalities with the duty to pass bylaws specifying what kind of developments it will allow and what kinds it will prohibit. The Act gives municipalities a limited right to take reserves when a landowner applies to subdivide land. This section outlines these various powers and indicates some ways in which they could be exercised to conserve natural areas.

7.3.3.2 Statutory Plans

A municipality carries out its authority to regulate land uses through plans the MGA authorizes or requires ("statutory plans"). Statutory plans have a number of purposes. They range from setting out the general direction a municipality wishes to follow regarding future land use to establishing firm rules for deciding subdivision and development applications. If a municipality's objectives include conserving natural areas, protecting environmentally significant areas or critical wildlife habitat, its plans should say so.

A word of caution is in order. A municipality may not put anything it wants in its plans. It may only address those areas that the MGA or other authorizing legislation either expresses or implies it may address. If a provision in the plan goes beyond what is permitted by the MGA or other laws and a municipal delegate acts on the basis of that provision, an affected person might ask a court to declare that delegate's action to be void on the basis of an *ultra vires* plan.

Municipal Development Plans

The broadest in scope and most general of statutory plans is the municipal development plan (MDP). The MDP sets out a municipality's goals and objectives for the future. It is not a regulatory plan in that it does not tell decision makers how to decide development applications. Instead, it sets forth the municipality's policies on land use and development.

The MGA requires a MDP to address policies on future growth and anticipated infrastructure including roads and transportation corridors to accommodate that growth. It allows a plan to address many other matters including development policy in regards to environmentally sensitive areas. ¹⁶ A municipality with this objective should state it in its MDP and address how it hopes to achieve the objective.

Area Structure Plans

Although still general, Area Structure Plans (ASPs) are more specific than the MDP. An ASP applies to a geographical area of primarily undeveloped land within a municipality ranging from only a few acres to several sections of land.¹⁷ The Act intends that ASPs provide a framework for subdivision and development

of the subject area. An ASP must describe the proposed sequence of development, land uses, density and the general location of major transportation routes and public utilities. An ASP may contain any other matters council considers necessary. 18

Neighbourhood Structure Plans

The City of Edmonton uses Neighbourhood Structure Plans (NSPs) as a component of an ASP. NSPs are generally prepared for areas that can support about 4,000 - 7,000 people. NSPs are more detailed than ASPs. NSPs must conform to the ASP as well as to Council policies and other requirements.¹⁹

Area Redevelopment Plans

Area redevelopment plans are like ASPs except that the former deals with redeveloping developed areas. These plans could address redevelopment to habitat protection or wildlife corridors.

Land Use Bylaws and Districting

The MGA requires every municipality to pass a land use bylaw.²⁰ The land use bylaw is the regulatory tool by which a municipality carries out its statutory plans. The major purpose of a land use bylaw is to regulate and control the use and development of land in a municipality.²¹ A land use bylaw typically has two elements:

^{16.} MGA, s.632.

^{17.} Frederick Laux, Planning Law and Practice in Alberta, (Carswell: 1990), [hereinafter Laux first edition], at 56.

^{18.} MGA, s. 633.

¹⁹Planning and Development Handbook for the City of Edmonton, at 24.

^{20.} MGA, s. 639.

^{21.} MGA, s. 640(1).

one which creates the administrative structures to deal with subdivision and development applications and one which creates specific rules to be applied in the development and subdivision process. Administrative structures would include establishing a development authority to decide development permit issues as well as a process to apply, issue, cancel and alter development approvals.

The MGA requires that the land use bylaw divide the municipality into districts, commonly known as "zones", in such number and at such places as council may decide.²² Familiar districts include residential, commercial, agricultural, and industrial. However, a municipality may establish various others. The land use bylaw must state what uses are permitted and what uses are discretionary for each district.²³ It may state that when issuing a development permit for a permitted use, a Development Officer may impose such conditions as deemed necessary, and when issuing a development permit for a discretionary use the Development Officer may impose such conditions as required to ensure compliance with the bylaw. The MGA requires an approving authority to issue a permit if the proposed development conforms to a permitted use. Accordingly, conditions probably may only be imposed for permitted uses where the bylaw gives the development officer a discretion which may be properly exercised by way of a condition, for example, to set landscaping standards.²⁴ However, with discretionary uses,

provided that the authority has rational planning grounds, an approving authority has greater discretion to impose conditions.²⁵

Of the many districts that a land use bylaw may establish, ones that show more promise for natural areas protection are open space and direct control districts. The objective of *open space* districting is to conserve environmentally sensitive areas with unique natural qualities, or to minimize development that, owing to the physical characteristics of the land, may prove hazardous. Open space districting achieves its objective by only allowing non-intensive land uses consistent with conservation.

Example: the stated purpose of the Strathcona County Conservation and Open Space (CO) district is to "provide for the preservation and protection of environmentally sensitive areas and lands having significant natural environment capability for conservation, passive recreation and education purposes". Permitted uses are: "Ecological Reserves, Environmental and Natural Conservation, Farming, Natural Science Exhibits, and Public Park". Discretionary uses are "Accessory Dwelling and Public or Private Education Services".²⁸

Direct control districting is more open-ended than conventional districting. The MGA authorizes a land use bylaw to direct

^{22.} MGA, s. 640(2).

^{23.} MGA, s. 640(2).

^{24.} Laux, Second Edition, at 9-24.

^{25.} *Ibid.*, at 9-23.

^{26.} Others indirectly also show promise. For example agricultural districting may in effect keep land from being fragmented into smaller parcels.

^{27.} Laux, second edition, at 6-25.

^{28.} *Ibid.*, at 54.

control districts, where, subject to any applicable land use plan, council may regulate and control development as it considers necessary.²⁹

In the past, municipalities also have preserved environmentally sensitive land through the use of holding districting. Usually a holding district or holding zone would only apply to recently annexed rural land adjacent to urban land. The zone is meant, in effect, to restrict uses to hold off on development lest it prove to be disorderly and premature.

There is no doubt that Council's changing the district of land can affect its market value. Changing land's district to permit more uses, what is called upzoning, may increase market value, if there is a demand for those uses in the area. Changing land's district to permit fewer uses, or downzoning, may decrease market value if there is a demand for the denied uses. In the former case, municipalities charge no tax or levy on the owners whose properties market value increased. However, in the latter case, landowners often feel they should be compensated for any loss of value. Later, this section discusses the law relevant to when the imposition of planning regulations legally might require compensation or other action.

7.3.4 Overlays

An "overlay" is a special set of regulations imposed in addition to the standard regulations for a land use district.³⁰ An overlay

could be used to provide additional protection to sensitive areas within a district.

7.3.5 Subdivision, Compulsory Dedications and Natural Areas Conservation

7.3.5.1 Introduction

Subject to narrow exceptions, the MGA prohibits the Registrar of Land Titles from registering any instrument having the effect of subdividing land unless the subdivision has been approved under the MGA.³¹ The MGA gives the subdivision authority the right to require an applicant for subdivision approval to dedicate land without compensation for purposes specified in the MGA. The municipality takes title to land taken as reserve. Relevant to natural area conservation are municipal reserves and environmental reserves.

7.3.5.2 Exceptions to Municipal Right to Take Reserves

The exceptions stated in s.663(d) of the MGA relevant to municipal and environmental reserve are: no such dedication may be required where the subdivision creates only one lot out of a quarter section, lots of 16 ha or more which solely will be used for agricultural purposes, the land to be subdivided is 0.8 ha or less, or land or money in lieu of land was provided in

^{29.} MGA, s. 641.

³⁰ From City of Edmonton website, Planning and Development, Planning and Policy Services.

^{31.} MGA s. 652. The exception are for a quarter section; a river lot, lake lot or settlement shown on an official plan as defined in the *Surveys Act* that is filed or lodged in a Land Titles Office; a part of a parcel of land of land described in a title if the boundaries are shown and delineated in a plan of subdivision.

respect of an earlier subdivision creating the parcel in respect of which subdivision now is sought.³²

7.3.5.3 Municipal Reserves

Land may be taken as municipal reserve only to be used for the following purposes: a public park; a public recreation area; a school; or to separate areas of land that are used for different purposes. Taking land as municipal reserve to achieve protection of a natural area may be appropriate where the reserve land being used for one or more of the authorized purposes may meet those objectives. Ordinarily, the municipality may take as municipal reserve no more than 10% of the land or such lesser amount set forth in the municipal development plan.³³

7.3.5.4 Environmental Reserves

Land may be taken as environmental reserve only if it consists of a swamp or a gully; land that is subject to flooding, or in the opinion of the subdivision authority is unstable; a strip of land not less than 6 m in width abutting the bed and shore of any lake, river stream, or other body of water to prevent water pollution or to provide public access.³⁴ Taking land as environmental reserve to achieve natural areas protection objectives may be appropriate where those objectives may be met by the reserve

land being used for one or more of the authorized purposes.³⁵ The MGA does not give a maximum percentage that may be required as environmental reserve.

Environmental Reserve Easements

Where the municipality and the landowner agree, environmental reserve may be taken as environmental reserve easement. The main difference between environmental reserve and environmental reserve easement is that with the latter, title to the reserve land remains in the name of the landowner. An environmental reserve easement may be registered on title by caveat in favour of the municipality. Land subject to an environmental reserve easement must remain in a natural state.³⁶

7.3.6 Subdivision, Natural Areas Conservation and Voluntary Transfers

7.3.6.1 Voluntary Dedications Where No Reserve May Be Taken

Where under the MGA a municipality may not take land otherwise qualifying as environmental reserve as reserve because of section 663(3) of the MGA (see Section 7.3.3.2), there still might be ways for the municipality to conserve a

^{32.} MGA, s. 663.

^{33.} MGA. s. 666.

^{34.} MGA, s. 664. Under section 3 of the Alberta *Public Lands Act* (RSA 1980, c. P-30) the provincial crown owns the bed and shores of all permanent water bodies and courses.

^{35.} However, Fred Laux says that in practice environmental reserve often is taken for purposes that go well beyond the statutory categories. He notes that in the "real world, knowledgeable developers recognize that environmental reserves are somewhat like apple pie and, therefore, are generous in their offerings." However as Laux states developers expect concessions in return such as higher densities, reduced road dedications, levies or servicing costs. See *Laux*, *second edition*, at 14-9.

^{36.} MGA, s. 664(3).

natural area. The MGA gives a subdivision authority the right to reject a subdivision application on the ground of unsuitability.³⁷ Although the notion of "unsuitability" is not crystal clear in law, an argument may be made that where land falls under the characterization for environmental reserve, it is unsuitable for development. Where the subdivision authority has legal right to reject the application on this ground, it may be open to it to, as one expert says, "negotiate a "voluntary" dedication of problem areas of land."³⁸ However, the subdivision authority must be careful not to abuse its authority or act beyond statutory right. The municipality also must make sure that the voluntary nature of the transfer to the municipality is well documented lest some future landowner attempt to have a court set it aside as being an *ultra vires* extraction of a dedication.

7.3.6.2 Conservation Easements Instead of Reserve

Provided that a municipality does not run contrary to anything in its statutory plans or bylaws, as a qualified organization and a natural person it may accept grants of conservation easements. (See A Conservation Easement Guide for Alberta, Arlene Kwasniak, Environmental Law Centre, for detailed information on conservation easements. It may benefit both the landowner seeking subdivision and the municipality if the owner voluntarily grants a conservation easement instead of the municipality taking reserve or full reserve. For example, when a municipality takes environmental reserve, title to the land usually transfers to the municipality and the land must be left in its natural state or

used as a park.³⁹ An environmental reserve easement must be kept in a natural state. A landowner would benefit by granting a conservation easement instead of giving reserve or a reserve easement. Regarding reserve, he or she retains ownership of the land. Regarding both, he or she may negotiate what uses may be made of the land, and whether there should be any public access. As well the landowner might find a municipality more willing to make discretionary concessions if the owner voluntarily and informedly offers to grant a suitable conservation easement instead of the municipality taking reserve. In addition, the landowner might enjoy some property tax benefits. Although the conservation easement area remains in the taxpayer's name, the assessment might be lowered given its loss of development potential. Finally the owner might consider the economic and other development benefits of an attractive subdivision containing an environmentally significant area.

A municipality may benefit by entering a conservation easement rather than taking reserve since it does not have to become owner of bits and pieces of reserve land and it retains the right to tax the entire subdivided property. As well, the municipality might be able to fulfil conservation objectives of its plans and bylaws where the conservation easement area does not all technically fit under the definition of "environmental reserve." Finally, if the municipality and the landowner agree, they might get some qualifying organization other than the municipality to hold and enforce the conservation easement. This would relieve

^{37.} MGA, s. 654(1)(a).

^{38.} Laux, second edition, at 14-9.

^{39.} MGA, s. 671. If the landowner and municipality agree, environmental reserve may also be taken by way of easement, in which title stays with the landowner (s. 664(b)). The land still must remain in a natural state or be used as a public park.

the municipality of some management and financial responsibility and might be more attractive to some landowners.

7.3.6.3 Conservation Easements as a Condition of Subdivision

This section considers a situation where a municipality asks a landowner to grant a conservation easement as a condition of subdivision and the landowner does not want to grant it. Can the municipality legally insist on the condition? Here many issues come into play. Although municipalities are natural persons, they cannot use their natural person powers to impose conditions on subdivision. Natural persons cannot act as subdivision authorities unless empowered by statute. Municipalities may act as subdivision authorities but only in accordance with the MGA which gives them that power.

The MGA gives subdivision authorities only limited powers to impose conditions on subdivision. As to the extent of the power, according to an expert, if the subdivision approving authority has the power to refuse an application "... as a matter of discretion, it has the collateral right to approve the subdivision but subject to such conditions which will ameliorate the concerns that would have caused a refusal." Accordingly, it may be said that a subdivision authority has the right to impose a conservation easement as a condition of subdivision where the authority had a valid, legal right to refuse the subdivision and imposing the condition would ameliorate the concerns that would have based the refusal. Expert legal advice should be sought if there is a

7.3.6.4 Conservation Easements Outside of the Subdivision Process

Provided that there is nothing contrary in a municipality's statutory plans and bylaws, a municipality may enter into a conservation easement as grantor or as grantee at any time. So, for example, a landowner in the municipality might ask the municipality to act as a qualified organization in respect of a conservation easement. The municipality may agree by virtue of its natural person powers and by virtue of the fact that municipalities may act as qualified organizations under EPEA. Or, to further its objectives such as to preserve environmentally sensitive land, natural areas or wildlife habitat, or, for example, to add a link to a natural trail, a municipality may ask a landowner if he would be willing to grant a conservation easement. It might be a lot cheaper for the municipality to purchase an interest by

basis of directives in land use plans or by-laws only if those plans or by-laws do not go beyond authority of the MGA.

question as to whether the subdivision had a valid, legal right to refuse the application and whether the conservation easement would ameliorate the concern. If a condition goes beyond legal right, an interested party may appeal the condition. The first appeal would be to the subdivision and development board or Municipal Government Board, which hears appeals from subdivision authorities. If the party fails at that level, he or she may appeal to the Court of Queen's Bench on a question of law or jurisdiction.⁴²

Laux, second edition, at 12-23.

^{41.} The words "valid, legal right" are used most intentionally. A subdivision authority has, for example, a valid, legal right to refuse a subdivision on the

^{42.} MGA, ss 686 and 688. The subdivision and appeal board hears appeals from a decision of a subdivision authority unless the subdivision concerned some issue of importance to the province, such as the presence of permanent bodies of water on the land subject of the subdivision.

way of conservation easement than by out and out purchase. As well, it might suit both parties that the landowner retains title to the land subject to the conservation easement.

7.3.6.5 Federal Income Tax Benefits and Conservation Easements With Municipalities

Chapter IV of A Conservation Easement Guide for Alberta, together with the enclosed tax update, set out a number of potential federal income tax consequences of granting a conservation easement. These consequences must be kept in mind when landowners grant conservation easements to municipalities. When a landowner sells an interest in land by way of conservation easement to a municipality, the consequences are fairly straightforward and the normal capital gain/loss rules apply.

Special considerations apply when a landowner donates a conservation easement (or gift of an entire parcel) to a municipality intending it to be either an ecological gift or just a gift of capital property. As noted in the Guide, where a conservation easement is a gift of capital property that constitutes an ecological gift, special rules apply to reduce any capital gain and to increase federal tax benefits. This could be quite attractive to a landowner. However, a gift is by definition a voluntary transfer of property made without any consideration paid by or material benefit flowing to the donor. So, a grant of a conservation easement to a municipality made with no consideration, and solely out of generosity and the desire to protect a bit of nature should qualify. However, a grant of a conservation easement to a municipality as a condition of subdivision, or to obtain

concessions, likely would not qualify as a gift for income tax purposes. However, it is stressed that in any number of circumstances a grant of a conservation easement to a municipality will qualify as a gift. It all depends on the motives for the grant and the circumstances surrounding it.

7.3.6.6 Ecological Gifts of Capital Property

To qualify as an ecological gift, a parcel or lesser interest in it must be *capital* property. Accordingly, a parcel granted by a developer who held it as inventory might not qualify as a gift of capital property. Similarly, a gift of a lesser interest, such as a conservation easement, in a parcel held as inventory likely would not qualify as a gift of capital property. Insofar as this is the case, it is an unfortunate quirk in the ecological gift federal tax rules that in the writer's view should be changed to give developers more financial incentive to make gifts of environmentally significant areas.

⁴³ Revenue Canada, Income Tax Rulings and Directorate in answering a request from the writer has confirmed this view. To quote from Revenue Canada's letter:

[[]to be a gift] ... the transaction may not result directly or indirectly in a right, privilege, material benefit to the donor or a person designated by the donor. To qualify, the grant must be in the form of an outright gift. Any legal obligation on the donor would cause the transfer to lose its status as a gift. Further, in order for a grant to be a gift, it must be made without conditions, from detached and disinterested generosity, out of affection, respect, charity or like impulses.

7.3.7 Planning, Subdivision, Development and Compensation

7.3.7.1 Background on Expropriation, Regulation and Compensation

Under Canadian law, if a government, including a municipality, takes an interest in land without the owner's consent, and the statute under which the taking occurred either explicitly or implicitly gives the owner the right to compensation, the government must compensate the owner. In the usual case, a government will take an interest in land by an out-and-out expropriation. For example, a municipality may expropriate land to expand a highway. But what rights do a government and the affected landowner have when the government body does not out-and-out expropriate land, but rather imposes regulation on the land so that the landowner cannot develop it as he or she hoped to? This issue is critical when considering how far municipalities may go in regulating uses of land in order to further municipal objectives to protect environmental values.

7.3.7.2 When is Compensation Payable and When is it Not, Where Planning Regulation Limits Development?

Our Canadian courts have addressed the issue of whether the imposition of planning regulation that decreases market value may ground a claim for compensation, or be grounds to invalidate (quash) the regulatory action. Cases indicate that where the statutory delegate (usually council) which imposes the regulation has not acted with discrimination, bad faith, or without

factual basis, and has acted for legitimate planning objectives, courts will deny actions for either quashing or for compensation.

Acting for *legitimate planning objectives* means that the plans, bylaws or other regulatory authority the statutory delegate relied on in making the challenged decision, or imposing the challenged district, did not exceed the authority of the planning statute. 45

Generally speaking, *discrimination* means that the statutory delegate acts in a way that is partial and unequal.⁴⁶ Courts may quash delegates' actions for being discriminatory unless the governing law expressly, or by necessary implication permits discrimination.

Cases indicate that *bad faith* on the part of a municipal statutory delegate typically involves fraud, corruption, or acting for ulterior

^{44.} In Alberta, see the *Expropriation Act.* R.S.A. 1980, c. E-16.

^{45.} The rules to determine whether subordinate legislation are ultra vires authorizing legislation recently were succinctly set forth in *MacMillan Bloedel Ltd v. Galiano Island Trust Committee* ((1995), 28 M.P.L.R. (2d) at 157, (B.C.C.A., leave to appeal to the Supreme Court of Canada refused)). The court in this case sets out four categories under which subordinate legislation may exceed statutory authorization:

⁽¹⁾ where the power is given for an express purpose, but it is found as a fact to have been exercised for a different, unauthorized purpose;

⁽²⁾ where the power, on its face, authorizes the enactment, but it is argued that some limitation of the power is to be implied in the statute, and the exercise of power is contrary to that limitation;

⁽³⁾ where there is no express power to do the thing done, but it is argued that the power sought is to be implied from a general power;

⁽⁴⁾ where the matter is essentially one of the interpretation of the power.

^{46.} Kruse v. Johnson, 1898 2 Q.B. 91 (Div. Ct.).

motives, unrelated to planning processes relevant to the decision in question.

Without factual basis means the statutory delegated did not act on the basis of the facts and evidence. An example would be where a development authority disallows development of a river bank for "safety reasons" and all engineering reports indicate that development of the bank should cause no safety concerns.⁴⁷

7.3.7.3 Cases Denying and Cases Granting Compensation Claims

Examples of cases⁴⁸ where courts have denied compensation or denied a request to quash a legislation or decision which limits development are:

- No compensation for a development freeze when Alberta designated land as a restricted development area which allows existing uses, but prohibits any new uses without the Minister of the Environment's consent:⁴⁹
- No compensation for a freeze on development in British Columbia until such time as sewers collection and disposal problems were solved;⁵⁰

- No compensation where an Alberta municipality's plans and bylaws state it wants certain land for a park, the municipality refuses to zone the land to enable the owner to develop it, and the municipality does not buy the land to make it into a park;⁵²
- No quashing where court found that a British Columbia subdivision authority had a legislative mandate to act in conformity with the goals of governing planning legislation. The goal was to "preserve and protect the trust area and its unique amenities and environment". Court found bylaws promulgated under the Act which were aimed at protecting the Galiano Island natural environment to be legal, and not *ultra vires*, even though they frustrated the plaintiff landowner's development plans. 54

Examples of cases where courts have allowed applications of alleged takings or have quashed decisions freezing or disallowing development are:

 Court quashed British Columbia municipal bylaw rezoning land from residential to park where circumstances indicated that council's true motivation was to acquire the

No compensation for designation of an old barn in Nova Scotia as an historic site, which defeated the developer's plans to remove it to construct a hotel and facilities;⁵¹

 $^{^{47.}}$ For example, in *Moore v. Sanich (District)*, 30 M.P.L.R (2d) 132, (B.C.S.C.).

^{48.} Frederick Laux discusses the many of the listed cases, plus others, in *Laux, Second Edition*, in Chapter 8.

^{49.} Trelenberg v. Alberta (Minister of the Environment) (1980), 31 Alta L.R. (3d) 353 (Q.B.).

^{50.} Genivieve Holdings Ltd. v. Kamloops (City) (1988) 42 M.P.L.R. 171, (B.C. Co. Ct.)..

Some Fine Investments Ltd. v. Nova Scotia Attorney General (1990) 97
 N.S.R. 66 (S.C.), aff'd (1991) 102 N.S.R. (2d) 348 (C.A.).

^{52.} Hartel Holdings Co. v. Calgary City Council (1983) 8 D.L.R. (4th) 321 (S.C.C.) [Alta.].

The legislation in this case was the *Islands Trust Act*, S.B.C., 1989, c. 68.

^{54.} MacMillan Bloedel Ltd. v. Galiano Island Trust Committee, (1995), 28 M.P.L.R. (2d) at 157, (B.C.C.A., leave to appeal to the Supreme Court of Canada refused).

owner's land for a park at a bargain price; court found the municipality acted in bad faith. 55

- Court quashed an Edmonton City Council resolution effecting a freeze on the development of land under land use planning legislation in order to accommodate the province's pending designation of the area under the heritage legislation on the basis that the Council's resolution was not based on legitimate planning objectives.⁵⁶
- Court quashed and removed some conditions in a restrictive covenant prohibiting certain development in an environmentally sensitive area imposed as a condition of subdivision by a British Columbia municipal authority. Court reasoned that the subdivision authority imposed these conditions without factual basis and with an element of bad faith. The court found the delegates' action to be without factual basis since the subdivision authority ignored engineering reports that indicated no need for the imposition of the conditions. The court found the element of bad faith since the subdivision authority failed to disclose to the landowners all of the authority's requirements for a restrictive covenant until after the municipality completed a purchase of land from the landowner. The subdivision authority admitted that he did this because he did not want to jeopardize the sale and purchase.57

7.3.7.4 How Far Can Municipalities Go?

It is apparent from the above that municipalities such as Edmonton may go a long way with planning, subdivision and development prohibitions, conditions or limitations without having to pay any compensation. This is not to suggest that the City should not make financial or other amends when it prohibits or limits development. Often making amends is the right political or even moral decision. However it is critical that the City realizes what are its legal rights regarding compensation and what it might do regardless of legal rights. It must realize this in order to rationally assess claims for compensation and effectively engage in negotiations regarding development proposals involving natural areas. As well, it is critical that when claims for compensation are made to the City, that the City independently assess them to determine to what extent they accurately reflect loss in fact and loss in speculation.

This section concludes with a succinct measure for determining how far municipalities may go to regulate and limit land development, offered by Frederick Laux from his celebrated *Planning Law and Practice in Alberta, second edition*:

To sum up, as the law presently stands in Alberta, provided that municipalities act discreetly and pursuant to comprehensive long-range planning objectives, they have little to fear by way of judicial intervention, even though their actions may have a dramatic impact on the development expectations of landowners. Municipalities can decide when land is ripe for development. Private land can be prohibited from development forever in the name of protecting consumers from hazards inherent in the land. Similarly, there is ample scope to downzone land for the protection of the

^{55.} Re North Vancouver (District Zoning By-law 4277), [1973] 2 W.W.R. 260 (B.C.S.C.).

^{56.} Tegon Developments Ltd. v. Edmonton (City) (1977) 5 Alta. L.R. (2d) 63 (C.A.) aff'd [1979] 1 S.C.R. 98.

Moore v. Sanich (District), 30 M.P.L.R (2d) 132, (B.C.S.C.). The author of the book was advised that the case was not appealed since "an accommodation was reached". Telephone discussion on August 19, 1996 with Allan McDonald, solicitor for the District of Sanich.

natural environment. Further, so long as municipalities follow the model used by the City of Calgary in Hartel,⁵⁸ intensive land development can be halted indefinitely pending possible future acquisition. In the end, it would seem that Alberta municipalities can go a considerable distance before they have crossed over the line of legitimate land use regulation and into the realm of an illegal or compensable taking. Nevertheless, in light of the revived concern over civil liberties and individual rights brought on in large part by the Charter, one can expect a continual reassessment of the situation, and perhaps some swing of the pendulum in favour of private landowners.59

7.3.8 Municipal Taxation Reduction or Exemption

Under an ideal legislative system, municipalities would have the right to reduce or exempt property from municipal taxes where the owner leaves land in a natural state in order to assist the municipality in carrying out its environmental conservation policies. Unfortunately, Alberta municipalities do not exist under such an ideal system. The MGA sets out fairly specific rules as to when a municipality may reduce or exempt property taxes. Some rules are relevant to conserving natural areas. However, as the next two sections show, the rules do not to allow reductions or exemption to cover all cases where a tax reduction or exemption would be desirable. For example there is no right to exempt developers or private individual landowners from taxes when they leave land in a natural state to carry out municipal policies.

with Exemption from Municipal 7.3.8.1 Properties **Property Taxation**

The following interests in land are exempt from municipal property taxes. The italicized comments note how the exemption might be relevant to natural area conservation 60:

- Property that is:
 - owned by a municipality and held by a non-profit organization officially on behalf of the municipality (Note: exemption could be used if a non-profit organization such as a land trust holds a parcel of land and maintains it for conservation purposes);
 - held by a non-profit organization and used solely for community games, sports, athletics or recreation for the benefit of the general public (Note: some of these activities could be consistent with conservation of natural areas).
- Any interest in property held by the Crown in right of Alberta or Canada (Note: this would include naturally occurring permanent wetlands and natural water courses; see Section 7.3.9 below).
- Property held by a municipality that earns no revenue and is held for a public benefit (Note: this could apply where the Municipality is the Grantee of a conservation easement or for municipal or environmental reserve).

60 From MGA s. 362.

Hartel Holdings Co. v. Calgary City Council, 403.

Laux. Second Edition, at 8-21.

7.3.8.2 Properties with Discretionary Exemption

The following interests in land are exempt from municipal property taxes, though council may remove all or part of the exemption with one year notice:⁶¹:

 Property that is used for charitable or benevolent purposes that is for the benefit of the general public and owned either by a level of government or a non-profit organization.

The following interests in land are exempt from municipal property taxes, though a council may, with notice, remove all or part of the exemption (no mandatory notice period):⁶²

- Property used in connection with Ducks Unlimited Canada under a lease, license or permit from the Crown in right of Alberta or Canada.
- Property held by a non-profit organization.

7.3.9 Wetlands and Watercourses

7.3.9.1 Permanent Wetlands and All Naturally Occurring Bodies of Water

The Provincial Crown owns the bed and shores of many Alberta wetlands and watercourses. The extent of this ownership is set out in sections 3 and 4 of the *Public Lands Act* 63 , which reads:

62 From MGA, ss 363 and 364.

- **3(1)** Subject to subsection (2) but notwithstanding any other law, the title to the beds and shores of
- (a) all permanent and naturally occurring bodies of water, and
- (b) all naturally occurring rivers, streams, watercourses and lakes, is vested in the Crown in right of Alberta and a grant or certificate of title made or issued before or after the commencement of section 3 of the *Public Lands Amendment Act, 1984* does not convey title to those beds or shores.

(2) Subsection (1) does not operate

- (a) to affect a grant referred to in subsection (1) that specifically conveys by express description a bed or shore referred to in subsection (1) or a certificate of title founded on that grant,
- (b) to affect the rights of a grantee from the Crown or of a person claiming under him, when those rights have been determined by a court before June 18, 1931, or
- (c) to affect the title to land belonging to the Crown in right of Canada.
- **(3)** For the purposes of subsection (1), a river, stream or watercourse does not cease to be naturally occurring by reason only that its water is diverted by human act.
- **4.** No person may acquire by prescription an estate or interest in public land.

⁶¹ From MGA, s. 362.

⁶³ Public Lands Act. R.S.A. c. P-30.

Accordingly, the Provincial Crown must be involved in any proposed development that includes any wetland, other waterbody or watercourse that falls under the section 3 of the *Public Lands Act.* Since the owner of the surrounding land usually does not own the bed and shores of any wetland, other waterbody or watercourse falling under section 3, it follows that he or she is limited regarding compensation or related claims where prohibitions or restrictions are placed on development of them.

Arlene Kwasniak of the Environmental Law Centre currently is completing a study on laws and policies that affect wetlands that should prove useful to the City.

7.3.9.2 The Bed/Shore of a Water Body or Watercourse?

The *Public Lands Act* does not define "bed" or "shore" of a natural water body. However the *Surveys Act* ⁶⁴defines them as follows:

17 ...

- (2) When surveying a natural boundary that is a body of water, the surveyor shall determine the position of the line where the bed and shore of the body of water cease and the line shall be referred to as the bank of the body of water.
- (3) For the purpose of this section, the bed and shore of a body of water shall be the

⁶⁴ Surveys Act, S.A. 1987, c. S-29.1.

land covered so long by water as to wrest it from vegetation or as to mark a distinct character on the vegetation where it extends into the water or on the soil itself.

Under the definition from the *Surveys Act*, the bank is the physically ascertainable line where long action of water has caused the bed and shore to have no vegetation, distinct vegetation or a distinct soil. A knowledgeable and observant person can locate this line by looking. Accordingly, where a water body or water course borders private land, Crown ownership covers an area up to the bank and private ownership begins at the bank.

7.3.9.3 The Bank and Environmental Reserve

Any environmental or other reserve to be taken by a municipality will begin at the bank. It is important to note that if environment reserve easement is taken instead of environmental reserve, any accretion will accrue to the landowner instead of the municipality. This is because title to the reserve remains with the landowner.

7.3.9.4 Municipal Management over Wetlands, Other Waterbodies and Watercourses

Section 60(1) of the MGA states:

Subject to any other enactment, a municipality has the direction, control and management of the rivers, streams, watercourses, lakes and other natural bodies of water within the municipality, including the air space above and the ground below.

Note that this provision is not limited to permanent wetlands or watercourses and so should apply to all naturally occurring waterbodies or watercourses, including intermittent ones.

The extent of power given to a municipality by virtue of this section is not certain. For example, it could be argued that it implies an access right over private lands to enable a municipality to carry out direction, control or management of a wetland on the land. On the other hand, it could be argued that more direct statutory language would be needed to give a municipality such right. In any case, it is clear that this provision gives municipalities authority relevant to conservation of natural areas containing wetlands or watercourses.

7.3.9.5 Water Related Approvals under Other Legislation

Carrying out development on private land that contains surface water often requires statutory approvals. For example

- Under the Water Act⁶⁵ any drainage activities will require an approval. It is not relevant whether a waterbody is permanent or intermittent. As well, most water diversions require a license.
- Diversion, drainage or other activities affecting fish habitat or involving depositing some substances frequented by fish will require a permit under the federal Fisheries Act⁶⁶.
- Doing things that could harm migratory birds or their nests, or involve depositing oil, oil wastes or any other

substance harmful to migratory birds in any waters or any area frequented by migratory birds require a permit under the *Migratory Birds Convention Act*⁶⁷ unless allowed by regulations, or allowed by permit.

- A permit is needed under the federal Navigable Waters Protection Act to carry out activities that could interfere with navigable water.⁶⁸
- An approval or registration could be required under the Environmental Protection and Enhancement Act to carry out water related activities that can pollute.

The authority given to Alberta municipalities by section 60(1) of the MGA (see Section 7.3.1) should give them standing in respect of applications for any of the above approvals relating to watercourses or water bodies on natural areas, or in relation to any required environmental assessments.

7.4 A Conservation Toolbox

7.4.1 About Tools

The preceding section discussed many of the things that Alberta municipalities may do to assist in conserving natural areas within their boundaries. The discussion did not, however, cover every possible *legal tool* available. By the term "legal tools", this report means common law or statutory mechanisms that may be used to help conserve natural areas. Legal tools may be contrasted with management or development tools, for example using natural wetlands in

⁶⁵ Water Act, S.A. 1996, c. W-35.

⁶⁶ Fisheries Act, R.S.C., c. F-14, ss 35(1) and 36(3).

⁶⁷ Migratory Birds Convention Act, 1994, S.C., 1994, c. 22. ss 5. 6 and 35.

⁶⁸ R.S.C. 1985, c.N-22, s. 5.

conjunction with stormwater management, or financial tools, such as developing a Natural Areas Reserve Fund to purchase land that contains an important natural area.

The following sections summarize some of the legal tools available for conserving natural areas in the City of Edmonton and the views of the development industry on tools or approaches to natural area conservation.

7.4.2 Legal Tools to Conserve Natural Areas within the City of Edmonton

A summary of legal tools to conserve natural areas within the City of Edmonton is provided in Appendix 6. Appendix 6 sets out a comprehensive list of legal tools arranged in the following categories:

Designation Tools

Designation tools are statutory tools that a level of Government may use to designate an area of land to protect it and limit it from development. The first category of tools in Appendix 6 is Designation Tools other than those under the *Municipal Government Act*.

Sales and Purchases Transactions

These can be of an entire parcel or part of a parcel. In the latter case, a purchase by way of conservation easement, restrictive covenant or easement is involved.

Gifts

Gifts can be of an entire parcel or part of a parcel, where a purchase of a conservation easement or lesser interest is involved. In the latter case, a purchase by way of conservation

easement or restrictive covenant is involved. Some gifts will give rise to federal income tax benefits to the donor.

Personal, Term and Common Law Partial Interests

Temporary and interim protection of areas may be accomplished through personal landowner agreements or through term interests, such as leases or profits a prendre.

Administrative/Planning Tools – Traditional

These are the traditional tools that a municipality may use in the planning, subdivision and development process such as zoning and compulsory dedications.

Administrative/Planning Tools - Novel

These are innovative tools that a municipality may use in the planning, subdivision and development process such as transfer of development potential, building scheme restrictive covenants and bare land condominiums.

Regulatory and Administrative Tools - Ongoing

These are regulatory and administrative tools allowed under the *Municipal Government Act* other than those that relate to planning and development, such as general bylaw making powers and taxation authority.

7.4.3 The Legal Tool Chart and Incentives

Without doubt, one of the most effective ways of conserving natural areas is to offer the landowner financial and other incentives. Although incentives are not legal tools per se, many legal tools provide or allow for financial or other incentives to developers. Appendix 6 notes where a tool may provide incentives to landowners.

7.4.4 Comments by the Development Industry on Various Planning and Development Tools

During one of the workshops held with members of the Urban Development Institute, we discussed tools and obtained feedback from the industry on some of the commonly used tools for urban land conservation.

Municipal Reserve

The interpretation of Municipal Reserves as required under the *Municipal Government Act* may be an important tool in considering natural areas which do not automatically fall into Environmental Reserves (e.g., permanent creeks, rivers and lakes). Section 671(2) defines municipal reserve, school reserve or municipal and school reserve uses as:

- (a) a public park
- (b) a public recreation area
- (c) school authority purposes, or
- (d) to separate areas of land that are used for different purposes

A municipality could choose to take natural areas or a portion of natural areas as part of a developer's required contribution of up to 10% dedication in a typical subdivision. Alternatively, a municipality could take less than the maximum 10% in return for dedication of larger natural areas or wetlands, which might otherwise be developable in their natural state. This is an important consideration, particularly for woodlots.

Although attractive in theory, this tool needs to be applied carefully. Each development must be approached on its own merits, and the costs and benefits of municipal reserve dedications on natural areas weighed accordingly.

Tax Incentives

A forgiveness, partial forgiveness, or tax deferral of the municipal portion of property taxes (so long as the area remains in its natural state) may be an incentive for landowners who are holding land for eventual urban development or are using land for other purposes such as agriculture.

Servicing Costs

Relief or partial relief from servicing costs may help to reduce the costs to developers of conserving natural areas. These can be both onsite and offsite servicing costs.

Offsite servicing costs can be relaxed or forgiven by excluding or partially excluding the acreage of the natural area from the offsite cost levy assessment for such infrastructure as major sanitary, storm and transportation facilities, a portion of which services the development on the lands.

Onsite servicing costs may be increased due to the requirement to route linear infrastructure around natural areas, resulting in extra lengths without the benefit of servicing adjacent lands over these increased distances. Even though Section 677 allows for a municipality to permit a roadway or public utility to be installed and maintained on, in, over, or under reserve lands, the City has been reluctant to do so. Some form of credit might be given to the landowner for their

additional costs in order to preserve the natural area in an unaltered state.

Stormwater Management

Wetland natural areas can be used in conjunction with traditional stormwater ponds. By diverting a portion of stormwater runoff to the wetland, the wetland may be able to be sustained. This also may result in some cost savings in the sewer management system.

Land Exchange

Where the City has an inventory of developable lands, a land exchange with the City could be explored. This exchange could be based upon area or value.

Density Transfers/Bonusing

Transfer of development rights in the form of density may be possible between properties owned by the same company or person or sold through a banking system of credits. A banking system of credits may be difficult to administer.

Although sound in theory, this is difficult to apply in the suburbs of Edmonton. With the possible exception of commercial land, the suburban market usually won't support the densities already allowed for under the City's Land Use Bylaw. Therefore, in the case of suburban residential and industrial land, there is little or no advantage to the developer of transferring additional density from one parcel of land to the other since the market will not support it.

This technique might work in the case where density is allowed to increase in downtown Edmonton by transferring development rights attached to a natural area in the suburbs to a downtown property where the market would support such an increase in density.

Natural Areas Fund

A Natural Areas Fund could be established by the City to be used for the purchase of natural areas. Such a fund should be supported by all city taxpayers through the property tax base. This fund might also be used to underwrite enhancements to natural areas (e.g., construction of boardwalks, paths, viewing areas, etc.).

Realty Fund

Perhaps a small percentage of every real estate transaction could be the source of money for a Natural Areas Fund. This would spread any financial burden to all property within the City. Although discussed as a possible technique, a natural area fund supported by the property tax base was preferred.

Utility Linkages

Perhaps utility rights of ways could be used as pathways to link natural areas. Compatible vegetation may be used to provide some habitat for animals, birds, etc. Although not within the developer's responsibilities, no concerns were raised regarding utility companies adopting this technique through urban areas.

Modified Urban Standards

Perhaps some thought could be given to modified urban standards in a neighbourhood which contains a natural area. This might include narrower local roads, narrower sidewalks, sidewalks on one side, no sidewalks, asphalt sidewalks, etc. (i.e., cluster subdivisions).

7.4.5 Other Tools

Brownfields Programs

In some parts of the city, abandoned properties exist that have not been redeveloped for industrial or commercial uses because of perceived concerns about site contamination and the liability issues that may be associated with a contaminated site. Because of these concerns, developers or businesses focus instead on previously undeveloped land, resulting in further loss of natural areas, open space or productive farmland. There are several possible ways in which management of contaminated sites or "brownfields" could help achieve the objectives of a natural areas program. First, there may be ways in which the City of Edmonton or the Province of Alberta can provide incentives for redevelopment of brownfields by streamlining the assessment and site remediation process, assisting with assessment and clean up of contaminated sites, property tax incentives, or other means. This could lead to exchange of properties or transfer of development rights from sites containing natural areas to these abandoned properties. As well, some of the abandoned or unused properties in the city may contain natural habitats that could be a valuable addition to the city's green spaces network. By assuming the responsibilities for clean-up and management of these sites, it may be possible to acquire

some relatively intact natural areas at a substantially discounted price.

7.4.6 Summary

Most, if not all, of the successful natural area conservation initiatives that have been developed in other parts of North America rely on a variety of tools to achieve their conservation goals. The preceding section identifies a wide range of tools that may be applicable in the City of Edmonton. The list is not definitive, although we feel that it greatly expands the range of conservation options that have hitherto been used in the City to conserve natural areas. We view this as a significant starting point, and point out that further consultation is required with the development industry and other stakeholders in the community to determine the feasibility and acceptability of the various conservation tools that we have at our disposal.

RECOMMENDATIONS:

- The City of Edmonton should take full advantage of the range of available tools for conserving natural areas.
- Further consultation with the development industry and other stakeholders should be undertaken as a basis for testing, refining and using the wide range of conservation tools that are available.

7.5 Stewardship

An important component in the process of conserving natural areas that may often be overlooked in the earlier phases, is the provision for maintaining these areas into the future. This aspect requires planning, funding and action, if the natural

area is to ultimately sustain itself over the long term, and should be addressed at the time of acquisition or securement of the site. The old belief that 'natural areas' do not need management because they are "natural" is no longer an adequate management option.

The process of identifying the requirements to sustain the area has usually been referred to as developing an 'environmental management plan', however, more recently this has been referred to as *stewardship planning*. Stewardship plans are key components in the conservation of natural areas in that they should address the site's ecological, economic and social values. Another key feature of a stewardship plan is that it is unique or site specific to the area in question and should reflect that uniqueness. The following sections describe the important features that should be incorporated into a stewardship plan to ensure that the integrity of the site is maintained into the future.

7.5.1 Components of a Stewardship Plan

7.5.1.1 History

The history of the natural area is important from both an ecological and cultural aspect, in that it identifies former use of the area by native peoples or other inhabitants. For example, certain wetlands may have been traditional hunting, fishing, or egg-gathering areas, while forested sites may have served as trapping or berry-picking sites. Air photography is an excellent source of recent historic information about the physical aspects of an area and the museum and archives may be a source of cultural information. Compiling information on the

history of a site increases public interest in the site, which in turn serves to enhance support for conserving the site.

7.5.1.2 Relationship of the Site to Other Natural Areas

This section should provide information on the connectivity of the site to other natural areas. The sites degree of isolation or linkage is important for many reasons, including the proximity to sources of propagules and genetic resources. Linkages such as wetlands, streams, forested areas, shelterbelts, park and manicured areas, railroad rights-of-way, and utility/pipeline corridors are all important and should be included in future management plans for the area. Where possible, the maintenance of connective links should be considered when securing a natural area and, in some cases, linkages should be incorporated into adjacent Neighbourhood or Area Structure Plans.

7.5.1.3 Site Description

By the time a site has been identified as an important natural area, worthy of conservation, some critical information has already been acquired. To effectively manage the site, it is important to identify as many other attributes as possible. Physical characteristics such as topography and hydrology are key to sustaining wetland areas into the future and should be described in detail. Detailed biological inventories should be carried out to provide baseline or benchmark data to which future information can be compared. Inventory formats should be in a form that may be updated easily, since volunteers could undertake this task on an on-going basis. Sensitive species presence should be identified and included in the management plan. Invasive species should also be identified

and any disturbances impacting the area should be noted. Ecological functions and inter-relationships, including successional stages present, should be identified to provide a sound basis for management.

7.5.1.4 Site Goals/Objectives

This is probably one of the most important components to consider when initiating a stewardship plan of a natural area, since this will be the focus of all future activities associated with the area. Goals and objectives should be determined through consultation with a broad range of stakeholders, including local citizens. It is important to get "buy-in" at this stage, since local residents are often involved in "watching over" the area or providing volunteer work around the site. This section should also identify other key management requirements including access, infrastructure, reclamation/naturalization, enhancement, weed control, and buffer requirements. Determining what uses will be acceptable and compatible with use of the natural area for nature appreciation, interpretive or educational value involves considerable dialogue with stakeholders.

One of the most important decisions the managing body will have to make is the target ecological successional stage that they visualize for the site, keeping in mind the dynamic nature of ecosystems. Not to transform it to a particular stage but to manage the anthropogenic perturbations that would drastically change the site. For example, wetlands naturally proceed from permanent to semi-permanent to intermittent and eventually through siltation and sedimentation become uplands. Woodlands eventually mature, become decadent, fall and open up the forest to start the cycle again. Managing to

maintain a hydrologic regime that would sustain a wetland, in light of all development occurring in the watershed, is a major task.

7.5.1.5 Site Management/Operation

Setting goals and objectives for the site is only the first step, and of little value unless implemented. This section of the plan should develop a detailed management and operational plan, so that everyone is clear as to who should do what, where and when. This will involve functions such as water management, removal of hazardous trees, infrastructure design if required, or designation of areas that are closed spatially and/or temporally. Outlining reclamation plans and weed control will be important functions in site management, since nearly all sites experience infestations of invasive species. Measures to deal with pets as well as nuisance wildlife should all be addressed at this point. All prohibitions and controls applicable to the natural area should be addressed in the management plan.

7.5.1.6 Legal Aspects

The stewardship plan should define all legal boundaries, titles and easements/agreements, etc., in order that management/ operational plans may be implemented in appropriate areas of the site. If access is permitted then liability and security should be addressed.

7.5.1.7 Costs and Funding

All costs and funding partners involved in the initial acquisition process should be identified and acknowledged in the

stewardship plan, including donations and in-kind contributions. Further, this section should address the annual maintenance and operational costs, property taxes, cost for capital works scheduled, and any biological inventories or scientific studies that are required. Roles and responsibilities for all partners involved in the stewardship of the site should be clearly noted here, including potential future funding sources.

7.5.1.8 Monitoring

A detailed monitoring program should be implemented to evaluate site performance under the prescribed management regime. The initial site description data provides a baseline from which future measurements could be compared. This task should be conducted on an annual basis by the site steward (organization responsible) asking the question: "Is the site meeting its goals and objectives?". Other monitoring priorities include: updating the biological inventory, noting land use changes, site disturbances and weed encroachment, water quality, and any changes in ecological function. Information gathered during the monitoring effort should be assessed against the management plan and if required, the plan should be changed to ensure objectives are being met. Monitoring is usually included in the initial plans for most habitat programs with the best of intentions to carry it out, however, it is often the first item to be dropped when time and/or funding become limiting.

RECOMMENDATION:

Detailed inventories and stewardship plans should be completed for each natural area as soon as the sites are acquired or conservation agreements are put in place. The interim stewardship plans developed during the present study provide a useful framework for the stewardship coordinator or volunteers to complete these tasks.

> Today, cities are owned, controlled and influenced by all of people, who sorts are motivated by all sorts of goals, sometimes conflicting and sometimes harmonizing. The membership of the orchestra who makes things happen in a city is forever changing, and the job of the conductor is usually up for grabs. In order for urban land conservation to succeed, many different players must perform their functions at the proper time and to the proper degree, with equal measure of selfinterest and compromise. That doesn't occur easily, but like great music, it is humanly possible. The key to the success of urban conservation

Conserving Edmonton's Natural Areas

8

8 Marketing and Financing

8.1 Marketing and Financing Strategy

8.1.1 The Current Challenge - Creating an Appealing Bandwagon

The marketing challenge facing the environmental coalition tackling land conservation in the City of Edmonton involves more than simply raising money. It is creating a movement or a bandwagon that will deliver results.

Positive community support encourages stronger business support. Stronger business support brings additional resources to move projects from dreams to reality.

The greater the success, the more appealing the bandwagon. The more people that jump on to the bandwagon, the more appealing it is for others to jump on as well. **Success breeds success.**

The question facing the coalition is how to build the <u>right</u> "bandwagon" and how to create enough momentum to get it rolling.

There is no cookie cutter solution; however, the marketing strategy will provide a *flexible framework for the coalition to*

move forward. This framework is an assessment based on a fixed point in time. Windows of opportunity change and should never be ignored because they are "not in the plan"; however this flexible framework provides a touchstone to evaluate how new opportunities move you towards your strategic goals.

Financing a program is often seen as a daunting challenge. While securing a funding base takes work, it is simply a marketing exercise.

To market an idea or commodity successfully, you need to understand:

- The marketing environment,
- Potential customers, partners or supporters,
- Your competition,
- Your strengths,
- Your weaknesses and lastly,
- A clear understanding of what your "product" is and what you want to accomplish.

With this analysis in mind, you then build the right tools to target the right audience at the right time. A key to successfully building momentum around a project is getting it right the first time! The image created around the launch will stay with the project and either help it or hinder it. That is why the initial positioning is so important.

Securing financial support for a community cause is successful when these same marketing principles are applied. Unfortunately there are no short cuts to success.

8.1.2 Strategy Development Process

This strategy was developed following a review of the issues and opportunities that currently exist for natural area conservation in Edmonton. The information was compiled through the following activities:

- Background literature and research review of numerous case studies, national, regional and local attitude research regarding environmental issues, recreation patterns, tax payer concerns and priorities, philanthropy activities.
- Two focus sessions including environmental community, and randomly selected taxpayers.
- Web search, media scan and phone follow-up with potential corporate partners.
- Web search, literature review and personal follow-up with key foundations.
- Local media scanning of coverage on parks and land conservation issues.
- Discussion and feedback from the Project Steering Committee.
- Personal discussion with community and corporate contacts.

The background review is forged with the consultant's marketing experience to create the strategic plan.

8.2 Communication and Marketing Issues

8.2.1 Understanding the Marketing Environment

To increase the potential of success, the first step of any marketing program is to understand the environment that the project will occur within. While this project may be very local in nature, the broader national and global community influences the City of Edmonton. Therefore it is important to understand, and put in context, some of the broader trends.

As the world becomes more interconnected, so does the impact of the global community. Local issues that have national or global appeal do not stay local for long. This broader public interest provides both opportunities for Edmonton's organizations that use it effectively and challenges for those that do not factor it into their marketing and communication plans.

The next sections provide a top line review of factors and trends that relate to environmental issues, natural area conservation and recreational access. These issues may influence public attitudes, corporate decision making, political pressure and community support.

Public interest and concern regarding environmental issues is re-emerging as a growing issue of concern. Global studies such as The Environmental Monitor (1999) by Environics International indicates that economic hardship and pollution are seen globally, as the two greatest threats.

While results vary from country to country, there is a growing concern, especially in North America towards key environmental issues.

Some research indicates that the current economic prosperity is linked with the growing focus on environmental protection. As many North Americans currently do not perceive economic uncertainty, they are focusing their attention towards quality of life issues and the world that they will leave their children.

Other trends indicate the public does not see the issue as either economic well being or environmental protection. They tend to view these issues as inter-connected. There is growing public support for solutions that address both issues in a responsible manner.

Globally we are seeing this convergence clash at major international trade events such as the recent World Trade Organization meeting or the World Petroleum Congress.

At these events decision-makers are facing a new, young, well-organized and vocal activist. This new generation of environmental activist is emerging as a result of growing frustration from industry's efforts at environmental protection and social responsibility.

While these activists may be seen as extreme by some, there is a growing number of "average citizens" whose lives are touched by environmental issues. "Stress and pollution" were highlighted in the 1999 Environmental Monitor as being the greatest threat to human health.

With this in mind, it is not surprising that there is a broadening of public support for activities that ensure the right to a clean healthy environment. From smog alerts to E-coli in the water supply, people understand firsthand the impact of current environmental management challenges.

The perceived lack of corporate responsibility is hardening public support for stronger legislation and the imposition of tough financial penalties.

8.2.2 Globally - Social Responsibility Emerging

The corporate community is aware of this trend and many are endeavoring to embrace their social responsibilities. The Millennium Poll on Corporate Social Responsibility by Environics International indicated that there is a public expectation that the corporate sector should be actively contributing to the social and environmental agenda. They should be striving to set higher standards not to simply meet the minimum. Environmental protection was identified as one of five social issues that should be addressed.

The study indicates an early trend towards corporate social responsibility becoming a new pillar of performance evaluation. The principle of "doing well by doing good" is proving to make good business sense for both shareholders as well as stakeholders. Companies that embrace the approach are slowly incorporating these principles as core values and not simply a fashionable add-on.

The global corporate community realizes that with proactive involvement, they have the opportunity to formulate solutions that meet their needs as well as environmental concerns. The absence of this attitude in some parts of the world is resulting in a much more rigorous regulatory environment.

While some might say "what happens in Asia or Europe does not have any impact on us", they are wrong. Global markets and global trends should not be ignored. The ability and willingness of the media to cover stories from far-flung locations provides a powerful tool to create global attitudes.

As economic issues become more mainstream, so does the media coverage on corporate activity around the world. This increased exposure of business activities, both good and bad, impacts the image of these companies in their home communities and with their key investors.

As the corporate community goes global, so does the environmental community. Both the Internet and the increased media coverage provide cost-effective tools for international advocacy organizations to monitor business practices worldwide. More and more issues are positioned as global, not simply community-based. We need only look to the Cheviot Mine project to see this trend in action.

Corporate image and goodwill is an important commodity for any publicly traded company. Most companies do not want to be associated with practices that paint them as hurting the health of the communities they do business in. Impact on the health of current and future citizens is a driving force behind the public's growing interest in the environmental agenda.

Globally, the primary issues within the environmental agenda are air and water quality, however, land management and conservation is seen by some as an important contributor to clean air and water.

8.2.3 Nationally - Trends are Consistent

Focusing closer to home, we see similar trends on the national scene. Numerous national polls are showing increased public interest in environmental issues. National polls by Angus Reid (1998) as well as Pollara Perspective (1995 – 98) indicate an upward trend of the importance of environmental issues in relationship to other issues. Environment has moved from 9th of 20 issues to 5th of 20 issues.

This increased top-of-mind concern may be driven from media coverage of international policy initiatives such as the Kyoto Agreement, personal experiences with smog or water quality issues or the growing body of science that is linking health concerns such as asthma to environmental sources. Other factors that may contribute to this upward trend in concern might include the perceived economic security or the aging baby boomer population with changing priorities.

It is clear that there is no one factor that creates this upward trend but a combination of demographic, economic and social factors. However, the research does indicate that an important motivation underlying these concerns is the kind of world that we will leave to future generations.

While air and water quality issues top the list nationally, we also see urban environmental issues, such as deforestation, emerge. The growing urbanization of Canada is reducing the day-to-day experience with nature that many Canadians had in the past. As urbanization increases, it takes more effort to get to and enjoy a natural setting. Even with these limitations, Statistics Canada's 1996 study, "The Importance of Nature to Canadians", indicated that over 85% of the population participated in one or more nature—related activities. While a quarter of the activity noted in the study involved an overnight stay, which infers some form of vacation, the vast majority of

nature-related experiences were enjoyed in near-to-home environments.

The passive recreational appeal of near-to-home "natural areas" and the environmental benefits that these sites can contribute to air and water quality underpin public support. Canadians continue to take pride in their natural heritage and support investing in it for the benefit of future generations. We believe that this is an important key message to keep in mind as the coalition communicates the benefits of conserving natural areas within the City of Edmonton to partners and stakeholders.

8.2.4 Alberta - Environmental Issues Important

When reviewing the public attitudes of Albertans, we see a correlation with some of the national and global trends. While Albertans are less inclined towards a punitive regulatory environment, they do support the national and global efforts towards improving our environment. Our province has enjoyed a bounty of spectacular natural wonders, wide-open spaces, clean water and air for many years.

Alberta's previous level of urban development did not provide the urban sprawl found in other higher density locations such as Vancouver or Toronto. Many Albertans came from smaller centers where nature was usually right next door. In addition, the agricultural and resource extraction economic base that built the province has provided many Albertans ample exposure to Alberta's natural heritage. This lifestyle manifests itself in Albertans who participate and enjoy nature in a variety of ways. Statistics Canada's 1996 report showed that 89% of Albertans participated in nature-related activities.

Alberta is changing. Our urban centers are becoming larger and more urbanized. While our population is aging, they are looking for opportunities to stay active and healthy. Our economy is robust. While it is still heavily influenced by resource extraction, we have successfully diversified the economic base. We continue to strengthen and build-off the intellectual assets that our first-class educational institutions provide, while marketing the expertise learned from the resources sector.

When the downturn of public spending occurred in the 1990s, the priority service areas of health and education actively and successfully reached into the corporate and philanthropic pockets. These efforts brought new money to the table; however, they also diverted money from other community projects.

With Alberta's shift to re-investment in health and education, we may see an easing of fund-raising pressure from these sectors. While they will continue to raise money for enhancements, there is no longer a "life and death" argument for supporting these primary services. The new and enhanced projects are less compelling as they will not impact the broad community as earlier campaign projects did.

Alberta's prosperity and re-building philosophy is clearly demonstrated in the *recently announced Centennial Legacy Program*. This matching funding program is an excellent opportunity that the coalition should capitalize on quickly. *Preserving natural areas offers long term health, recreation and educational opportunities.* This is an excellent legacy for our children and communities. In addition, these sites *do not require extensive infrastructure or*

ongoing maintenance that other parks require and are therefore more cost-effective to maintain.

While the Centennial Legacy Funding is structured to fund thirty cents on the dollar to a maximum of \$10 million per project, there is the opportunity to enhance this contribution level.

Scanning the political environment at the provincial level raises several other issues that may provide opportunities to enhance "partnership proposals" with the Province of Alberta. Alberta's approach to climate change and greenhouse gas emissions has not had any significant public profile. Climate Change Central is currently being re-structured into an independent organization. A key mandate appears to be supporting education and awareness efforts with industry and community towards more sustainable practices.

The Province's Metro Edmonton governance review has telegraphed a message to our region that it should be *managing more of its issues from a regional perspective*. Whether the issue of land conservation will fall into this category is questionable however, regional support for any initiative garners stronger political support from the Province.

8.2.5 Edmonton Takes Pride in Key Quality of Life Policies

Over the years Edmonton has **spearheaded** programs and solutions that, with hindsight, have **demonstrated real civic leadership**. Whether it is the City's approach to recycling and composting, or the development of the river valley trail network, many initiatives demonstrate in tangible ways, the

community's support for managing our resources in more sustainable ways.

Green space and parks are a very important part of the quality of life in our community. Consistently, the *City's Citizen Satisfaction Survey ranks support and satisfaction with Edmonton's green spaces and parks at 85-90%*. The river valley is most frequently listed as Edmonton's number one asset.

This support quickly manifests itself when issues regarding urban development in the river valley emerge. The reaction is always strongly supportive for maintaining Edmonton's Ribbon of Green. Commercial efforts that may be perceived as spoiling the river valley or turning it into an exclusive enclave are quickly shouted down.

Edmontonians' support for passive recreational areas is not surprising when you assess their recreation patterns. The Edmonton sample of Alberta's Recreational Study (1996) indicated that passive walking continues to top the list of preferred recreational activities.

The pride in our green space and the strong support for passive recreational activities that interact with nature is particularly important as we look to future needs and pressures. Several factors support the concept of expanding and equitably distributing around the city natural sites.

Recreation studies indicate that passive recreational activities are popular because they are low cost, unstructured, easy-to-do and can be done spontaneously. As baby boomers age, support for passive recreation, such as walking, will likely continue to grow in popularity.

The population may be aging but it is not working less. Numerous community and recreation studies show that people are *feeling very pressured for time*. Between managing jobs and family commitments, many people do not have a lot of structured time left. People want to participate *when they have the time and inclination...not when a recreational programmer thinks they should*.

As our City grows, the *convenience of regionally distributed natural areas becomes more important*. Natural areas are not seen as more than a "nice to have", but an important feature of what makes this City special.

During the present study, we focus-tested with randomly selected taxpayers, their support for conserving natural areas. The pride in what we have to date came through loud and clear. However they also felt that we should continue to conserve additional sites.

Several interesting concepts emerged with this group that touched on some of the global trends. Residents felt that natural areas and green space provided "breathing room in the urban landscape". This was seen as providing wonderful opportunities to reduce the stress of day-to-day urban life as well as to provide small "windows into nature" for urban children.

A second very important concept that emerged from the public group related to the size and diversity of the natural areas that were being considered for conservation. Support was expressed to protect areas that are large enough to make a difference. Small neighbourhood pocket parks were enjoyed and viewed as a quality-of-life amenity. However, there was a

degree of skepticism that small areas could contribute in any meaningful way to enhance the ecological values of our environment.

There was recognition by the public group that our community was made up of many species, not simply humans. The principle of "walking gently" frequently emerged when we probed for the level of access and activities that natural areas should provide. There was strong support for preserving some areas while providing limited access for less intrusive passive activities such as wildlife viewing, walking, interpretative learning activities, etc.

Edmontonians felt that natural areas are a very important part of the fabric of our community. They also felt very strongly that this was a public responsibility that should be shared equitably across the tax base, particularly sites of citywide significance. They did not support the concept of natural areas becoming "owned" by the surrounding community or adjacent properties. They did not support private interests owning, designing or managing these natural assets.

While they respected that access may be limited for reasons of environmental protection, they felt very strongly that access should be open to all Edmontonians.

While none of the public group were experts in environmental management, they felt that intuitively there were economic and environmental benefits from more effectively using the existing natural attributes to help manage our water and air quality. They questioned the practice of taking down mature trees, only to replace them with young ones. They recognized that these

"quality of life" components of our City had a cost and expected to pay for them through the tax base.

In addition to a public focus group, we also solicited stakeholder input from representatives of the environmental community. It is not surprising that this focus group strongly supported increased conservation of land and water resources.

What was particularly interesting was the *correlation between the public and environmental groups* regarding several key points. Both groups supported the following:

- Conserve large biodiverse natural areas that can sustain an ecosystem;
- Sites in an urban environment increase understanding of nature and other species;
- Sites can help manage urban drainage and air quality issues cost-effectively; and
- Sites contribute to the quality of life.

The two notable differences between the two groups emerged around the importance of access and distribution of the sites and the assessment of current land conservation practices, priorities, and approaches.

Because the public felt that these were public assets, they stressed that they should be available to all the community. This manifested itself in the context of ensuring "public ownership or management" as well as the geographic distribution of these sites. The public group felt that some areas, such as southwest Edmonton and the river valley

communities, had greater access to these amenities, hence there should be some focus on the other communities. This was not an issue with the environmental community.

The environmental community was critical of the existing land conservation track record of the City of Edmonton. They did not feel that the City demonstrated serious commitment to conservation of natural areas. In contrast, the public group supported by numerous citizen satisfaction surveys and park management performance assessments, indicated that they felt the City was doing a pretty good job.

While room for improvement was noted, there was not a concern regarding the City's performance. In fact *public ownership*, either by the City or in partnership with other groups was seen as providing the *needed transparency and public accountability*.

While the public group supported more conservation and natural areas, they wanted to ensure that the current resources dedicated to recreation and park services were being efficiently deployed. With that assurance, the group indicated that if additional funds were needed, then a small tax increase to support purchase of the sites might be in order. The group did not support deploying resources from other areas in any significant way, nor did they support local development levies for areas that could serve the wider community. While **cost** was not a top-of-mind issue with the environmental group, it was a **very important issue with the development community, the third major stakeholder in this issue**.

The Consulting Team met with members of the Urban Development Institute. This audience has a slightly different perspective on the challenges facing the City relating to land development and natural area conservation.

Representatives from the development community generally agreed with several of the principles around natural sites, however, they raised the following practical issues and concerns:

- Who pays for it?;
- Process costs;
- Process/regulatory authorities;
- Site selection and urban compatibility; and
- Public expectations and acceptance.

While other aspects of this study will cover specific suggestions that may generate site-specific solutions cost-effectively, there are several key points that impact the marketing strategy of this initiative with this audience.

Through the study review, it was apparent that past dealings between the development community, the City and the environmental community have created a business relationship that is built more on conflict than on co-operation. It appears that all the parties are endeavoring to change this confrontational culture however, the level of trust between the parties is still very tentative.

The development community must deal with the issues that their customers raise. Based on this front line experience, they are concerned with the *urban compatibility and public acceptance of natural areas* that border residential development. Some residents may find the sounds of frogs in a wetland soothing but others see a wetland as a safety hazard for children. Some enjoy a walk through the woods while others see tree stands as a safety or fire hazard for their property. These *conflicting public attitudes are an important consideration for the development community*. They will not incorporate these type of areas into their neighbourhoods if they feel that it will inhibit their ability to market the properties.

While the environmental community does not support these views, our public focus group did raise and agree with some of these concerns. Countering this is the appeal to a segment of the market to reside around parkland, golf courses, ravines and natural areas. These concerns raise the need to ensure that residents understand the impacts and opportunities that natural areas offer.

Very few business communities like surprises. The development community is looking for a more effective and consistent planning environment to work within. They raised concerns about inconsistency in the planning approach and the utilization of development alternatives that may facilitate cost-effective natural area protection.

They endorse the early identification of the sites so that all the parties involved know what is expected. This should minimize the last stand-type of situation that the Little Mountain Natural Area evolved into. In addition, early site identification minimizes land and servicing costs.

A fundamental issue with any landowner is respecting their rights as a landowner. Even supportive landowners quickly become defensive if they feel that arbitrary measures are being proposed by any of the stakeholders. We saw an example of this misunderstanding during the study period. This highlights the very tentative confidence that the landowner and development community has in the intentions of all the stakeholders.

The development community has expressed the position that no one business sector or area should carry the burden of cost of amenities that benefit the whole community. Our public focus group expressed a similar view. Community-wide assets should be supported by community-wide sources.

While nobody supported punitive measures towards one area, the reality of market-based assessment does impact the taxation levels on certain properties or neighbourhoods. There are numerous examples of increased property values due to the proximity of natural areas. Our public focus group noted that as the *assessed value goes up, so does the property tax.* This suggests that it makes good business sense for the City of Edmonton to encourage these amenities.

Creating an appealing community is an important ingredient in maintaining and enhancing Edmonton's competitive position in the global marketplace. The recently released Greater Edmonton Competitiveness Strategy Diagnostic Assessment 2000 by Economic Development Edmonton, lists key quality of life factors such as parks, recreation, culture and health services as important foundations for competitiveness. This assessment ranks our quality of life as high. However, it also raises concerns over

the region's ability to sustain current environmental quality. The report notes that as growth occurs, trade-offs may be required. It becomes important to understand and manage the primary and secondary consequences of these decisions on the long-term quality of life.

On the positive side, the assessment highlights progress on all of the top community environmental issues (e.g., air, water, waste), particularly noting the leadership position that Edmonton has taken with water quality and waste management. On the negative side, decisions such as the recent draining of wetlands to support a golf course are used as an example of Edmonton's uneven environmental management track record. Effective environmental management is a component of maintaining long-term economic competitiveness.

With stress and pollution noted globally as two of the most significant health risks, it is not surprising to see these factors as a component of the foundation for long-term economic competitiveness. More and more people are choosing to live and work in communities that contribute to a healthy lifestyle, rather than inhibit it.

When we review Edmonton's business community, other corporate interests are particularly important in any "green" initiatives. Edmonton's strong resource extraction base allows major multinational companies to enjoy strong growth. The growth in the manufacturing industry strengthens the long-term diversification of Edmonton's economy. These players are important employers and engines of our economic prosperity. They are also facing significant environmental challenges to their industrial processes and expansion activities. Whether it

be in Edmonton or abroad, many of the *players are looking* for opportunities to improve their reputation and counterbalance the environmental impact of their operations.

The growing pressure around greenhouse gas omissions provides corporate marketing opportunities with partners who offer effective "green positioning". Whether driven by the corporate values of social responsibility or simply the need for an enhanced public image, there are marketing opportunities with this sector. As the capital city, activities or projects profiled in Edmonton can enhance top-of-mind awareness with key government decision-makers.

The City has done a lot of strategic planning that provides a broad framework for land use in our community. Plan Edmonton highlighted the importance of land management and conservation in the development mix.

The support and fostering of the River Valley Alliance demonstrates the importance of the river valley as an asset and the need to bring to the table, regional and community interests.

The *Integrated Service Plan* identifies strategic direction and community support for natural space conservation and passive recreation. The Plan recognizes the need for partnership in service delivery and the pressure on the existing resources.

The public consultation workshop in June 2000 surrounding the long-term financial plan highlights the community's desire to define "smart growth" and develop a clear picture of what our community will look like. City Council's "Vision for Social Well-Being and Quality of Life", provides a broad framework

that reinforces the importance of these elements to our community.

With this strategic thinking in place, it is timely to articulate and champion specific elements of quality of life and urban design.

By defining in more clear and tangible ways the balance, compatibility and priorities of the community as they relate to urban development, green space, parks and natural preserves will assist our community to maintain the quality of life component of our competitive business advantage.

One can not leave the scan of the Edmonton environment without a comment on the political landscape. As we go into a municipal election year, we know that Council's composition will change. With one vacant spot and several current councillors looking to other political and business opportunities, the current political climate may experience more uncertainty.

With the recent federal election and the other two levels of government going to the polls in the next twelve months the players, decision-makers and balance of influence could change significantly. While this may not have a direct impact on this specific program, this kind of change can significantly impact the speed and results of public sector decision-making.

8.2.6 Economic, Social and Political Climate Ripe for New Land Conservation Projects

From our review of the current economic, social and political environments it is apparent that there is a unique and timely window of opportunity to secure support and money for these kinds of projects.

Successful projects do not happen on their own! Success requires a concentrated, coordinated proactive approach between government, municipalities, stakeholders and residents. With other community pressures easing, the opportunity to create a successful integrated community nature conservation team is stronger than ever. Edmonton and its community stakeholders have the opportunity to develop and implement the visionary leadership, policy and programs that will ensure an even better quality of life for future generations.

8.3 Marketing Issues Frame Strategy's Direction

8.3.1 Addressing Primary Marketing Issues Key to Strategic Direction

While we have observed growing interest in environmental issues, the study process also identified several specific marketing issues that need to be addressed for this project to be successful including:

- Creating a cohesive public/private sector team;
- Creating a fresh dynamic image for the project; and
- Creating positive momentum.

These issues are important because they reach into the very **basic principles of marketing**; product definition and promotion. These issues are interrelated and the solutions to one will provide the foundation for the next step in the marketing program. You can not build momentum if key individuals do not know who you are and what you want to

achieve. You can not create a clear and positive image if your team is not cohesive or your product is not defined.

The time spent establishing the right foundation for marketing activities will be time saved as you roll out the program. It is always easier and cheaper to introduce the right image the first time, rather than change people's opinions once they are formed.

The following three-phased strategy provides a program to address these issues in a sequenced and progressive manner. The *first phase* of the strategy focuses *on consolidating the base of organizational support that will improve the stability and continuity of the stakeholder relationships.* In addition, this phase will *increase the political support and provide a clear, long range strategic vision* for this component of quality of life amenities.

The **second phase** formalizes the stakeholder relationship into the creation of a new organization that will act as a champion and public focal point for these projects. The marketing strategy will focus on creating a new "brand" that packages the initiatives in a manner that will appeal to new corporate and community partners.

The **third phase** of the strategy will identify activities to create momentum and incremental support from the community, particularly the corporate sector.

The marketing strategy sets the groundwork for soliciting support. The third phase of the strategy identifies the financing approach and target contributions. The **short-term objective** is to **leverage currently committed funds in a**

manner that will generate new public and private sector contributions needed to complete priority projects.

It is important to note that this strategy focuses on *creating* the marketing momentum needed to move targeted conservation projects forward. While longer term educational activities and broader based awareness programs can be effective in changing attitudes over the long term we believe that the priority at this point is to create the right infrastructure and a successful track record in conserving natural areas. The goal is to create a successful track record that organizations want to be aligned with. Time and resources should be focused towards this goal, rather than spreading resources too thin.

8.3.2 Marketing Strategy Phase 1 – Creating a Cohesive Public/Private Sector Alliance

Phase 1 - Issue 1 - Defining the Partners

The first phase of the marketing strategy targets the development of two important marketing tools that will set the tone for the rest of the program. These tools will assist the project to effectively compete for resources needed to achieve success. The *two components are a unified alliance and a strong, clear public policy position on land conservation.*

A barrier to forging this alliance that emerged through the study process was the lack of trust and respect among key stakeholders. While some partners may recognize that compromise is needed to move various projects forward, there does not appear to be a *sustained and consistent approach*

to working through issues and concerns of all parties in a manner that will forge a long-term respectful relationship. This approach, if continued, will inhibit the development of a constructive working relationship and the long-term goal of creating a successful "champion" for conserving natural areas in Edmonton.

Policy makers ignore fragmented interests. Corporate partners avoid relationships that can be unstable or acrimonious and individual philanthropists give their money to causes that they feel are successful and strong.

Fostering an environment of respect and trust is even more important in this project because success requires cooperation from many different interests. The current relationships are complex. They have emerged over years of acrimonious land use planning debates. The relationships vary between the development and environmental communities, the corporate sector and the City of Edmonton.

Even within the environmental community, we see different priorities and issues that emerge and manifest themselves in conflicting positions. While some groups respect that compromise may be required to achieve their goals, others appear to be committed to aggressive positions that will alienate new partners.

This project has helped to bring some of the parties to the table however, the longstanding views of each of the key parties continue to bubble to the surface. One day participants talk as "partners" and the next day they act as public adversaries. The result is a fragmented and/or unstable alliance and is not conducive to attracting strong policy support

or new funding partners. Organizations that lend their name and resources to projects expect to be treated with respect, even when partners disagree.

To start the process of relationship building and present a cohesive and unified business approach, we are recommending a two-phase approach. The first step defines the "players" and how they will work together. The second step creates a new organization to manage the existing relationships and promote new partner participation.

PHASE 1 - RECOMMENDATION 1.1 – Partnership Protocol

Develop a formal protocol between partnership organizations. Key elements of this protocol should include:

- Areas of co-operation;
- Program expectations and contributions;
- Partner responsibilities and behaviour;
- Conflict resolution between partners;
- Media relations; and
- Terms of partnership and withdrawal.

The protocol should focus on creating a working relationship that is directed to completing land conservation projects. While members would be encouraged to champion land conservation projects, general advocacy activities should not be the primary focus of this partnership.

The protocol would provide the founding principles for a broader organization in the second phase of the marketing program.

Phase 1 - Issue 2 - Defining Natural Area Land Use Vision

The nature of land use planning is integrally woven into the fabric of civic responsibilities. The Consulting Team noted that the community looks to the City of Edmonton to provide both transparency of decision-making and public accountability surrounding the design and development of our community.

Because market forces and the development industry drive so much of the physical development of the City, it is important to identify early on in the planning process, the vision and direction that City Council feels the community wants. It sets the tone and strategic direction for the civic administration as they establish and manage land use and conservation priorities as well as provides the business and community a clearer and more stable planning environment to work within.

While the City of Edmonton has done a lot of broad strategic work, citizen feedback indicates that there is a *need to be more specific on what this strategic direction means in real terms*. What does "quality of life" really look like in our City? What does equitable access to natural spaces by our citizens really mean? What do we mean by "smart growth" and how do we manage it? The community is looking to Council to work with them to ensure that the natural assets that we have today will continue to be there for future Edmontonians. This feedback supported a more systematic

approach to planning both for development and "green space or natural area conservation".

In addition, *civic leadership is an important component* in this phase of the strategy, because it can *provide the profile and credibility* that will launch the next phase of this initiative with new potential partners.

PHASE 1 - RECOMMENDATION 1.2 - Picture Edmonton 2010 - SMART Growth Vision

Expand City Council's "Vision of Social Well-Being and Quality of Life" by the development of a "smart growth" vision policy. This vision statement should provide a clear policy statement that defines the long term "picture" of what the City should look like.

This vision statement could be built by utilizing a community workshop that invites key stakeholders to provide Council input on what quality of life really looks like in our community and what is the balance that we want for urban development and natural area conservation.

Phase 1 - Issue 3 - Aligning Civic Policies and Practices Toward a Land Use Vision

As a major landowner and influence in the land use process, the City needs to ensure that the design and implementation of its policies are consistent with the strategic direction of Council's Vision. Through the study process, it became apparent that inconsistencies currently exist between different departments. Some departments of the civic administration see land as an asset that they strive to maximize the value of

regardless of who they sell it to, while others see land as their core business and strive to secure it cost-effectively.

The *community expects that the civic priorities are consistent across Departments*. They are looking for assurance that the City of Edmonton maximizes the deployment of resources to support key civic businesses that serve this community such as parks and natural areas.

The business community looks to the City to provide a consistent approach to resolving land use planning issues. As noted in the section relating to the development industry, there is a lack of awareness and understanding of the options that can be used to cost-effectively conserve selected sites during the development process. While various options have been used in specific locations, there doesn't appear to be a system in place to effectively find alternative solutions.

PHASE 1 - RECOMMENDATION 1.3 – Review of Current Land Management and Acquisition Priorities and Policies

With establishment of Council's Vision, a review of existing land use zoning, management and acquisition policies and inter-departmental communication should be undertaken. The goal of this review would be to ensure that corporate policies support the implementation of the long-term "smart growth" vision.

During this review consideration should be given to developing a more effective and streamlined inter-departmental approach to reviewing development issues and opportunities, identifying the best solutions that meet the civic priorities and ensure consistent decision-making towards approved Council policies.

8.3.3 Marketing Strategy Phase 2 – Creating A Fresh Dynamic Image For The Project

Phase 2 - Issue 1 - Creating a New Foundation to Champion the Program

The next phase of the marketing program converts policy directions and improved stakeholder relationships into a new organization, *Edmonton's Conservation Land Trust or Nature Network Land Trust*. This Trust will champion the completion of targeted land conservation projects.

Through the study process, we reviewed various options of program management. Various stakeholders had varying views as to the credibility and current capacity of existing organizations or the City of Edmonton to champion and manage the conservation program. It became apparent that most of the organizations are very stretched. Stakeholder groups indicated that they are interested in assisting in selected projects but nobody had the interest, marketing skills or current resources to move this initiative forward.

Numerous examples exist in the City of organizations and alliances that have tried to move forward major projects without dedicated staff resources. These continue to struggle and often burn out key volunteers because it is difficult to secure results in a timely manner.

Time is an important consideration when reviewing the current marketing window of opportunity. With economic growth, the Provincial Centennial and growing environmental concerns, the time is right to offer partners an excellent marketing and legacy opportunity. This window may not always be there.

With strong community support for "public management" of these sites, one solution might be to lobby for more civic resources to undertake the projects. These projects will also be under challenge when faced with changing community and corporate priorities. More importantly, the City of Edmonton will be limited in their ability to raise incremental donations to support these projects. *Many donors feel that they pay taxes to the City and do not like donating additional funds directly to the City.* However, these same sources will consider contributing to worthy civic projects through a community-based organization.

Lastly, the complex relationships that exist between various stakeholders may not benefit the successful implementation and corporate partnerships envisioned for this initiative. A fresh organization brings the opportunity for a fresh image and the ability to focus all its resources on moving these projects forward rather than other existing stakeholder organizations' priorities.

The *final structure and mandate of the Land Trust needs* to be developed by the founding partners; however, the Protocol developed in Phase 1 provides some of the founding principles. We feel that the Land Trust is a very important marketing tool to provide a strong, fresh community champion for these conservation projects. In light of the marketing and partner development requirements, the structure and resources of the Trust should include marketing and fund development skills to complete these tasks, especially during the first couple of years.

PHASE 2 - RECOMMENDATION 2.1 - Create "Edmonton's Nature Network Land Trust"

Create a new organization comprised of "equity" partners that provide land, funds or administrative resources to coordinate the implementation of targeted conservation projects.

To support this new organization we would recommend the development of the following marketing support tools:

- Visual Identity Package
- Conservation Project Profile Sheets
- Web Site

Phase 2 - Issue 2 - Creating the Most Appealing Conservation Project Package

An important objective of marketing a program is to ensure that you have the best competitive position. In the case of the table lands project, they are competing with <u>THE</u> other major natural area in Edmonton – the North Saskatchewan River Valley and Ravine System. The *river valley and ravine system is unquestionably the strongest supported asset in Edmonton*. This is particularly important because many of the funding partners and potential sponsors are the same.

Over the past few years, the River Valley Alliance, a private/public sector organization, has created a regional alliance. Several of the principles it holds regarding the river valley are consistent with the objectives of conserving natural areas in the table lands. More importantly, several of the challenges facing this organization are also the same,

particularly relating to administrative resources to move projects forward.

An added strength that the Alliance brings is their regional participation. We recognize that regional participation may increase the complexity of decision-making however, given the location of most of the priority table land sites, regional partners could strengthen the appeal for key provincial and corporate sponsors.

As discussed earlier in the report there are also important ecological and sustainable benefits from linking these two projects. By combining the two programs, there is a greater chance of increasing the overall resources for natural area conservation and passive recreation development.

PHASE 2 - RECOMMENDATION 2.2 - Explore the Development of an Integrated Fund Development Approach with the River Valley Alliance

Explore the development of an integrated package and strategy with the River Valley Alliance that markets priority river valley and table land sites. Two options to achieve this could be:

- The establishment of a joint marketing committee with representation from both organizations. The committee would, at a minimum, share information surrounding their fund development activities or optimally, spearhead joint fund development proposals.
- The merging the River Valley Alliance into the new Land Trust. Specific interests could continue to have profile at the subcommittee level (e.g., River Valley, Wetlands, Woodlots, Trails, etc.)

A key output of the integrated approach would be a coordinated marketing program that targets a variety of sites and sponsorship opportunities.

8.3.4 Marketing Strategy Phase 3 – Rolling out the Program to Build Support

Phase 3 - Issue 1 - Packaging Existing Resources to Increase Marketing Effectiveness

Phase 3 of the strategy has two primary thrusts: the securing of core corporate partners and the implementation of an annual community awareness program.

Because current administrative resources are very stretched, the first step of any program is to secure operational funding to support moving the organization and its projects forward. *It takes time and money to raise money*. Therefore, this phase is designed to develop enough core funding for the next 5 years to ensure the continuity of operation for the Land Trust.

With core financial resources in place, staff resources can be hired to manage the implementation of other fund development activities and the coordination of the awareness program with various partners within the community.

As noted earlier, the key to successful fund and partner development is to create the image of a strong successful enterprise. This is usually achieved with the announcement of major financial contributors. The land conservation project is fortunate because it already has a strong, committed partner, the City of Edmonton.

The City of Edmonton's contribution of \$250,000 per year for 5 years (for a total of \$1.25 million) towards urban land conservation is a significant contribution. An additional \$650,000 per year for 2004 and 2005 has also been identified in the capital budget. While these sums are reviewed through the annual budget process, the first is reasonably secure because of the source of funding (Parks Reserve), while the \$650,000 is more vulnerable to the annual budget priority debate.

The funding level is very important however, the overall contribution could be more effectively leveraged if the current annual commitments could be locked into a 5-year total program. This is particularly important given the Provincial Centennial announcement of matching funds for legacy projects completed by 2005. The larger the commitment from the City, the easier it is to garner more from the Province and other partners.

A second consideration is the ability to secure multi-year support from other partners. A five-year commitment from the *City of Edmonton sets the benchmark for other partners to meet.*

Lastly, by profiling the cumulative commitment, the City demonstrates to the community that they will continue to play a pivotal role in the development and management of natural areas in Edmonton, albeit it with other partners from the corporate and philanthropic community. This level of civic commitment ensures that the public's concerns of accessibility and accountability in the management of these sites will be addressed.

PHASE 3 - RECOMMENDATION 3.1 – Five Year Commitment by City of Edmonton

Quantify the City of Edmonton's current annual land conservation and natural area development commitments (both financial and human resources), into a 5 year funding commitment that can be used to leverage other public and private sector contributions. Optimally, this should include both the \$250,000 per year commitment and the \$650,000 currently projected for 2004 and 2005. This would create a fund of well over \$2 million.

With the commitment in place, the City should undertake an activity to champion the City's commitment and participation in the new Trust.

Phase 3 - Issue 2 - Leveraging Civic Contribution with the Corporate Community

The City of Edmonton's contribution not only provides significant resources to help move projects forward, it provides a very strong lever to encourage participation by others in the community. The recent announcement of the Provincial Centennial funding, that provides matching funding of \$.30/community dollar for legacy projects provides additional incentive for communities to maximize their community investments in projects. The greater the community contribution, the greater the potential matching dollars up to the maximum of \$10 million.

To maximize matching opportunities and raise the needed operational resources, we propose *targeting a select group* of corporate partners that will provide a "founding" commitment for 5 years. We believe that a select group of

corporate partners can be secured relatively quickly if foundations of the program as outlined are put in place.

We feel that the Land Trust will need to move relatively quickly to capitalize on current funding windows, economic prosperity, environmental pressures and electoral cycles. Longer term funding should be pursued once some of the fundamentals have been put in place and some projects have successfully been implemented or completed. In other words, once the basic "bandwagon" has been built and is moving forward, it will be easier to grow it stronger and larger.

An important consideration in any partner development program is who invites the new partners. In the case of a project that is a fundamental part of our community in which the City plays a pivotal role, we feel that the *Office of the Mayor* is in the best position to bring together a targeted group of corporate leaders and to encourage their participation.

The Office of the Mayor's message would be enhanced by the participation of *one or two "blue ribbon" environmental or community leaders*. A couple of community or environmental leaders that bring credibility and personal connections to some of the proposed corporate partners would assist the Office of the Mayor.

PHASE 3 - RECOMMENDATION 3.2A— Corporate "Legacy Leaders" Team

Create a group of founding corporate partners that would each contribute \$35,000 - \$50,000 per year for 5 years towards the operations of the Trust. The initial target would be 5 partners.

The partners equity contribution into the Trust would provide each partner with input to the program and public recognition of their participation in any promotional activities undertaken by the Trust.

This program would be presented as a marketing opportunity to support their corporate positioning as a responsible environmental member of the community.

PHASE 3 - RECOMMENDATION 3.2B - Office of the Mayor to Take a Leadership Role in Building the Legacy Team

With the level of civic commitment already in place we recommend that the Office of the Mayor take a leadership role in launching the development of this team. We recommend that the Office of the Mayor present the concept and the benefits to targeted corporate partners supported by one or two key community or environmental leaders.

The Office of the Mayor would be supported with presentation material and a customized briefing package for each of the corporate representatives at the table.

Once core participants are in place, members would provide the leadership to take it through the next phase of development. The City, as an equity partner, would continue to have a decision-making role in the Trust.

Phase 3 - Issue 3 - Leveraging Trust Funds with the Province of Alberta

With civic and core community funds in place, the Trust is in a strong position to maximize the funding contribution from the Province of Alberta. This is important on several fronts. As our market research indicates, there is strong community support for a significant role being played in this area by the Province. The quality of our environment is seen as a provincial responsibility as well as a municipal one.

The Province's Centennial program is a perfect fit for creating a network of natural areas that will enhance the quality of life for the Metro Edmonton area. Both the legacy contributions that these conservation projects offer and the time frame for completion fit very well with the Province's stated priorities.

While the opportunity to tap into an existing funding program is usually the easiest avenue, the program does offer the opportunity for the Minister to increase the Provincial contribution beyond the \$0.30 per community dollar. We feel that there are several solid arguments that would support a lobbying strategy to increase the Provincial contribution either through the Centennial Funding Program or from other sources.

As with certain components of the corporate community, the Province of Alberta is trying to address growing national and international concerns over climate change and the environment. Because of the nature of Alberta's economic base, the Province is looking to a variety of voluntary compliance methods to achieve reduction. While the primary thrust is focused towards reducing air pollutants, the preservation of trees and natural spaces is also positioned as contributing towards enhancing urban air quality. The growing concerns over water quality and the growing costs of water treatment systems may provide a secondary argument for the utilization of natural wetland sites as an alternate and more

cost-effective approach to stormwater management in Edmonton.

Armed with strong community support, a sizeable committed funding base and both recreational and environmental arguments, the Land Trust should lobby for enhanced Provincial support for prioritized conservation projects. If Provincial support is secured, then a follow-up meeting and briefing should be requested. In addition, a briefing should be provided to any governmental MLAs from Edmonton.

PHASE 3 - RECOMMENDATION 3.3 – Trust to Secure Provincial Support

Prepare a funding proposal from the Trust that outlines the key priority projects, highlights corporate, community and regional supporters and summarizes the recreational and environmental benefits that can be achieved for Metro Edmonton.

Working with the Edmonton area MLAs, present the proposal to the Minister of Community Development and the Minister of Environment requesting enhanced matching funding.

Phase 3 - Issue 4 - Championing the Partnership by Increasing Community Awareness

The stage is now set to capitalize on and promote the success of the partnership to date with the general community. This phase is important because it provides the public and private sector partners the opportunity to meet their marketing and corporate positioning objectives.

The awareness component of the Marketing Strategy - Phase 3 has two primary thrusts. The first is the public and stakeholder launch of the Trust and the second is the introduction of a new annual event surrounding natural area appreciation and conservation. To sustain awareness throughout the year, we propose a couple of strategically targeted activities.

To create impact in the community, we feel that the Trust needs to focus its activities around a core event then work to expand its impact over the ensuing years. This minimizes the risk of spreading the message too thin and reducing the communication impact in the community.

It is important to remember that the awareness activities at this phase of the marketing strategy are designed to keep the issue top-of-mind with key public and private sector decision-makers, while initiating the longer-term process of increasing awareness within the community.

PHASE 3 – RECOMMENDATION 3.4 – Media Relations Program – Launch Phase

Roll out a media relations program that profiles a series of news items relating to the Trust:

- Launch of the Trust Announcement of funding partners, priorities and new Board of Directors, Editorial Board meetings, media event: June/July
- Appointment of Staff: July/August
- Media Briefing of Selected Sites: August October

 Green Space Editorial Follow-up - Media site tours: August - October

Phase 3 - Issue 5 - Teaming Local Groups to Deliver Awareness Activities

A key ingredient in the success of the strategy is to effectively galvanize and focus the efforts of local recreational and environmental groups towards the objectives of land conservation. While many of these groups have expressed interest in helping, there are several practical limitations that exist in delivering ongoing programs. A lot of the groups have interest in one aspect of natural areas, bird watching or wetland conservation, while others are more interested in broader environmental advocacy. Most of these groups are already pressed to complete the priority tasks that their organizations face.

It is very important to effectively utilize these volunteers in ways that are rewarding, help the land conservation cause and do not compete for the scarce resources that these groups need to survive. For this reason, we feel that the local organizations efforts should be primarily focused towards the public awareness activities. Local stakeholder organizations can support the Trust by extending, dedicating or piggybacking on existing fund-raising efforts rather than endeavoring to undertake incremental programs that will stretch their resources too thin.

PHASE 3 - RECOMMENDATION 3.5 - Natural Heritage Day/Week

Develop an annual event that profiles Metro Edmonton's natural areas and the advantages that they offer the

community. This event could start as one day tied into an existing event such as Arbour Day. We propose a May/June timing to avoid the busy summer season and provide for the potential of school-based activities.

The event could include on-site interpretative activities, media profiles of Metro Edmonton's natural heritage, wildlife spotting or flora and fauna hunts, community tree planting or a "Natural Heritage Marketplace" promoting various clubs, sites and activities.

The event would be organized and promoted through a Steering Committee of interested organizations supported by the Trust. Over the longer term, the day/week would provide a focal point for key announcements on conservation activities and successes.

Phase 3 - Issue 6 - Keeping Stakeholders and Landowners Informed and Involved

Stakeholders are a very important audience in creating and sustaining success for the Trust's projects. However, not all stakeholders and landowners have the same interest and issues nor should they receive the same message. The common principles underpinning stakeholder communication are the sharing of honest, accurate and timely information, in addition to working with stakeholders to find common solutions that respect each party's interests.

Our timeline indicates that an update should be sent to all affected landowners prior to public announcement of the sites. Even though the current identified natural areas are public, the increased profile and proposed action plan to move on sites may garner heightened concern or interest. It is important to open the channels of communication between the City and the landowners as early as possible.

The broader stakeholder community can be divided into two groups, those organizations that are active in recreational and environmental issues and local neighbourhood residents who have an interest because of the location of a particular site.

The stakeholder organizations provide an excellent and willing tool to distribute information on conservation projects through their membership. While many of these groups have newsletters, we propose that a *pre-produced newsletter* insert be provided to the organizations to distribute with their own information. This *approach enhances the Land Trust's profile as a new dynamic organization* and ensures that the information is distributed effectively.

These two tools should also be distributed to key civic staff to keep them apprised of the progress of conservation projects, solutions being implemented and to maintain top-of-mind awareness of conservation priorities.

PHASE 3 – RECOMMENDATION 3.6 – Landowner and Stakeholder Updates and Project Briefs

Provide a program brief to landowners just prior to the report going public, assuring them of their role and the process of consultation that will occur.

Develop a simple 2-4 page "Update" that is either mailed directly or inserted with organizational newsletters to

stakeholders and landowners. The information would also be included in the web site along with contact numbers.

The update would be produced 3 times per year and would be designed to provide key information and general awareness on important projects.

A 1-5 page Project Brief supporting the "Updates" would be available on the web and by request to provide more detailed information on specific projects.

Phase 3 - Issue 7 - Sustaining Interest in the Community

The following activities are proposed to foster support from the local recreation and environmental communities and to extend awareness of conservation and site-protection activities.

The first program is focused around the development of a Metro Edmonton Legacy Catalogue. This approach has been very successful in other sectors and utilizes proven retail marketing principles to encourage community participation.

The catalogue would provide a wide variety of activities and products that the public could support, buy or sponsor. These could vary from a park bench or birdhouse to a wetland park. The product contributors would set the price and would receive the contribution with a small commission paid to support the catalogue development and distribution. The program could be structured to provide a commission to other organizations that promote the catalogue and generate sales or sponsorships from it.

This type of program can provide both "new " revenue sources for partners as well as the ability to generate a wider awareness of conservation and its benefits. In addition, it taps into the growing public concern around the kind of community that our children will inherit by providing easy to access opportunities for a personal contribution.

PHASE 3 - RECOMMENDATION 3.7 - Legacy Catalogue and Advertising Support

Develop a "product" catalogue that sells sponsorships, products and activities that enhance and support land conservation and nature appreciation activities. All sales would be brokered through the Trust.

The product catalogue can be put together by a task team of interested environmental and recreational groups supported by the Trust. We recommend that the catalogue be produced in both hard copy format and posted on the web with an ecommerce capacity. The program would be supported with a media launch and an advertising program. The timing of the program should either coincide with the Natural Heritage Day (2002) or launched prior to the Christmas purchasing season (2001 or 2002).

Actively solicit for specific sponsors to support the design, production and distribution of the catalogue. Sponsorship packages could include design, printing, advertising, distribution, point-of-purchase displays.

Phase 3 - Issue 8 - Tapping into Foundations and Project Specific Support

Foundations should not be ignored however, *most of them* will only support project specific activities or one time tasks and not land acquisition. While there is a sizable number of Foundations that support environmental activities, there is a far greater number that support educational pursuits.

As the specific elements of the program become more defined, there should be opportunities to package elements of projects together in a manner that highlights their environmental, recreational and/or educational benefits. There is a far wider range of private sector and foundations that will support specific elements of the awareness, education or site-development projects. Appendix 7identifies some of the options that are worthy of consideration.

With the reluctance of the Canada Customs and Revenue Agency to provide charitable status to many of environmental groups, the Land Trust may require partners that currently hold charitable status to apply on the Trust's behalf. While this may complicate the matter, it is not insurmountable.

The downside to foundation support is that it *rarely provides* ongoing sustained support however, the application process for grant funding from many foundations is straightforward and not overly time-consuming. It can provide a reasonable return on the time and effort invested.

This may be an area to tap into the skills and insight of some of the existing community partners. Several of these organizations have extensive experience in framing proposals and a proven track record with several local foundations.

PHASE 3 - RECOMMENDATION 3.8 - Foundation/ Corporate Proposal Team

Recruit a task team of 3-5 volunteers to assist in writing and developing funding proposals for targeted Foundations. This task team would review potential foundations and match "packages" that would be eligible for funding consideration.

The team would also scan and match new project-specific sponsors from the corporate sector.

Drafting the proposals may be undertaken by volunteer members or by Trust resources. The annual goal would be to secure \$70,000 - \$100,000 in foundation or new corporate commitments.

Phase 3 - Issue 9 - Celebrating Conservation Efforts

To sustain corporate and community support, it is important to recognize and champion success. The well-respected Emerald Awards Program in Alberta provides an opportunity to increase the profile of urban land conservation within the environmental and business communities. This provides an opportunity to profile the Edmonton Natural Area Land Trust in front of other key business and community individuals as well as championing urban land conservation successes.

The strategy proposes approaching the Emerald Awards Foundation to pursue the viability of establishing a new urban land conservation award. In discussion with the Emerald Awards Foundation, the 2002 event will be held in Edmonton where there may be an opportunity to develop a theme around urban land conservation. This award would be sponsored

annually by the Trust and would be presented as a part of the Emerald Awards.

Alternatively, if a dedicated award is not feasible, we recommend a proactive approach to nominating specific Trust partners and projects for awards.

PHASE 3 - RECOMMENDATION 3.9 – Urban Land Conservation Award for the Emerald Awards

Sponsor a new award for urban land conservation and proactively nominate projects for it. The award would be sponsored annually by the Edmonton Nature Network Land Trust.

8.4 Marketing Staff Needed to Move Strategy Forward

For the program to be successful, there is a need for dedicated resources that will coordinate partners involvement and proactively manage marketing and partner development activities. The Land Trust will need to develop effective relationships with their key partners. To achieve this, the continuity and skill that comes with a staff person is required. It is especially important during the start-up, that the Land Trust has staff dedicated to moving projects forward. Without this, positive momentum for the Land Trust will not be created.

Land Trust staff will need a combination of fund development and marketing expertise. In addition, they should be able to effectively write and present ideas and proposals to a variety of decision-makers in the public and private sectors. Specialized writing and production skills can be contracted out and we have included these costs in the program budget costs.

RECOMMENDATION:

Hire either one full-time or two part-time staff to implement the marketing and fund development program.

8.5 Evaluation Tools

An important marketing tool is the accurate assessment of public attitudes and support for the project. During the present study, we reviewed research that provided attitude trend analyses and undertook qualitative research that validated these broader trends. However, there was limited, statistically valid research that probed specific support and levels of awareness of urban land conservation in the Edmonton area.

Community support is an *important selling feature with* potential corporate partners. The stronger the case validating public support, the stronger the appeal for participation will be. Secondly, benchmarking attitudes provides a valuable evaluation tool to assess the progress and impact of the program. This evaluation would assist the Land Trust in measuring the impact of awareness activities, not simply the amount of coverage or profile the activities have achieved.

RECOMMENDATION:

Undertake a benchmark attitude study on urban land conservation and nature appreciation activities in the Metro

Edmonton area that provides appropriate, statistically validated data.

The first survey would validate funding priorities and public issues as well as assess awareness levels of existing natural areas and conservation benefits. This would be followed up every two years with a similar survey to evaluate progress.

Budget required would be approximately \$15,000.

8.6 Stakeholder Participation Summary

A goal of the present study was to develop a strategy that utilized various organizations to deliver the communication and fund-raising strategies. Based on feedback from current stakeholder organizations (e.g., members of the Phair/Bolstad Committee) and our experience working with several local and regional consortiums, we feel that volunteer efforts should be focused to areas of interest and where there is the expertise to complete the tasks.

An important consideration is in the area of fund raising. With the introduction of a new organization, it is important that it is not seen as competing for the same resources that existing stakeholders are. The overall *goal is to leverage and expand funds dedicated towards urban land conservation, not simply divert funds from other environmental activities*.

The design and implementation of Nature Week and the Legacy Catalogue tie into both of these objectives. *Nature Week provides a focal point where various groups can undertake activities to promote their own specific niche*

while contributing to an overall program that is designed to increase top-of-mind awareness.

The Legacy Catalogue provides both awareness opportunities and a consortium approach to marketing products, services and donation opportunities. This could increase resources to all of the partners.

Some organizations have indicated an interest in contributing some of their fund-raising efforts towards urban land conservation projects. The structure of the Land Trust provides two funding opportunities to accommodate this. Local organizations may choose to raise funds to become a founding member of the Trust or they may contribute as a project partner on specific activities. Because of the competitiveness of the community fundraising sector, we do not recommend introducing new grass roots fund-raising activities but rather lobby and promote existing partners to dedicate some of their current efforts to the urban land conservation cause.

With the growing fatigue in the not-for-profit sector, we believe that for *sustained participation* by stakeholder organizations in the Trust, there is a need to *provide participation opportunities that are seen as rewarding and beneficial*. They should provide a win-win for the Trust and the participating stakeholder organizations. By focusing efforts surrounding a couple of key projects, we feel the Land Trust can achieve this as well as avoiding volunteer burnout.

8.7 Financing Strategy – Summary of the Direction

The financial strategy proposed is divided into two phases and dovetails the public attitudes towards public and private sector participation. The *first phase*, covering the period of 2001–2005, is designed to *secure the establishment of the Land Trust and to commence the implementation of priority projects* before the opportunities to conserve them are lost forever. The *second phase* focuses on developing *sustained funding sources for the Trust while continuing to fund and implement additional conservation*, awareness and educational projects.

The qualitative research done for this project demonstrated clear public support for a significant role for the municipality and the provincial government in the ownership and management of natural spaces. While they supported the concept of partnerships with the not-for-profit and the corporate sectors, there continues to be strong support for ensuring public sector involvement and equitable access for all Edmontonians.

Public input also supported a provincial role. As the senior level of government responsible for health, education and the environment, our community representatives felt that the Province of Alberta should also play an important role. Natural areas contribute to a healthier community and provide invaluable educational opportunities for children in urban areas.

Because of the overriding public reaction that "this is public sector responsibility", the first phase of the financing strategy

strives to secure and lock in the majority of the funds from the public sector.

Financial participation by the corporate sector is envisioned through two channels. The primary thrust is to develop a group of core corporate partners that will help to shape and lead the initiative. The contributions raised through the Legacy Leaders program would support the core activities of the Land Trust and would provide a broad and sustained marketing profile for the Legacy Leaders.

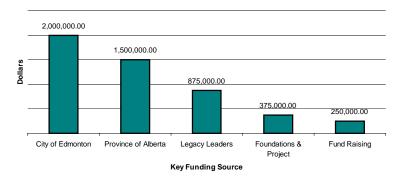
The core funding commitments would be structured for a fixed term, such as 5 years. This provides all partners an opportunity to define and limit their participation. In effect, the defined contract period provides partners an exit clause for their involvement.

With core financing in place, the Land Trust can secure the expertise to expand this base through project-specific funding by not-for-profit organizations, the corporate sector and the foundation community. The Foundation/Corporate Proposal Team would spearhead this thrust utilizing the administrative support and promotional tools developed by the Trust.

Community fundraising is currently the smallest component of the strategy. This reflects the current competitive nature of this sector, the lack of resources within the stakeholder community and the resistance shown by community members to any additional community fundraising activities. We are targeting some community funds to reflect the willingness of some organizations to dedicate some of their fund-raising to the program. Over the longer term, we would hope that the Legacy Catalogue would provide a stream of revenue in place of specific fund-raising activities.

The following represents sector contribution objectives:

Funding Targets 2001-2005



When we look beyond the five-year window, the Trust needs to maintain participation by the existing partners while developing longer term funding sources. We would propose that an endowment fund be established working with the Edmonton Community Foundation. Consistent with the policies of the Edmonton Community Foundation, the endowment fund would distribute to the Land Trust, a portion of the interest earned from the fund's principal.

Beyond the Edmonton Community Foundation's ongoing promotion for philanthropic contributions, the Foundation spearheaded a dedicated campaign this year for the "Yes 2 Kids Millennium Fund". This experience, while successful, stretched their resources considerably and they are not planning to undertake another program such as this in the near

future. With the right approach and the right partners, the Edmonton Community Foundation may be willing to consider leading a fund development project for the Land Trust as a centennial project. Regardless of whether they agree to undertake the fund development aspect, as the premier agency in Edmonton managing endowment funds, the Edmonton Community Foundation would be the best partner in managing any endowment funds raised for the Land Trust.

8.8 Moving Forward Beyond This Strategy – The Next Steps

As phase three of the marketing strategy comes to completion and the Land Trust becomes well established, there are several other communication activities that the Trust should consider. These could include some of the following:

- Briefing of new City Council early 2002;
- Annual event to celebrate and recognize partner contributions;
- Conservation report card;
- Speaker program to enhance stakeholder awareness;
- Annual report and annual meeting with keynote speakers to draw media coverage;
- Supplementary curriculum material;
- Edmonton caucus briefing provincial and federal; and
- Alberta Capital Region briefing.

The long-term funding needs should also be addressed as the Land Trust moves into 2003-2004. The Land Trust should focus some of its efforts on establishing a long-term fund

development strategy that will ensure continuity of funding beyond the 2005 period.

8.9 Communication Work Plan

The following sections provide a detailed work plan of the strategic direction discussed in the strategy. The sections outline the communication goals, objectives, tactical sequencing, and budget and program descriptions of the specific activities proposed.

8.9.1 Marketing/Communication Goal

To increase support for urban land conservation projects within the City of Edmonton.

8.9.2 Marketing/Communication Objectives

- To consolidate existing stakeholder support and cooperation for urban land conservation projects.
- To confirm and consolidate civic policy direction and support.
- To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects.
- To increase the financial support for selected urban land conservation projects.
- To increase public awareness of the "quality of life" benefits for land conservation within the urban setting.

8.9.3 Target Audience

Phase 1

Primary

- · Current environmental organizations
- Urban Development Institue
- City Council

	 Stakeholders interested in civic development issues
Secondary	 Civic departments relating to land management
	Landowners
Phase 2	
Drimory	Protocol/Trust Partners
Primary	River Valley Alliance
	• Landowners
Casandani	Council
Secondary	Regional neighbours
	Province of Alberta
Phase 3	
	Corporate sector
	Province of Alberta
Duimeau	 Environmental, recreational and development stakeholders
Primary	• Landowners
	 General community (18-70 years)
	 Foundations
	Neighbours of targeted sites
Casandani	 School boards
Secondary	Opposition MLA's in Edmonton Region
	Alberta Capital Region Alliance

8.9.4 Key Message by Primary Audience

Dhasa	• To achieve success, there needs to be a stronger, more cohesive voice from the environmental, business and civic communities to
Phase 1 Current	champion urban conservation projects. ◆ Achieving natural area conservation results should be the focus of a new partnership.
Environmental	 Achieving hatdral area conservation results should be the rocus of a new partnership. A partnership must be built on mutual trust and respect.
Organizations	 Increasing natural area in Edmonton makes good business sense.
0. ga _ a	 Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	 To achieve success, there needs to be a stronger, more cohesive voice from the environmental, business and civic communities to
	champion urban conservation projects.
	 Achieving natural area conservation results should be the focus of a new partnership.
	 A partnership must be built on mutual trust and respect.
UrbanlDevelopment	 Conserving sites now ensures future generations have access to unique aspects of their natural heritage.
Institute	• Edmonton's table lands and river valley and ravine system create a unique natural network that improves the quality of life and
	marketability of all quadrants of the City.
	 Increasing natural areas in Edmonton makes good business sense.
	 Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	• To achieve success, there needs to be a stronger, more cohesive voice from the environmental, business and civic communities to
	champion conservation projects.
	 A partnership must be built on mutual trust and respect.
	 Conserving sites now ensures future generations have access to unique aspects of their natural heritage.
City Council	 Edmonton's table lands and river valley and ravine system create a unique natural network that improves the quality of life to all quadrants of the City.
	 Increasing natural areas in Edmonton makes good business sense.
	 Increasing natural areas in Edmonton makes good health sense.
	 Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	 To achieve success, there needs to be a stronger, more cohesive voice from the environmental, business and civic communities to champion conservation projects. This voice should focus on results, not rhetoric.
Phase 2_	 To move forward the Land Trust must build new positive working relationship among stakeholders, landowners and funders.
Protocol/Trust	 Achieving natural area conservation results should be the focus of the Land Trust.
Partners	 A partnership means all partners contribute and all partners influence the direction the Land Trust proceeds.
	 Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	 Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	• To achieve success, there needs to be a stronger, more cohesive voice from the environmental, business and civic communities
	champion conservation projects. This voice should focus on results, not rhetoric.
	 Achieving results requires more dedicated resources than currently any one organization can commit.
River Valley Alliance	 There is a current window of opportunity that is not being maximized.
Kivel Valley Amarice	 Edmonton's table lands and river valley and ravine system create a unique natural network that improves the quality of life to all quadrants
	the region.
	 Priority table land sites serve regional neighbours as well as City of Edmonton residents.
	 A regional voice with the Provincial Government is much stronger than any one municipality.
	 Teaming up with the Land Trust does not inhibit individual priority projects but grows the whole funding pie larger.

Key Message by Primary Audience (continued)

1107 1110	bodge by Timmary Additioned (Continued)
	 An effective partnership with environmental and local communities can enhance both corporate profile as a responsible environmental partner as well as reduce acrimonious public debate with some key participants.
	 Association with high profile conservation sites in the Edmonton area increases visibility with key government policy makers.
Phase 3	• Edmonton's table lands and river valley and ravine system create a unique natural network that improves the quality of life and appeal of
Corporate Sector	living and working in the Metro Edmonton area.
	 Increasing natural areas in Edmonton makes good business sense.
	Increasing natural areas in Edmonton makes good health sense.
	Conserving sites now ensures future generations have access to unique aspects of their natural heritage.
	Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	The Land Trust represents a unified voice for urban land conservation projects for the Metro Edmonton region.
	 Conserving sites now ensures future generations have access to unique aspects of their natural heritage.
	 Edmonton's table lands and river valley and ravine system create a unique natural network that improves the quality of life to all quadrants of the region.
Province of Alberta	 Priority table land sites serve regional neighbours as well as City of Edmonton residents.
	 Natural areas equitably distributed throughout the region provide enhanced recreational/educational opportunities for citizens.
	 Increasing natural areas in Edmonton makes good business sense.
	 Increasing natural areas in Edmonton makes good health and environmental sense.
	 Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	 Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	• Edmonton's table lands and river valley and ravine system create a unique natural network that improves the quality of life to all quadrants of
-nviranmantal	the region.
Environmental, Recreational &	 Conserving sites now ensures future generations have access to unique aspects of their natural heritage.
Development	• To achieve success there needs to be a stronger, more cohesive voice from the environmental, business and civic communities to champion
Stakeholders	conservation projects. This voice should focus on results, not rhetoric.
	 To move forward the Land Trust offers the forum to build a new positive working relationship among stakeholders, landowners and funders.
	All landowner's rights will be respected.
	 All conservation projects and negotiations will be based on voluntary compliance.
	All landowner's rights will be respected.
Landowners	 All conservation projects and negotiations will be based on voluntary compliance.
	 Each parcel of land and natural area is unique and may require different solutions.
	 Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	 Conserving sites now ensures future generations have access to unique aspects of their natural heritage.
	• Edmonton's table lands and river valley and ravine system create a unique natural network that improves the quality of life to all quadrants of
General Community	the region.
_	 Conservation within an urban setting balances conservation, preservation and responsible human access and use. Increasing the natural area in Edmonton contributes to a healthier community.
	 Increasing the natural area in Edmonton contributes to a healthier community. Natural areas provide a unique educational and recreational experience for urban residents.
	 Conserving sites now ensures future generations have access to unique aspects of their natural heritage.
	 Conserving sites now ensures ruture generations have access to unique aspects of their hatural heritage. Edmonton's table lands and river valley and ravine system create a unique natural network that improves the quality of life to all quadrants or
	the region.
Foundations	 Conservation within an urban setting balances conservation, preservation and responsible human access and use.
	 Increasing natural areas in Edmonton contributes to a healthier community.
	 Natural areas provide a unique "living classroom" for urban children.
	 The Trust represents community and corporate partners that have committed resources to conserve natural areas in Edmonton.

8.9.5 Marketing/Communication Activity Plan Timetable

Activity						Ye	ar 1						Year 2			
		2	3	4	5	6	7	8	9	10	11	12	1	2	3	4
Phase 1 – Creating the Team																
Partnership Protocol																
Smart Growth Summit – Picture Edmonton 2010																
Smart Growth Policy Statement															1	
Civic Administrative Review																
Phase 2 – Creating an Image						•						•				
Create Edmonton's Nature Network Land Trust Support Tools – Visual Identity, Conservation Project Profiles and Web Site																
Integrated Funding Approach with the River Valley Alliance																
Phase 3 – Creating Momentum																
Package Civic Funding into 5 Year Commitment																
Corporate Legacy Leaders Promotion – Event, Presentation Material and Briefing																
Provincial Funding Strategy																
Media Relations Program – Trust Launch and Staff Appointment																
Media Relations Program – Media site Briefings and Greenspace Editorial Program																
Natural Heritage Day/Week																
Stakeholders and Landowners Updates																
Project Briefs																
Legacy Catalogue and Promotion																
Foundation/Corporate Proposal Team																
Emerald Awards																
Marketing Staff Recruitment																
Benchmark Evaluation																

8.9.6 Marketing/Financing Strategy Resource Requirement Summary

Priority	Activity	Timeline*	Program Budget Year 1	Program Budget Year 2	Staff Time in Days	Volunteer Time in Days
Phase 1 -	- Creating the Team					
High	Partnership Protocol	Q1 Y1			0	10
High	Smart Growth Summit - Picture Edmonton 2010	Q1-2 Y1	\$13,500		0	5
High	Smart Growth Policy Statement	Q2 Y1			0	2
High	Civic Administrative Review	Q1-2 Y1			0	10
Phase 2 -	– Creating an Image					
High	Create Edmonton's Nature Network Land Trust Support Tools – Visual Identity, Conservation Project Profiles and Web Site	Q2 Y1-Q4 Y2	\$23,500	\$5,000	20	5
Medium	Integrated Funding Approach with RVA	Q1 Y1			0	10
Phase 3 -	- Creating Momentum					
High	Package Civic Funding into 5 Year Commitment	Q1 Y1			0	2
High	Corporate Legacy Leaders Promotion – Event, Presentation Material and Briefing	Q1-2 Y1	\$7,500		0	5
High	Provincial Funding Strategy	Q1-2 Y1			10	3
Medium	Media Relations Program – Trust Launch and Staff Appointment	Q2 Y1	\$3,000		5	1
Low	Media Relations Program – Media site Briefings and Greenspace Editorial Program	Q3 Y1-Q3 Y2	\$15,000		10	
Medium	Natural Heritage Day/Week	Q3 Y1-Q2 Y2		\$50,000	100	20
High	Stakeholders and Landowners Updates	Q2 Y1 ongoing	\$2,500	\$2,500	6	1
Medium	Project Briefs	Q2 Y1 ongoing			10	1
Medium	Legacy Catalogue and Promotion	Q4 Y1-Q3 Y2	\$5,000	\$40,000	100	5
Medium	Foundation/Corporate Proposal Team	Q2 Y1 ongoing			10	10
Low	Emerald Award	Q2 Y2		\$10,000	2	0
Staffing I	Requirement	Q2 Y1	\$55,000	\$55,000		
Benchma	ark Survey	Q2 – 3 Y1	\$15,000			
Total			\$125,000	\$162,500	273	90

^{*} Q - Calendar quarter, Y - Year

8.9.7 Communications Program - Activity Plan Details

Activity Description	Objective Served	Target Audience	Outcome
Phase 1 - Partnership Protocol The Protocol would outline the key aspects of a working relationship between the signatories. The overall objective is to develop a more	Primary: • To consolidate existing stakeholder support and	Primary: • Current environmental organizations.	 Improved trust between key participants. Enhanced working relations between key participants.
effective working relationship that minimizes the public acrimony among various partners, especially among different sectors of the community.	cooperation for land conservation projects.To coordinate stakeholder	Urban Development Institute. City Council	Evaluation Method
Protocol Development: - The draft framework for the protocol could be developed in a workshop format with interested organizations. Based on the input from the workshop, a small task team that equitably represents the key interests currently at the table will draft the protocol for consideration by potential organizations. Each organization would then be offered the opportunity to participate by endorsing the principles as outlined in the Protocol. Each organization would formally approve participation and become a signatory to the Protocol. Protocol Tenure: - The protocol would be structured with a sunset clause as it is envisioned as an interim step that will clarify the communication, roles and expectations of the existing partners so that they can move forward more cohesively. The Protocol will provide the basis for the founding principles of the Edmonton Nature Network Land Trust.	 To coordinate stakeholder participation towards land conservation awareness and prioritized land conservation projects. Secondary: To increase the financial support for selected land conservation projects. To confirm and consolidate civic policy direction and support. 	 City Council. Secondary: Stakeholders interested in civic development issues. Civic departments relating to land management. Landowners. 	 Protocol endorsed by representatives of the environmental, development and civic communities. Reduced acrimonious debate among partners. New solutions being considered that enhance conservation activities.
Protocol Timing: - The completion of the Protocol with participation by both the environmental and development community would enhance the ability to garner strengthened Council support for the project.			

Timing: Q1 Y1 Budget: Volunteer Time Only.

Activity Description	Objective Served	Target Audience	Outcome
Phase 1 - Smart Growth Summit - Picture Edmonton 2010 Design and implement a community workshop that invites interested stakeholders and the public to participate in a one or two-day workshop to provide input on what should Edmonton should look like as a community in 2010. The objective would be to define, in tangible physical means, what "quality of life" looks like in our community as it relates to urban design and green space requirements. Preliminary options would be developed by the Administration as a starting point for discussion that would show tangible examples of what some of the options might be. Council would use this workshop as a key input opportunity to assist them in developing a "smart growth vision". At the completion of the workshop, provide an evaluation of the workshop and its benefit would be given to participants. A follow-up summary of the results of the workshop will be mailed to each participant. Participants will be advised of any follow up to Council actions or activity.	Primary: To confirm and consolidate civic policy direction and support. To increase public awareness of the "quality of life" benefits for land conservation within the urban setting. Secondary: To consolidate existing stakeholder support and cooperation for urban land conservation projects. To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects. To increase the financial support for selected urban land conservation projects.	Primary: Current environmental organizations. Urban Development Institute. City Council. Environmental, recreational and development stakeholders. Stakeholders interested in civic development. Landowners. Secondary: River Valley Alliance. Corporate Sector. Province of Alberta. Civic departments relating to land management.	 Provide Council with focused community input from key stakeholders involved in urban development issues. Identify key stakeholders that may have an interest in participating in the Land Trust. Provide a media opportunity on urban growth issues. Position City Council and the City of Edmonton as proactive leaders in dealing with urban growth issues. Evaluation Method Assessment of feedback evaluations from participants. Identification of potential Land Trust participants.
Timing: Q1 – Q2 Y1	Budget: Consultant to Facilitate \$2,500, Workshop Operation Cost		sults - \$10,000, Advertising -

Timing : Q2 - Q3 Y1

8.9.7 Communications Program - Activity Plan Details (continued)

Activity Description	Objective Served	Target Audience	Outcome
Phase 1 - Smart Growth Policy Statement Utilizing the results of the Smart Growth Workshop and previous strategic planning work, develop a Smart Growth Policy Statement. This would be approved by Council and rolled out as a priority policy statement. This could include the following steps:	Primary: To confirm and consolidate civic policy direction and support. To increase public awareness of the "quality of life" benefits for urban land conservation within	Primary: Stakeholders interested in civic development issues. Civic departments relating to land management. Landowners.	 Clear statement on urban design and growth management issues particularly relating to gree space needs in the urban environment. Position City Council and
 Invitation to stakeholders to the Council Session. Formal presentation in Council of the Policy Statement and its key direction. Media briefing including editorial board meetings and a news conference. Direct mail out to key stakeholders and regional decision makers including leaders in the development community. The mail out would be a combination of a letter with a 4 page summary of the policy and examples of the implications of the policy direction. Policy statement posted on the web site. Presentation prepared and provided to members of Council to present to key stakeholders including Urban Development Institute, the Chamber of Commerce and the environmental community. 	the urban setting. Secondary: To consolidate existing stakeholder support and cooperation for land conservation projects. To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects. To increase the financial support for selected urban land conservation projects.	 General community (18-70 years). Secondary: Current environmental organizations. Urban Development Institute. River Valley Alliance. Corporate sector. Province of Alberta. Regional neighbours. 	the City of Édmonton as proactive leaders in dealing with urban growth issues. Evaluation Method Assessment of stakeholder and community feedback. Positive media coverage of the Policy statement and process.

Presentation – Internal Resources or \$3,000.

system is working.

Timing: Q1 – Q2 Y1

8.9.7 Communications Program - Activity Plan Details (continued)

Activity Description	Objective Served	Target Audience	Outcome		
Phase 1 - Civic Administrative Review Review the process and policies that influence the City's decision making relating to land acquisition, land management, zoning and development to ensure that the various departments are consistent with the corporate vision. This review might consider existing mandates and operational considerations to ensure that civic resources are being	Primary: To confirm and consolidate civic policy direction and support. To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land	Primary: Current environmental organizations. Urban Development Institute. City Council. Stakeholders interested	 Improved consistency in the review and implementation of development options as it relates to urban land conservation projects. Streamlined process for external parties to deal with the civic administration 		
maximized towards corporate priorities and not hindered by differences in inter-departmental mandates. Additional consideration should be given to improving and streamlining inter-departmental reviews and discussions that many development projects require to ensure that options and alternatives are considered and implemented in a consistent fashion.	conservation projects. Secondary: To consolidate existing stakeholder support and cooperation for urban land conservation projects.	 Stakeholders interested in civic development issues. Landowners. Secondary: Environmental, recreational and 	surrounding urban land development and servicing needs. Increased examples of innovative development solutions that result in conserved natural spaces.		
At the completion of this review, a summary of the recommendations should be shared with key development industry and community stakeholders. The communication tools could include a direct letter to key stakeholders supplemented by a briefing presentation on the recommendations and posting the information on the web site.	stakeholders. • General communit 70 years).		staken should be shared with key development and community stakeholders. mmunication tools could include a direct letter to key lders supplemented by a briefing presentation on the stakeholders. **Corpor** *		 Stakeholder evaluation of development process. Reduced time to process and finalize development options and design.
A stakeholder evaluation form would be developed and provided to participants (both internal and external) to complete. These would be reviewed on an annual basis to assess how the			 More sites conserved within the development process. 		

Budget: Existing Internal City Resources to Develop. No Incremental Budget Required.

Activity Description	Objective Served	Target Audience	Outcome
Phase 2 - Edmonton's Natural Network Land Trust Support Tools Develop core promotional tools to use in the first phase of the marketing strategy. Visual Identity Package – Logo, stationary, etc. Conservation Project Profile Sheets – Information sheets on the priority projects including maps, photos, unique natural features, conservation plans, and potential recreational or educational opportunities. Proposed format: 11X17, one fold, 4 colour, colour copy, or laser output. The format should provide for the opportunity to revise easily and modify sheets for customized proposals. Web Site – A basic web site be designed and registered. Currently both edmontonnaturalnetworklandtrust.org and naturalnetworklandtrust.org are available. The site should be designed for e-commerce capacity. The site should provide avenues to share information between partners and with the broader community on urban land conservation issues. This tool provides a very cost-effective manner of distributing information to stakeholders. It would be one of the primary information streams for the Land Trust. The web site would also provide links to all partners and cross promote activities. With the completion of the Legacy Catalogue, the site would implement its e-commerce capacity.	Primary: To consolidate existing stakeholder support and cooperation for urban land conservation projects. To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects. To increase the financial support for selected urban land conservation projects. Secondary: To increase public awareness of the "quality of life" benefits for land conservation within the urban setting.	Primary: Protocol/Trust Partners. Corporate sector. Province of Alberta. Secondary: Environmental, recreational and development stakeholders. Landowners. River Valley Alliance. General community (18-70 years). Foundations. City Council. Regional neighbours Province of Alberta.	 Awareness of the Land Trust, its partners, objectives and projects. Evaluation Method Public Attitude Survey. Assessment of corporate support.
Timing : Q2 Y1 – Q2 Y2	Budget: Visual Identity Pack Sheets 5 Sites: Design, Wri Writing, Design and Impleme	te and Laser Printing - \$5,0	000, Web Site Registration,

Activity Description	Objective Served	Target Audience	Outcome
 Phase 2 - Integrated Funding Approach with the River Valley Alliance Brief the River Valley Alliance on the principles and existing partners that are working on the Land Trust and discuss options for creating more synergy between the two organizations and reducing duplication. Options for consideration could include: Merging the two organizations and having the currently contributing partners contribute to the Land Trust instead. Merge the two organizations and establish a subcommittee to deal with river valley land issues. Currently contributing partners may continue to contribute to support river valley projects and planning rather than the overall Land Trust. Continuing the River Valley Alliance and have the Alliance as one stakeholder in the Land Trust. They would contribute as one organization with one representative and would continue their focus on river valley development and conservation. Continue the two organizations with a task team that shares and coordinates funding applications to ensure maximum contributions and minimum overlap of effort. Based on the final decision of this group, modify the project priorities to reflect any expansion of the activities. 	Primary: To consolidate existing stakeholder support and cooperation for urban land conservation projects. To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects. Secondary: To increase the financial support for selected urban land conservation projects.	Primary: Protocol/Trust Partners. River Valley Alliance. Secondary: City Council. Regional neighbours.	 Increased funding and administrative support to move projects forward. Reduced overlap in administrative and volunteer efforts. Stronger regional voice for land conservation and park development projects. Incremental provincial financial support. Evaluation Method More projects completed in both river valley and table lands.
Timing: Q2 – Q3 Y1	Budget: Volunteer Resources On	ly. No Incremental Budge	et Required.

Activity Description	Objective Served	Target Audience	Outcome
Phase 3 - Packaging Civic Funding into 5 Year Commitment Convert and approve the existing annual program into a 5 year commitment including both the park reserve funding of \$250,000 per year and the proposed capital contribution in 2004 and 2005 of \$650,000 per year. Publicly promote the 5 year commitment towards addressing key "quality of life" amenities and to implement the "smart growth policy" direction. Announce the commitment either in conjunction with the Smart Growth Policy or use the announcement to set the ground for sponsorship promotion to both the corporate sector and provincial government.	Primary: To consolidate existing stakeholder support and cooperation for urban land conservation projects. To confirm and consolidate civic policy direction and support. To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects. Secondary: To increase the financial support for selected urban land conservation projects. To increase public awareness of the "quality of life" benefits for land conservation within the urban setting.	 Primary: Protocol/Trust Partners. River Valley Alliance. Corporate sector. Province of Alberta. Secondary: Landowners. General community (18-70 years). Foundations. Civic departments relating to land management. Regional neighbours. 	 Positive media coverage of the decision. Support from key stakeholders for the strategic direction. Maximum financial contribution from the Province. Evaluation Method Media assessment. Incremental revenue.
Timing: Q1 – Q2 Y1	Budget: Volunteer and Civic Res	ources. No Incremental Bu	dget Required.

Activity Description	Objective Served	Target Audience	Outcome
Phase 3 - Corporate Legacy Leaders Promotion Target corporate partners that would benefit from participation in a visible and positive community environmental initiative that helps to counter growing pressures on industrial emissions. Other factors that may contribute to participation would be the marketing need to increase profile in the Metro Edmonton community by aligning themselves with projects that improve the quality of life in our community, enhance regional and neighbourhood recreational opportunities and expand educational opportunities with regional "living classrooms". Format: Breakfast meeting hosted by the office of the Mayor. Attendees: 10 – 12 senior executives. Environmental Representatives: Any of the committed Land Trust participants to attend and one "blue ribbon" representative from the environmental community. Presentation: A brief presentation with supporting visuals be prepared for the office of the Mayor. Proposals: A customized colour proposal targeted to each of the corporate representatives be prepared and provided to them as leave behinds. The proposal would request a formal response. Key Messages: Community legacy opportunity with strong civic support in place to support this project. Leveraging power of every dollar that the Land Trust can raise in securing the maximum amount from the Province. Real business benefits from an opportunity to build a more effective working relationship with environmental and community groups.	Primary: To increase the financial support for selected urban land conservation projects. To increase public and corporate awareness of the "quality of life" benefits for land conservation within the urban setting. Secondary: To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects.	Primary: Corporate sector. Secondary: Province of Alberta. Environmental, recreational and development stakeholders. Landowners. City Council.	• 3 – 5 Corporate Partners bringing collectively between \$100,000 - \$200,000 per year for 5 years. Evaluation Method • Assessment of corporate participation.
Marketing and corporate positioning opportunity to enhance the quality of life in Metro Edmonton.			

Corporate Proposals \$7,000.

Activity Description	Objective Served	Target Audience	Outcome
Phase 3 - Provincial Funding Strategy With civic and corporate funding, the provincial funding request should be developed. It is important to have a strong base of support behind the application if the Land Trust is to have a chance of maximizing the provincial contribution. To enhance the proposal's chances, the following lobbying program should be considered: • Meeting with senior Edmonton government MLA – Minister Hancock. • Briefing package to go to Edmonton Progressive Conservative Caucus. • Meeting with Environment and Community Development Ministers. • Final submission of proposal based on discussions from various meetings. Delegation: Civic, corporate and community representatives. Application: From the new Land Trust on behalf of the partners. Purpose of the Meetings: To promote increased matching funding from the program guidelines, not simply the standard contribution.	Primary: To increase the financial support for selected urban land conservation projects. Secondary: To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects. To increase public awareness of the "quality of life" benefits for land conservation within the urban setting.	Primary: Province of Alberta. Foundations. Secondary: City Council. Protocol partners. Corporate sector. Landowners. General community (18-70 years). Regional neighbours.	More than the minimum matching funding of \$.30 per dollar raised. Evaluation Method Assessment of provincial level of support.
If proposal process bridges the election, then it is important to bring any new players up to speed on the project and the opportunities.			
Timing : Q2 – Q3 Y1	Budget: Land Trust Staff Resour	rces to Prepare. No Prograi	n Budget Required.

Activity December	Objective Served	Torget Audienee	Outcome
Activity Description	Objective Served	Target Audience	Outcome
Phase 3 - Media Relations Program	Primary:	Primary:	 Accurate and positive media coverage of the
Undertake a series of media relations activities that increase the profile and awareness of conservation sites, activities and partners. The activities	To increase public awareness of the "quality of life" benefits for	 Protocol/Trust Partners. 	events that reflect key messages.
should be sequenced to build a sense of momentum and capitalize on	land conservation within the urban setting.	 Corporate sector. 	 Development of editorial
seasonal media opportunities and slow news times.	urbari settirig.	 Province of Alberta. 	stories on conservation
In addition, the media relations activities should try and target media	Secondary:	 Landowners. 	sites with regional media.
partnership that can help to create broader community awareness through editorial features covering conservation sites and the Land Trust's activities.	 To consolidate existing stakeholder support and 	 General community (18-70 years). 	 Increased awareness of conserved sites in the Metro Edmonton area and
Trust Launch	cooperation for urban land conservation projects. Secondary:	the benefits of natural	
Format: News conference on site in a natural area, with media package that is sent to key editorial and news staff in Metro Edmonton publications and media outlets.	 To increase the financial support for selected urban land conservation projects. 	 Environmental, recreational and development stakeholders. 	 areas. Increase of profile for current Land Trust partners.
Content: Launch the Land Trust, announce founding partners and board of directors and profile priority activities.		 Civic departments 	Evaluation Method
Timing: No later than June 2001		relating to land management.	 Assessment of the media
-		 Regional neighbours. 	coverage of the events
Trust Staff Appointment – New Release		 Regional neighbours. Opposition MLA's in	and stories.
Green space and Natural Areas Editorial Program		Edmonton region.	 Public Attitude Survey.
 Media tours of selected sites with interpretive guides. 		Editionton rogion.	
 Media backgrounders on individual sites and their potential. 			
 Promote these story teasers to the dailies and weeklies. Potential partnership with the Real Estate Weekly. 			

Timing: Q2 Y1 and ongoing.

Budget: \$3,000 for Miscellaneous Media Relations Costs.

Activity Description	Objective Served	Target Audience	Outcome
Concept: Create a community event that profiles existing and potential sites in the Metro Edmonton area and the benefit that they provide the urban community. The event could be built around an existing event such as National Trails Day or Arbour Day that currently do not have strong image in the community. This provides the Land Trust with the opportunity to mold and "own" the event as an annual opportunity to promote urban conservation and the Land Trust. Supplementing any news or editorial coverage would be targeted advertising. Organization: Task team from partnering organizations and interested individuals. Format: Various interpretative and educational activities. One option would be to organize a Natural Heritage Marketplace that could showcase various clubs, sites and activities in a central location. There is an opportunity to actively partner with the two school boards to develop activities that could tie into the school outdoor education or science programs. News Opportunities: Utilize the event to profile partners and any new projects. Timing: May or June to avoid the busy festival season and tie into the school year.	Primary: To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects. To increase public awareness of the "quality of life" benefits for land conservation within the urban setting. Secondary: To increase the financial support for selected urban land conservation projects.	Primary: Environmental, recreational and development stakeholders. General community (18-70 years). School boards. Secondary: City Council. Protocol/Trust Partners. Corporate sector. Province of Alberta. Neighbours of targeted sites.	 Increased awareness of existing natural areas and their benefits to the community. Increased awareness of the "living classroom concept". Increased participation in conservation activities. Identification of new funding partners to support conservation activities. Increase the profile of existing partners in the Land Trust. Evaluation Method Public Attitude Survey. Attendance at Events. Number of participating partners.
Timing : Q4 Y1 – Q3 Y2	Budget: Staff Time as well as \$ the Event.	50,000 to Support the C	Organization and Advertising of

Timing: Q2 2001 and ongoing

8.9.7 Communications Program - Activity Plan Details (continued)

Activity Description	Objective Served	Target Audience	Outcome
Phase 3 - Trust Stakeholder and Landowners Updates and Project Briefs Stakeholder Update Audience: Various organizations and individuals that are interested in urban land conservation activities. This would include environmental, development, and recreational groups and neighbours as well as civic staff dealing with land development or acquisition. Frequency: 3 times per year. Format: Over printed on pre-printed mastheads, 2-4 pages. Distribution: Direct mail to stakeholder list as well as providing distribution copies to key stakeholder groups to include in their regular mail outs. Web Site: Posted on the web site. Content: Brief bullets of information on key issues. In-depth information offered through Project Briefs. Land Owner Update Audience: Land owners of targeted sites. Format: Over-printed on pre-printed mastheads. Frequency: 3 times per year or if a specific issue warrants it. Distribution: Direct mail to landowners. Web Site: No, leave the communication with landowners as more targeted and exclusive. Content: Information that keeps the landowners aware of progress and any impact on	Primary: To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects. To increase public awareness of the "quality of life" benefits for land conservation within the urban setting. Secondary: To increase the financial support for selected urban land conservation projects.	Primary: Protocol/Trust Partners Environmental, recreational and development stakeholders. Landowners. General community (18-70 years). Secondary: City Council. Province of Alberta. Neighbours to targeted sites. School system. Opposition MLA's in Edmonton region. Alberta Capital Region Alliance.	Improved awareness of urban land conservation projects. Stakeholders and landowners feel that they are appropriately informed about activities that relate to their interest or land. Evaluation Method Stakeholder and landowner communication evaluation.
Content: Information that keeps the landowners aware of progress and any impact on specific areas. This can also highlight successful projects that may encourage others to negotiate. Individual negotiations would be kept confidential.			
Project Briefs			
One to five page background papers to provide more detailed information on specific projects. They would be mailed on request as well as posted on the web site			

Budget: Printing and Mailing Costs - \$2500 for each year. Evaluation Done In-house

Activity Description	Objective Served	Target Audience	Outcome
Concept: To integrate and promote specific promotional and product opportunities that raise funds to support conservation activities. These may include sponsorship programs such as the following: • Tree plantings, • Benches, • Trails, • Interpretive panels or centers, and • Whole sites. In addition, the catalogue could also market specific products that partnering organizations produce and market as fund raising activities. These could include nature crafts, calendars, books, guides, etc. The catalogue would collect and market the full range of products and participation options to encourage grass roots support to partner organizations and conservation activities. Format: Colour catalogue, 12 – 16 pages. Distribution: Through public distribution outlets and stakeholder organizations. It would also be loaded on the web site with e-commerce ability. Promotion: Media event to launch catalogue, point of purchase promotion at key partner locations and civic outlets, selected advertising and e-mail promotion. Timing: Natural Heritage Week and Christmas shopping season Commission: The Land Trust would receive a commission for all products or donations brokered through the Legacy Catalogue.	Primary: To coordinate stakeholder participation towards urban land conservation awareness and prioritized urban land conservation projects. To increase public awareness of the "quality of life" benefits for land conservation within the urban setting. Secondary: To increase the financial support for selected urban land conservation projects.	Primary: General community (18-70 years). Protocol/Trust Partners. Corporate sector. Environmental, recreational and development stakeholders. Secondary: Landowners. City Council. Regional neighbours. Province of Alberta. Neighbours of targeted sites. Opposition MLA's in Edmonton region.	 Increased awareness and financial support for urban land conservation and nature appreciation activities through distribution of the catalogue and sales of the products. Create incremental revenue for each participating organization. Evaluation Method Public Attitude Survey. Sales from the Catalogue.

Budget: Staff Time plus Design Fees in Y1 - \$5,000 and Production and Advertising in Y2 - \$40,000.

Activity Description	Objective Served	Target Audience	Outcome
Phase 3 - Foundation/Corporate Proposal Team Recruit three-five volunteers that will coordinate the review and preparation of proposals to foundations and corporate partners interested in specific projects. The task team would meet bi-annually to review upcoming opportunities and assess them with upcoming project needs. The volunteers and staff would assign preparation of the funding proposals. Skills required for the Task Team include proposal writing and understanding of the project priorities. Land Trust staff would provide administrative support and any financial reports required to support the proposal, would be done by Land Trust staff. Where the Land Trust is not the submitting organization, the proposal would be drafted for review and revised by the	Primary: • To coordinate stakeholder participation towards land conservation awareness and prioritized urban land conservation projects. • To increase the financial support for selected land conservation projects. Secondary: • To increase public awareness of the "quality of life" benefits for land conservation within the urban setting.	Target Audience Primary: • Foundations. • Corporate sector. Secondary: • Province of Alberta. • City Council. • Protocol/Trust Partners. • Environmental, recreational and development stakeholders.	Secure \$50,000- \$100,000 in project and/or administrative funding. Funding support from at least one new foundation or corporate partner per year. Evaluation Method Assess success of funding proposals based on number submitted, time spent and dollars raised and new sources identified.
submitting organization. Timing: Q2 and ongoing	Budget: Staff Volunteer Resources O	nlv	identined.

Activity Description	Objective Served	Target Audience	Outcome
Phase 3 - Emerald Award for Urban Land Conservation Develop and sponsor an annual award that focuses recognition on urban land conservation activities. Actively encourage submissions by partners for this award. Undertake a specialized promotion at the award dinner that would increase top-of-mind awareness of urban land conservation issues. Ideas include: Treelings as table decorations, Door prizes of bird houses, nature picture books or nature sound compact discs, and/or Bird whistles as table favours with land conservation facts on a small card. After the Emerald Awards Program, a special advertising recognition of the winners and their contributions would be placed in Edmonton newspapers. The ad would profile the Land Trust as well as the award and their partnership with the Emerald Foundation. Alternatively, if this is not possible, then working with another organization such as the Chamber of Commerce or the Urban Development Institure may generate similar profiles in the business community.	Primary: • To increase public and corporate awareness of the "quality of life" benefits for land conservation within the urban setting. Secondary: • To increase the financial support for selected urban land conservation projects.	Primary: Corporate sector. Province of Alberta. Environmental, recreational and development stakeholders. Secondary: Landowners. City Council. Regional neighbours. Province of Alberta.	 Increased recognition of the environmental benefits of urban land conservation programs. Media coverage of Emerald Award Winners in the business press. Increased corporate partners in land conservation projects. Increased awareness of the Land Trust with the business community. Evaluation Method Review of media coverage for coverage on urban land conservation. Direct mail questionnaire to participants to evaluate understanding and interest in urban land conservation projects.
Timing: Q2 Y2	Budget: Award, Promotion and	Advertising - \$10,000.	



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10

10 Appendices

Appendix 1 – Summary of the General Public Focus Session

Stakeholder Input Process

To achieve the objectives as outlined in the study, there were four groups that the Consulting Team engaged in dialog. These were the development community, landowners, environmental groups and a representation of the general public. A key objective of these sessions was to identify trends, common issues and concerns, the intensity of support or opposition to various issues. The results should not be taken as a statically accurate survey but as qualitative research that provides an indication of trends.

The discussion sessions were structured to probe stakeholders' priorities both within specific land conservation types and areas, stewardship priorities and issues as well as funding priorities within the context of other municipal service priorities. A secondary outcome of the workshops was to identify any opportunities where partnerships could emerge to assist in moving the project forward.

General Public Session - Focus Group Time and Location

The session was held in the Heritage Room of City Hall on Thursday August 2 from 7:00 – 9:00 P.M. The session was facilitated by Dagny Alston of The DAGNY Partnership, with members of the Consulting Team and Project Steering Committee observing.

General Public Session - Focus Group Objectives

- To identify and understand the community's priority and criteria for land conservation within the City of Edmonton.
- To understand community attitudes towards what land qualities are most important to conserve and why.
- To probe for attitudes surrounding whom should own, operate, fund and have access to conserved land.
- To probe the community's fiscal priority for this activity.

1.1.1 Public Session - Focus Group Selection, Screening and Composition

To ensure that the participants in this session represented the "silent majority" we utilized the services of an independent recruitment firm to identify at random 12 citizens. The following chart outlines the screening criteria that were used to screen these citizens and the composition of the group that attended. Each participant was paid a small honorarium of \$35.

Screening Criteria	Actual Participation
Homeowners (taxpayers)	12
Representative gender mix (50/50)	7 Female, 5 Male
Age bias (22-50) with no more than 2 seniors	5 – 30-39 years
	6 – 40-50 years
	1 – 51-64 years
Each quadrant of the City represented with a	NW – 2
maximum of 1 per subdivision	SE – 2
	SW – 2

Screening Criteria	Actual Participation
	NE – 4
	Central – 2
City of Edmonton employees, students and environment group members were screened out.	Yes
Targeted 2-3 participants that purchased their house	1999 – 2
in the last year	2000 – 1

Summary of the General Public Session – Discussion

What does "natural area" land conservation within a City like Edmonton mean to you?

When we probed what a "natural conserved area" meant to the participants, most provided an unaided response that described "undisturbed" land that was left in its natural state. They mentioned that these tracks of land often attracted birds and wild life. There was a feeling that these habitats represented both natural species and possibly planted species as well.

There was a general discussion around access and use of conserved land, which re-enforced the view that this land was not designed for use or if there was some access and use it would be very passive activities only. Examples of activities included walking, non-intrusive interpretive activities and wildlife viewing.

Do you think that within the City boundaries we should have land that is left untouched? Do we need more or have we enough or too much and why?

There was **strong support** for conserving more land, particularly in those areas of the City that do not have access

to the river valley or as much other "green space" or mature landscaping. Some participants felt that Edmontonian's enjoyed a lot of conserved land, particularly noting the river valley area, however all the participants felt that natural spaces were an important component of creating a good place to live throughout the City.

The concept of green space creating a bit of "mental breathing room" in busy urban lives emerged. The group expressed the idea that "a bit of nature" provided balance to the built up environment. Some participants indicated that it might be more important to conserve land in newly developed areas because all the other landscaping was so young and underdeveloped. One comment reflected the general feeling of the group, "Why tear down all the mature trees and simply plant young ones? Why not leave the mature ones until the others have grown up?"

Most of the group supported the conservation of land to ensure that our city develops in a manner that future residents can enjoy. This attitude was summed up in the following way, "We don't want to be an LA, concrete sprawl for miles. That's not the kind of City I want to leave for my kids". The group concurred that conserved land and green space contributes to a healthy environment.

They noted that some neighbourhoods of the city have a lot of natural areas and easy access to green space (Whitemud Creek, North Saskatchewan River Valley, and Blackmud Creek), where other such as the southeast, northwest and northeast don't. There was support for the concept that other areas of the City should also get priority if there are natural areas of note to conserve or protect.

A common theme that emerged with this discussion was the importance of having access to these sites. Participants recognized that access if not controlled and limited could "spoil" the habitat, but also felt that without some access the public wouldn't appreciation the value of natural areas. It was noted that without public appreciation, public financial support would be very difficult to secure.

This discussion led to the importance of "controlled" access such as a trail network. This is seen as preferred passive activity that would contain the impact on the habitat but provide both recreational and educational opportunities for the citizens.

Cost issues also emerged in the discussion, however these will be addressed later in the summary.

Would your attitude change towards conserving land if the land was completely surrounded by development?

While participants felt that natural areas contributed to the quality of life in the community, the real ecological contribution of these types of sites as questioned unless the sites were large enough to support an ecosystem. Several critical factors emerged in the discussion that supported the key criteria (size, linkage and sustainability) that the environmental group workshop identified.

Public representatives felt that these "smaller" local areas provided valuable passive recreation and educational opportunities for the local neighbourhood but questioned if they could sustain much of an ecosystem. There was a general consensus that areas that were large enough to sustain a natural habitat were the most important to preserve.

As noted previously there is strong support for conserved lands to be publicly owned. An example was raised by one member of a development in Calgary where the local residents association owns the parkland and restricts access to residents and guests. This "gated community" approach was strongly opposed. The underlying principle of natural areas being a public responsibility and being maintained in the public domain emerged. The underlying drivers to this philosophy were the assurance of continuity, accountability, resources to effectively manage the land and the commitment to provide appropriate public access in an environmentally responsibly way. This principle influenced the preferred ownership, stewardship and funding solutions discussed later in the report.

A sidebar issue relating to urban growth was raised. As noted previously, participants felt that rapid urban growth and sprawl was not desirable. Part of the group recognized that the city will grow and growth in itself was not a disadvantage however the challenge is to manage it effectively. The group concurred that increased density was one option to minimizing urban sprawl. In addition to the loss of agricultural and natural land reserves, the group felt that sprawling urban development contributed to increased transportation costs and other municipal services that we all pay for.

Are there any disadvantages that you can see regarding conserving land?

While the group was generally supportive towards leaving areas of land, when probed they did raise several disadvantages or concerns. These were as follows:

- Impact on taxes
 - Cost to purchase the land or maintain it

- Loss of tax base revenue
- Crime or vandalism in areas adjacent to uncontrolled areas
- Safety, particularly around wetland areas
- Higher cost of houses in these areas
- Insects (mosquitoes) and other rodents

While the majority of the group recognized these disadvantages, with the exception of the taxation issue, they felt that the advantages far outweighed the disadvantages.

What criteria do you think should be used to evaluate a piece of land?

Through a brainstorming session the group identified the following criteria for selecting sites:

- Location
 - Threat to development
 - Geographic distribution within the City
- Interesting natural qualities
- Appropriate habitat for animals we are trying to preserve
- Areas with native species of lands and animals
- Accessibility
- Aesthetics What it looks like? Wooded areas more important than wetlands
- Variety of types of lands conserved in the Edmonton area
- Cost-effectiveness Get the best bang for the buck
- Ancillary Costs Additional cost of building roads around area or additional infrastructure
- Overall environmental costs and benefits for the long term

Each participant identified priorities through a "dotmocracy" exercise.

Each participant was given the same number of dots to "spend" and was asked to place them against a list of

priorities. The following chart reflects the results with a comparison to the results of a similar exercise done with the environmental group.

Critieria/Priorities -	Focu	s Groups
Critieria/Priorities =	Public	Environmental
Size and Diversity	18%	24%
Location	9%	4%
Linkages	9%	14%
Ecological Importance	19%	35%
Educational Value	8%	8%
Recreational Value	0%	1%
Buffer	0%	4%
Development Threat	9%	5%
Partnership/Stewardship Opportunities	0%	4%
Accessibility	3%	1%
Cost	19%	0%
Type of Habitat	6%	0%
Maintenance/ Management	0%	0%
Liability	0%	0%
Totals	100%	100%

While the specific list generated by each focus group was slightly different there was a consistent theme in the top priorities. Both groups stressed the need for land parcels that were large enough to sustain an ecosystem and were linked to other systems. The community environmental representatives also concurred that ecological importance was key. Residents supported the preservation of unique natural species in a manner that provided a "window into nature" for residents but preserved the environment for the plants and animals. This was in contrast to a couple representatives from the environmental community who expressed strong opinions that preservation efforts should be focused towards the plant and animal community and not to factor in the residents needs or desires for access.

To achieve this the top priorities would need to be size, diversity, sustainability, linkages and unique natural features.

Consistent with earlier discussions, the group ranked *public accessibility* as important criteria. They identified two aspects of accessibility for consideration. Firstly, the group felt that there should be consideration given to the geographic location and distribution of conserved sites to ensure all residents have access to green space in their quadrant of the city. Secondly, land owned by either the City of Edmonton or the Province was seen as more publicly accessible than land owned or developed by private interests or the local neighbourhood.

The group pursued several different funding models. Securing funds through increased house prices or through a local development levy had limited interest. There was concern that this would create an "exclusive access" image with these sites as currently appears to be emerging in some areas of the city. Because of the group's strong support for public ownership, the participants recognized that this would require a tax commitment.

Lastly, **cost and ensuring the best value** for public expenditures were identified as very important criteria by community representatives. These criteria were also important to the development community but did not factor into the environmental groups consideration.

It was interesting to note that the general public group did not see the "threat to development" as a driving consideration. They felt that the targeted areas should be assessed on other qualities that they offer and not conserved simply because the land was under development threat.

While recreational or educational activities did not emerge near the top of the site selection evaluation criteria discussion did probe "use" and level of development priorities. Using the dotmocracy priority setting approach the group identified the following use priorities:

Use of Preserved Land	Community Group
Preservation	42%
Passive Recreation	42%
Controlled Development	16%

These "use" priorities are consistent with the selection criteria. These re-enforce strong community support for some complete preservation and limited access passive recreation development. This is consistent with the community desire to create the urban "breathing space" that stands of conserved land can create.

As noted earlier in the report, the community recognized that access to some of these areas would increase the community's understanding of the benefits that natural areas can offer a city. The group felt that increased public appreciation would contribute to increased public financial support. They mentioned several times that they felt that people didn't really know what we already had, let alone some of these other sites.

What are the public attitudes towards different types of habitats and does it influence whether you should preserve it?

We presented two photo boards showing examples of the woodland and wetland habitat and explained the differences.

Again using dotmocracy, the group prioritized which type of habitat they felt should be preserved.

Type of Preserved Land	Community Group
Forest - Aspen, Poplar, Spruce	30%
Native Grasses or Shrub	16%
Open Water Marsh	14%
Emergent Wetland	12%
Streams	28%

When probing why community participants prioritized certain types of habitats, several reasons were tabled.

While wetlands with open water were seen as appealing because they attracted more birdlife, they were also seen as a potential safety concern for children. The group recognized that wetlands and surrounding areas were very important to support wildlife and also contributed to improving the quality of the watershed.

Woodland areas were more popular with the majority of the group however, the group reiterated the need for different *types of woodlands to be conserved in different areas* of the city. This support was countered somewhat by a perception, by some, that Edmonton has a significant amount of conserved land already. Examples raised were the river valley parkland. Overall the woodland areas were more strongly supported than wetlands because wetlands were seen to attract more bugs.

Funding Priorities

Where do you think the funding should come from? And why?

The community participants continued to support the principles of public ownership and public sector financial support for this

type of land. In discussion the group felt that the majority should come from the Province and the City of Edmonton, especially for those areas of regional significance.

While probing some of the other alternatives, there was a recognition that not all the areas would have citywide appeal and would be primarily used by the local residents. There was some support for finding ways to incorporate this into the cost of new house construction in that area. One participant indicated he willingly paid a premium on his house because he wanted the proximity to natural areas. Countering this option is the concern that if residents pay for the costs in their house purchase, these residents may have the perception that the land is for their exclusive use.

The options of user fees were pursued and received mixed reviews. Some felt it would discourage those with limited incomes while others supported a voluntary fee. The support for even voluntary user fees was tempered by concerns over the administrative costs to collect them.

While probing the issue of community fund raising, the group expressed fatigue at the expectation of raising funds for "yet again another cause". They did not feel that they should have to do this on something that they saw as a core responsibility of effective municipal planning.

With the growing trends towards public/private sector partnerships, we probed the public attitudes towards corporate sponsorship of land conservation projects. There was some level of support however, it was very clear that these sponsors should be minor players. They should not drive the design or management of the land.

The group recognized that corporations will want something for their support and that realistic recognition is appropriate as long as it didn't spoil the area that you are trying to conserve. The following represents the views of both the views of the environmental representatives and the community participants:

Private Funds -	Enviro	Environment		Community	
	Yes	No	Yes	No	
Name of the Area	35%	21%	75%	10%	
Design of the Area	21%	35%	17%	36%	
Signage in the Area	43%	15%	58%	17%	
Access to the Area	29%	29%	8%	37%	

Concerns were expressed by some members of the group *that the more land you conserve the more it costs* the tax base in either maintenance costs and lost property tax revenue. Others in the group felt that more green space enhanced the quality of life and was an important selling feature for the community. The economic development benefits were seen to outweigh the increased expenditures.

Each participant was asked to complete a chart identifying where the funds should come from. The following represents an average of this input.

Sources	Total Community	Total Environment
Municipal Taxes	22%	21%
Neighbourhood Tax/Improvement Levy	10%	2%
One Time Tax Levy	0	3%
Built into the Cost of New House Construction	13%	5%
Voluntary User Fees in all Park Sites	3%	3%
Mandatory User Fees in Park Sites	0	3%
Provincial Government	27%	14%
Private Foundations	10%	11%
Private Companies	9%	11%

Sources	Total Community	Total Environment
Community Fundraising Efforts	5%	10%
Other- List: Conservation Fund	0	3%
Corporate Landowners	0	1%
Check Off Fees	0	2%
Increase Water Costs	0	6%
Increase Fuel Tax	0	6%
Total	100%	100%

It is interesting to note that both the community group and environmental representatives targeted tax funded sources as the top options.

If municipal funds are to utilized to fund land conservation, should they be new incremental funds or diverted from other municipal priorities?

There was strong support (8 out of 12 community participants) for a *small tax increase to fund land conservation*. Most of the community participants felt that *civic taxes were very reasonable* and that *as long as the money was used effectively* they didn't object to a small increase. It is curious to note that only 3 of the 14 environmental representatives supported increasing municipal taxes. The *environmental community placed a higher priority on a dedicated consumptive tax* such as a gas or transportation tax rather than on property taxes.

Several of the participants indicated that they would like to divert funds from other municipal priorities. The chart on the following page reflects the results of a questionnaire that participants completed.

The chart reiterates the strong support for the core service areas and the public's lack of desire to divert funding from these to other worthwhile projects. Participants did identify some interest in diverting funds from selected services, however this interest was limited and may wane depending on the actual impact on the service cut. While the group did support a reprioritization of existing "park" priorities, they were not really sure where the current priorities are. They felt that this kind of parkland should be a high priority.

Overall, the community group did not feel that diverting funds from existing services was the way to fund land conservation activities. It is very important to note that the responses to this activity are very scattered and if service reallocation is to be pursued we would recommend that qualitatively substantiated research that can more accurately assess the attitudes based on a clear understanding of what the service impacts would be.

Ownership and Management

Who do you think should own this kind of land?....or does it make a difference once it is designated?

There was a consensus that the City of Edmonton would likely be the most fair and appropriate owner of the land, either on their own or in partnership with the Province of Alberta, appropriate environmental or recreational interest groups.

The *City was seen as having done a "pretty good job*" to date of conserving and managing parkland. It was also noted that the City of Edmonton provides the long-term continuity and public accountability that the community feels is important.

The representatives of the environmental community did not share this view on the City's land stewardship ability.

There were mixed feelings expressed about local community ownership. While some felt that this option would put the land management in the hands of people closest to the land, others were concerned that because the membership and active participation in local not for profit groups change. This may not provide long term land management contiguity.

	Community				Environmental			
Municipal Priorities	High	Medium	Low	Do Not Reduce	High	Medium	Low	Do Not Reduce
Ambulance				7%		3%		3%
Community and Family Services	1%		2%	5%				8%
Economic Development	2%	2%	2%		8%	3%		
Fire				7%		3%		3%
Sports, Recreation, and Arts Grants	1%	2%	4%	2%	3%	8%		3%
Library			5%	7%				8%
Police				1%				8%
Park Development – Other Areas	1%	4%	2%			3%		3%
Recreation Program and/or Facilities	1%	2%	6%	4%		7%		
Road Construction and Repairs	1%	1%	2%	4%	3%	3%		
Sewer Services and Repairs		1%	2%	4%	3%	3%		
Public Transit		1%	2%	4%		3%		3%
Waste Management		2%	2%	4%				8%

The option of having local environmental groups manage the land did not come unaided from the group. When probed about the viability of local environmental groups taking over land stewardship, the group felt that they would likely do a better job than a local community group. However, the significant lack of community awareness of most of these groups negatively impacted the public perception of their ability to manage public land. Irrespective of land ownership, there was strong support for effective management guidelines that each organization or owner would be required to follow. The City's role may be to manage the land directly or manage the adherence to the conservation guidelines.

It was also agreed that if the land remains in private hands than the opportunity to conserve it for future generations is severely limited.

Appendix 2 – Summary of the Environmental Workshop

A series of focus group sessions were held to obtain the views and attitudes of various groups with respect to conserving natural areas with the City of Edmonton. Included were sessions with land developers, environmental groups, public, business/industrial and landowners. The following report covers highlights of the environmental group's session

Objectives

The main objectives of the Environmental Focus Group discussion were to:

- Identify and understand the environmental communities' priority and criteria for conserving natural areas within the City of Edmonton,
- Understand attitudes of the environmental community towards what land qualities are most important to conserve? and why?,
- Identify ideas on who should own, operate, fund and access conserved land,
- Identify attitudes towards fiscal priority for conservation; would the environmental community be willing to pay extra or forego other services.

Methods

Participant environmental groups were selected from a list established by the Consulting Team with additions and deletions recommended by the Steering Committee. Attempts were made to obtain individuals with an active and long-term affiliation in their respective organizations.

A four-hour session was held at the offices of the Land Stewardship Centre of Canada on August 2, 2000 from 10AM to 2PM (Appendix 1 – Agenda)

A series of three groups of questions were put to the focus group:

- The entire group met and discussed the list of questions appearing in Appendix 2.
- Half the group addressed detailed questions on wetlands appearing in Appendix 3.
- Half the group addressed detailed questions on wooded areas appearing in appendix 4.

In addition, participants were asked to fill out a worksheet on potential funding arrangements and sources. The following is a list of environmental groups and individuals who attended the focus group session:

Environmental Organization	Focus Group Representative
Edmonton Bird Club	Peter Demulder
Canadian Parks and Wilderness Society	Irma Rowlands
FEESA, An Environmental Education Soc.	Christine Della Costa
Ducks Unlimited Canada	Brett Calverley
North Saskatchewan Watershed Alliance	Adele Mandryk
Environmental and Outdoor Education Council	Liz Esposito
Capital City Health Authority	Elson Zazulak
Pembina Institute for Appropriate Development	Kim Sanderson
Alberta Conservation Association	David Prescott
Edmonton Federation of Community Leagues	Elizabeth Masland
Urban Sprawl Comm./Sierra Prairie Chapter	Chuck Chamberlin

In addition, members of the Natural Areas Steering Committee, Barry Breau and Charles Richmond were present as observers. Consulting Team members included Dagny Alston, Dave Westworth and Ernie Ewaschuk.

Results

The following is a summary of environmental focus groups' responses to the questions posed at the session held August 2, 2000:

Why is it important for you/your organization to conserve natural areas?

General Consensus

All participants agreed that it was important to them and their organization to conserve natural areas within the City of Edmonton. The most frequently expressed reason was to conserve the ecological functions these areas provide, including their importance for conserving biodiversity and sensitive species, their watershed value (water quality and quantity), and providing connectivity between natural areas. A number of participants also identified the aesthetic value of retained natural areas, particularly in inner neighbourhoods. Several participants also commented on the educational value of natural areas, noting that the ecology of native woodlands and wetlands is currently part of the elementary school curriculum. Several also recognized the value of natural areas in terms of human health and wellness. Functions related to this include improvement of air and water quality, recreational pursuits such as walking birdwatching, and the quality of community life. Other points made were the reduction of infrastructure costs (drainage) and the need to consider these values in terms of future growth of the City.

Specific Comments:

 It is important for children to have the opportunity to experience first hand natural communities.

- Since the river valley and ravines are not accessible to all Edmontonians, preserving natural areas within communities on the tablelands is important.
- Green spaces (raw natural land) are important for purifying water, maintaining indicator species, and controlling pests.
- Natural areas provide a touchstone or baseline for what the natural world really is, as opposed to constructed or landscape areas.
- Society depends on biodiversity and ecosystem health and a fundamental shift in municipal priorities from the present focus on increased growth is required to conserve these values.
- Walking groups, such as the Wildrose Ramblers, are interested in natural areas of sufficient size and diversity to pursue this pastime.

Do you think Edmonton has enough natural areas conserved? Not enough? Why?

General Consensus

All participants expressed the opinion that the City has not conserved enough natural areas and a need exists in conserving more sites. Increasing residential density as opposed to urban sprawl was identified as a way of conserving land for natural areas.

Specific Comments

- There is a need to conserve natural areas in communities on the tablelands – not all communities have them.
- It enriches the City and the neighbourhood to have natural areas

Who would benefit from conservation of the natural sites? Would anyone be disadvantaged? How?

General Consensus

The benefits of conserving natural area were seen to be wideranging. Beneficiaries included:

- people who value 'natural areas'
- the public as a whole benefits from improved quality of life
- the City of Edmonton green spaces increase the attractiveness of the city as a place to live
- developers/land owners increase lot prices adjacent to green areas
- native plants and animals

Conversely, groups that may be disadvantaged include:

- landowners restricted development opportunities may adversely affect land value
- public restricted use of natural areas
- residents adjacent to wetlands may experience more mosquitos

What types of natural areas are most important to you? Why?

General Consensus

The group identified a number of types of natural areas that should be conserved. Generally the group felt that all habitat types had conservation value. One-third felt that all types were important and did not specify particular types as priorities. The highest level of support (4206) was expressed for complex sites containing both wetlands and upland habitats. Wetlands, including all types of wetlands, ponds, and creeks ranked second at 15%, while wooded areas were third at 6%. One participant indicated that natural area

conservation programs should also consider restoration of disturbed sites.

Type of Natural Area	Level of Support (%)
Wooded	6
Wetlands	
All wetland types	9
Ponds and creeks	6
Wetland-upland complex	42
Disturbed site restoration	3
All types	33

Specific Comments:

- It enriches the city and the neighbourhood to have ponds and natural waterbodies.
- Based on the elementary school curriculum (grades 5 and 6) both wetlands and woodlands provide educational opportunities (particularly inner city areas).
- All types are important for birdwatching and related outdoor activities.
- A small woodlot saved by negotiating an agreement between a community organisation, the city, and a developer to reduce the size of developed parkland is highly valued by community residents.

What criteria should be used to prioritize conservation of natural areas?

General Consensus

The group felt that the inherent ecological value of a site expressed in terms of its biodiversity, watershed value, and importance for native species, should be the principal consideration in natural area site selection. The second most important criterion identified was size and diversity (24%), followed by linkages (14%) and educational value (8%). Less important criteria included development threat, location, buffer

availability, partnership/ stewardship opportunities, recreational opportunities and access.

Criteria	Level of Support (%)		
Size and diversity	24		
Location	4		
Linkages	24		
Ecological importance	34		
Educational value	8		
Recreational value	1		
Availability of buffer	4		
Development threat	5		
Partnership/stewardship opportunities	4		
Access and visibility of sites	1		

Specific Comments

- Even small stands are important to communities on table lands because not all people have access to ravines
- Small isolated natural areas may not be sustainable because they may become overused resulting in loss of species
- Small, "postage stamp" areas may have limited ecological value but warrant conservation because of their educational value
- Ponds developing from gravel pits also have value
- Ecological sustainability and connectivity are important considerations
- Every community should have a green space a city without this is not healthy
- All habitat types and successional stages should be represented to maximise diversity

Who should be the landholder of conserved natural areas?

General Consensus

Opinions differed widely among participants with respect to which organization was best suited to hold natural lands. The

following specific comments reflect the wide range of views expressed.

Specific Comments

- Lands held by private organisations or developers may not provide sufficient protection to retained natural areas
- Lands held by the city may provide greater security
- Since the City of Edmonton does not have a good track record in this area, a non-profit, charitable organisation, such as Nature Conservancy may have more credibility.
- Partnerships may afford greater conservation opportunities than single landholders (ACA, DU, others), therefore tenure shouldn't be restricted
- Whoever pays the taxes should be the landholder tax incentives should be made available
- Land ownership is less important although it should be consistent with the purpose and function of the natural area

Who should be responsible for management/ maintenance/operation of the site?

General Consensus

There was a general consensus that the City should be responsible for setting policy for management. A point was also made however that the City did not have a good track record with respect to management and operation of natural sites. A role was identified for local community groups and volunteer organizations to act as site stewards. A general concern was expressed over maintaining long-term continuity, regardless of who managed the sites.

Specific Comments

- Fairness with respect to distributing costs/time commitments is important
- Site-specific management guidelines are required

- There should be provisions for auditing of monitoring
- There is a need for flexibility in how these areas should be managed

How should these sites be managed? As a park? Protected (no-use)? Passive recreational use? Active recreational use? As a stormwater facility? Access? Signage? Long term maintenance?

General Consensus

Preservation of the inherent ecological values of a site was seen as the primary management objectives. These sites should be designated and managed as natural areas – not as parks! Several participants pointed out that site-specific management guidelines are needed based on an overall conservation policy. Recreational uses should be compatible with the management policy.

Specific Comments

- The City should be more proactive in the management of these natural areas
- A strong network of partners is needed one group cannot do this alone
- These sites should not be managed for intensive recreation

Who should have access to the site?

General Consensus

It was generally agreed that the type and degree of access should reflect site conservation objectives. Zoning was suggested as a tool for controlling access within protected areas. Access should be limited to low-impact activities (e.g., unpaved trails). Restricted access by ATV's, dogs, and pets was also mentioned.

What barriers do you see would have to be overcome to conserve natural areas?

General Consensus

A number of potential barriers were identified during the small group discussions. These included:

- attitude of developers (growth at any cost)
- funding costs of acquiring and maintaining natural areas
- political will, including legislation, policy, and attitudes of city council – unwillingness to revoke previous agreements (many sites are grandfathered)
- public perception with respect to the value and use of natural areas
- liability and safety concerns (e.g., children in wetlands, wildlife collisions with vehicles)
- maintaining the hydrology and ecological function of wetlands
- overall population growth

Who should fund these types of projects?

General Consensus

There was widespread agreement among participants that the costs of retaining and managing natural areas is an area of public responsibility although sources of funding should be examined. Potential opportunities included:

- private conservation organisations (e.g., Ducks Unlimited)
- user fees, levies (e.g., water rate increase or gas tax)
- corporate donations
- creative funding partnerships
- establishment of a conservation fund
- "green taxes" on specific commodities
- conservation easements

Attachment 1: Revised Agenda

10:00-10:05 AM Welcome – Barry Breau (5 min.)

10:10 AM Project and Process - Dave Westworth (5 min.)

- Dagny Alston (5 min.)

10:20 AM Large Group Discussion – Dagny, Ernie, Dave (75 min.)

11:35 AM Break (prioritize areas and criteria)

Lunch

12:15 PM Small Group Discussion – Wetlands, Wooded (60 min.)

1:15 PM Funding Worksheet and Discussion – Dagny (30 min.)

1:45 PM Wrap-up and Close

2:00 PM Adjourn

Attachment 2: Large Group Discussion

- 1. Is it important to you/your organization to conserve natural areas within the City of Edmonton?
- 2. Why is it important to you/ your organization to conserve natural areas?
- 3. Do you think Edmonton has enough natural areas conserved? Not enough? Why?
- 4. What types of natural areas are most important to you? Why?
- 5. What criteria should be used to prioritize conservation of natural areas?
- 6. Who should be the landholder of conserved natural areas?
- 7. Who should be responsible for management/maintenance/operation of the site?
- 8. Who should have access to the site?

Attachment 3: Small Group Discussion – Wetlands

- 1. Which of these wetland types would you support as conservation areas? Why? (list specific qualities)
- 2. What barriers do you see would have to be overcome to conserve the above areas?
- 3. Who would benefit from conservation of the above sites? Would anyone be disadvantaged? How?
- 4. Who should fund these types of projects?
- 5. Who should manage/operate these sites?
- 6. How should these sites be managed? As a park? Protected (no-use)? Passive recreational use? Active recreational use? As a stormwater facility?
 - Access
- Public facilities
- Signage
- Long term maintenance

Attachment 4: Small Group Discussion – Wooded Areas

- 1. Which of these woodland types would you support as conservation areas? Why? (list specific qualities)
- 2. What barriers do you see would have to be overcome to conserve the above areas?
- 3. Who would benefit from conservation of the above sites? Would anyone be disadvantaged? How?
- 4. Who should fund these types of projects?
- 5. Who should manage/operate these sites?

- 6. How should these sites be managed? As a park? Protected (no-use)? Passive recreational use? Active recreational use?
- Access
- Public facilities
- Signage
- Long term maintenance

Appendix 3 – Summary of the Developers Workshop, June 21 2000: Urban Development Institute

Workshop participants were asked to individually list their concerns with respect to the planning and development process as it applies to the conservation of natural areas in the City of Edmonton. Five broad concern groups were identified and are listed below together with individual's listed concerns.

Small groups wrote a paragraph describing the broad concern and formulated objectives, which would substantially reduce or illuminate the concern.

Who Pays for It

Individual Concerns (9)

- Expropriation of land without compensation
- Lack of City support for natural areas
- Incremental servicing costs onsite
- Reduction of benefiting area for offsite costs
- Policy remain voluntary on conservation
- Lack of flexibility for compensation for natural areas (e.g., Municipal Reserve, Environmental Reserve, environmental easement, cash, Density Transfer, Trade for City Land, etc.)
- Alternative equitable method for acquisition of natural areas by City
- Information requirements at ASP stage Voluntary policy
- City commitment to natural areas. Prepared to "pay" for 62 sites

The Issue

The current process places the costs of a public resource/ amenity on the developer, City or immediate resident. As a public resource, it should be paid for by an agency with a corresponding mandate. This precludes private or other agencies/groups, which have a narrower mandate.

Towards a Solution

- To align payment for natural areas with groups that have benefits from and a specific mandate aligned with the natural area.
- To distinguish between normal costs of creating neighbourhood amenities / resources and the costs of managing them in perpetuity, and the costs of creating and managing natural areas.
- To establish an analytical framework to evaluate the types of cost associated with a "natural areas reserves" that addresses onsite, offsite costs, over expenditures/PAC's and any incremental costs associated with the NAR (planning costs, environmental studies).

Process Costs

Individual Concerns (5)

- Impact on housing affordability
- Lack of City support for natural areas.
- Incremental servicing costs onsite
- TAX/PAC incentives on environmental easements
- Delays on voluntary policy

The Issue

The inclusion of an environmentally sensitive area within a neighbourhood has the potential for increasing housing and development costs through:

- process delays
- increased PAC's/levies

- lost opportunity costs
- increase in salable unit land and development costs

Towards a Solution

To help alleviate these concerns, it would be necessary to:

- Have sites for preservation identified at the earliest possible point in the development process, complete with function, objectives, enhancement, and long term maintenance plans. All study costs should be recoverable in accordance with a compensation policy.
- Have in place a standard policy of compensation so that an individual developer on whose land a N.A. is identified is not disadvantaged by supporting its preservation. The real costs identified above and all real costs must be addressed in the compensation policy.

Process/Regulatory Authorities

Individual Concerns (10)

- Appeal process
- Very little direction re: planning process
- No firm policy (City)
- Policy remain voluntary conservation
- Relative weight of stakeholders with regard to development (e.g., NGO's vs. neighbouring residents)
- Information requirements at ASP Stage when voluntary policy
- Deal with natural areas in advance of development
- Negotiating with someone who has no authority
- Provincial jurisdiction under Public Lands Act, Water Act, etc.
- Stacked Terms of Reference on natural areas (re: economics, etc.)

The Issue

 There is a lack of authority and guidelines to deal with applications and no regard for the relative weight of input nor an appeal regarding the process. The voluntary component is not absolute (i.e. terms of reference ASP)

Towards a Solution

- To make the information required on N.A. voluntary, i.e. ASP.
- To provide a mandate and direction to staff to process applications. Need to delineate responsibilities and allocate budgets. Flexibility is important on a case by case basis, depending on tenure (e.g. City, NGO, conservation easement, etc.).

Site Selection and Urban Compatibility

Individual Concerns (11)

- recognition of integration of natural areas with urban development
- Urbanization preludes some environmental conservation
- Long term maintenance of natural areas Community Services
- Acknowledgement and respect for alternative design (e.g., boat launch, 60 HP motor boat, weed spraying, etc.)
- Control over use of natural areas following development (e.g., fires, security, dogs, cats, etc.)
- Highest and best use of land as a natural area
- Linkage of natural areas in a meaningful way
- Managing public expectations neighbours and city-wide.
- Size of area required to conserve certain features
- Who has the liability for long term sustainability?
- Nature is dynamic not static

The Issue

There is a concern that sites selected for conservation will be incompatible with future adjacent urban uses.

Towards a Solution

To deal with the above concern, site selection must include:

consideration of highest and best use (cost / benefit analysis)

- evaluation of long term maintenance costs and commitment of City to maintenance / management and liability
- recognition of the impact of uses made of the site by nearby residents
- alignment of N.A. needs with resident's expectations
- potential to integrate with other nearby open space
- potential to incorporate modifications to enhance viability / compatibility
- size of site required to maintain N.A. viability
- industry buy-in to site selection criteria

Public Expectations/Acceptance

Individual Concerns (3)

- Developer painted as "bad guy"
- Managing public expectations neighbours and city wide
- Lack of public acceptance of natural areas in the City ("slough mentality")

The Issue

Natural areas are sold on their perception, by the City during the planning process, by the media campaign to force the developer, and by the marketing program the developer uses to sell the area. The reality faced by adjoining residents and the practicalities and risk faced by the developer often fails to live up to that perception.

Towards a Solution

- To be clear on what the reality of the natural area will be.
- To communicate the reality in an understandable way.
- To retain flexibility to develop different natural areas and marketing opportunities.
- To attempt to blend the perception with the reality, to achieve compromise that allows natural areas to be conserved or developed or dealt with in creative ways to allow continued enjoyment by residents.

 To establish different long-term management options for Natural Area Reserves.

Appendix 4 – Summary of the Developers Workshop, September 15 2000: Tool Kit

Introduction

A meeting was held on September 15, 2000 at the Edmonton offices of the Urban Development Institute (UDI) to discuss with member, some possible tools that might be used to assist in the preservation of Natural Areas in the City of Edmonton. This meeting was arranged as a follow-up to the UDI June 21, 2000 workshop which identified five major issues concerning the existing planning and development process as it applies to the conservation of natural areas in the City of Edmonton.

• Who pays for it?

These were:

- Process Costs
- Process/Regulatory Authorities
- Site Selection and Urban Compatibility
- Public Expectations/Acceptance

The possible tools would largely address the first two concerns

Literature Review

The results of a literature review on the subjects of tools or techniques used elsewhere in North America were distributed and briefly discussed (Attachment 1). These tools or techniques are largely based in the United States and may or may not be desirable or transferable to Alberta without new, enabling legislation.

Creating A Good Environment

There needs to be a declared intention by the City to preserve specific natural areas as a matter of public record. This might be achieved via the City's Municipal Development Plan where a map showing major, sustainable natural areas is included along with citywide environmental management policies. A key consideration is whether or not the retention of these major natural areas is voluntary or not. Where it is **not** voluntary and where it is not covered by Provincial Legislation (e.g. Public Lands Act, Water Act, Municipal Government Act), then some form of compensation may be required (lease, purchase, etc.).

Where it <u>is</u> voluntary, then some incentives for the landowner may be appropriate (e.g. no *municipal property tax* owing on Natural area portion of land so long as it remains in its natural state). Other possibilities include tax deferral until such time as the surrounding property becomes developed and natural area becomes municipal reserve.

The importance of timing on cost is also important. For example, it is easier to acquire/preserve natural areas long before they are required for urban development. To wait until lands are ripe for development can mean raw land values are as high as \$50,000 - \$60,000 per acre and the lands have already been included in offsite cost levy calculations. These offsite cost levies can add substantially to the raw land costs. These offsite cost levies vary throughout the city and can range from \$10,000 to \$20,000 per acre for storm, sanitary, and transportation facilities combined. Therefore, the earlier that these major natural areas are known, then the more likely that they can be excluded initially from these offsite levy calculations or that the original offsite levy numbers can be adjusted to exclude the natural areas. Also, early identification means that the desired sites can be acquired for much less

money and that lands purchased by developers for suburban development can be appropriately discounted.

Municipal Reserve

The interpretation of Municipal Reserves as required under the Municipal Government Act may be an important tool in considering natural areas which don't automatically fall into Environmental Reserves (e.g. permanent creeks, rivers and lakes). Section 671(2) defines municipal reserve, school reserve or municipal and school reserve uses as:

- a public park
- a public recreation area
- school authority purposes, or
- to separate areas of land that are used for different purposes

A municipality could choose to take natural areas or a portion of natural areas as part of a developer's required contribution of up to 10% dedication in a typical subdivision,. Alternatively, a municipality could take less than the maximum 10% in return for dedication of larger natural areas or wetlands, which might otherwise be developable, in their natural state. This is an important consideration, particularly for woodlots.

Although attractive in theory, this tool needs to be applied carefully. Each development must be approached on its own merits, and the costs and benefits of municipal reserve dedications on natural areas weighed accordingly.

Tax Incentives

A forgiveness, partial forgiveness, or tax deferral of the municipal portion of property taxes (so long as the area remains in its natural state) may be an incentive for landowners that are holding land for eventual urban development or are using land for other purposes such as agriculture.

Servicing Costs

Relief or partial relief from servicing costs may help to reduce the costs to developers of conserving natural areas. These can be both onsite and offsite servicing costs.

Offsite servicing costs can be relaxed or forgiven by excluding or partially excluding the acreage of the natural area from the offsite cost levy assessment for such infrastructure as major sanitary, storm and transportation facilities, a portion of which services the development on the lands.

Onsite servicing costs may be increased due to the requirement to route linear infrastructure around the natural areas, resulting in extra lengths without the benefit of servicing adjacent lands over these increased distances. Even though Section 677 allows for a municipality to permit a roadway or public utility to be installed and maintained on, in, over, or under reserve lands, the City has been reluctant to do so. Some form of credit might be given to the landowner for their additional costs in order to preserve the natural area in an unaltered state.

Stormwater Management

Wetland natural areas can be used in conjunction with traditional stormwater ponds. By diverting a portion of stormwater runoff to the wetland, the wetland may be able to be sustained. This also may result in some cost savings in the sewer management system.

Land Exchange

Where the City has an inventory of developable lands, a land exchange with the City could be explored. This exchange could be based upon area or value.

Density Transfers/Bonusing

Transfer of development rights in the form of density may be possible between properties owned by the same company or person or sold through a banking system of credits. A banking system of credits may be difficult to administer.

Although sound in theory, this is difficult to apply in the suburbs of Edmonton. With the possible exception of commercial land, the suburban market usually won't support the densities already allowed for under the City's Land Use Bylaw. Therefore, in the case of suburban residential and industrial land, there is little or no advantage to the developer of transferring additional density from one parcel of land to the other since the market will not support it.

This technique might work in the case where density is allowed to increase in downtown Edmonton by transferring development rights attached to a natural area in the suburbs to a downtown property where the market would support such an increase in density.

Natural Areas Fund

A Natural Areas Fund could be established by the City to be used for the purchase of natural areas. Such a fund should be supported by all city taxpayers through the property tax base. This fund might also be used to underwrite enhancements to natural areas (e.g., construction of boardwalks, paths, viewing areas, etc.).

Realty Fund

Perhaps a tiny percentage of every real estate transaction could be the source of money for a Natural Areas Fund. This would spread any financial burden to all property within the City. Although discussed as a possible technique, a natural areas fund supported by the property tax base was preferred.

Utility Linkages

Perhaps utility rights of ways could be used as pathways to link natural areas. Compatible vegetation may be used to provide some habitat for animals, birds, etc. Although not within the developer's responsibilities, no concerns were raised regarding utility companies adopting this technique through urban areas.

Modified Urban Standards

Perhaps some thought could be given to modify urban standards in a neighbourhood that contains a natural area. This might include narrower local roads, narrower sidewalks, sidewalks on one side, no sidewalks, asphalt sidewalks, etc.

Other General Observations

A continuing theme throughout the discussions with UDI members was the urban compatibility and sustainability of natural areas along with the ongoing stewardship responsibilities. The City saw the importance of such things as an environmental management plan, which provides for sustainability and stewardship, while also providing for different levels of public interaction, as critical to the success of a natural area program.

Public education as to the value of natural areas was also seen to be important, particularly for wetlands. Without public respect and acceptance, the best intentions to preserve natural areas by landowners, developers and the City may go for naught if the general public view wetlands as nuisances (e.g., safety hazard for children, breeding ground for mosquitoes, noisy frogs, etc.) or wooded areas as potentially unsafe environments (e.g., personal security, fire hazard, etc.).

Attachment 1 – A Literature Review - Potential Tools for Use by Developers in Natural Area Conservation

Following is summary of potential tools for natural areas conservation used by various governments and the private sector in other jurisdictions in Canada and North America.

Mitigation Sites

When developers undertake a project that affects adjacent lands, they are often required to provide mitigation. Through mitigation, the developer agrees to provide land, wetlands, reforestation or another form of benefit for the negative impacts their project has on adjacent lands. Lands may be donated where the mitigation is to occur or publicly owned sites may be selected for enhancement. Mitigation efforts can also sometimes be directed toward extending, completing or enhancing greenway or open-space corridors.

Mitigation Lands and Banking

Mitigation land is a publicly-owned and managed natural site that has been purchased or protected with public or private funds, in the form of direct payments, voluntary land donations and/or required mitigation credits to permittees for set fees, which may be banked. Mitigation banking was initiated in the United States to meet wetland requirements for development impact. Mitigation occurs off-site, but usually in the same

area. Wetland mitigation fees are based on impaired acreage or wetland value and sometimes, credits may be sold to other permit applicants.

Management Agreements

A management agreement with a landowner may be obtained that secures protection of a parcel of land without reducing the rights of the landowner. This can be particularly useful for wildlife management or preservation of habitat. For example, many utilities in the United States are managing corridors for wildlife in certain areas, allowing shrubs and small trees to grow instead of clear cutting beneath power lines.

Ordinances and Land Use Programs

Many jurisdictions in the United States have established special programs that regulate land use and protect natural features. Some jurisdictions require new developments to include a specified percentage of open space. By letting a developer know about local green space plans (e.g., greenway corridors, significant natural areas), it may be possible to incorporate or expand natural features into the site plan for the new development. The Urban Land Institute has indicated that landscaping and preservation of mature trees can increase financial returns of 5-15% depending on the type of project in the United States. Furthermore, preservation of mature trees has been reported to increase the value of lots by 20-30% than similarly sized lots that were landscaped following construction.

Transfer of Development Rights Program

In a Transfer of Development Rights Program, developers can purchase development credits from people who own open space or natural areas. A conservation easement is placed on the open space if the owner sells his or her development rights to a developer. This tool is best suited for agricultural areas that are undeveloped and under pressure to become residential areas. Transfer of Development Rights Programs in the United States have permanently protected open spaces while compensating landowners who voluntarily restricted development on their property.

Purchase of Development Rights Program

In a Purchase of Development Rights Program, municipal governments can by conservation easements on land that have been identified as important open space. Purchase of Development Rights Programs permanently protect open space however, the municipal government must purchase conservation easements and dedicate staff to program administration.

Cluster Subdivision

A cluster subdivision generally sites houses on smaller parcels of land, while the additional land that would have been allocated to individual lots is converted to common shared open space for the subdivision residents. Typically, road frontage, lot size, setbacks and other traditional subdivision regulations are redefined to allow the developer to preserve ecologically sensitive areas, historical sites, or other unique characteristics of the land being subdivided. Developers can often experience cheaper site development costs involving road construction and water/sewer infrastructure. These reduced costs often offset the costs of restoration or development of amenities such as trails in open space areas.

The value of homes in open space developments has been found to appreciate at a greater rate.

Land Exchange

Land owned by a large public or private landowner, which is not needed for open space conservation, is made available for exchange for private lands needed for conservation.

Conservation Partnerships

Conservation partnerships are partnerships between conservation organizations, various levels of government and private industry. Through these partnerships, industrial and commercial activity is permitted on or near ecologically valuable land without threatening the natural features or resources on that land. Working together, conservation groups, government and private industry develop industrial and/or commercial uses that might be compatible with ecologically important land. Conservation partnerships in the United States have enhanced private sector land values because of the proximity of environmentally protected land.

Best Management Practices

Best management practices involves developing a list of ideal management practices for use in developments or activities in sensitive areas such as steep slopes, and near watercourses or natural areas.

Natural Resources Zoning Districts

This approach involves developing new zoning districts designed to limit uses on or near natural areas.

Tax Breaks/Tax Deferrals

Tax breaks or tax deferrals may be used to lower tax assessments for properties that are kept in a natural site. The additional taxes are not due until the property is disturbed or developed.

Density Transfers

Through planned unit development or cluster subdivision provisions, density within a development can be transferred to non-natural resource areas.

Appendix 5 – Summary of the SWOT Analysis of Short-listed Sites

Candidate Natural Area: NW7035

Strengths:

- One of the largest remaining forest stands on Edmonton tablelands.
- Excellent example of relatively undisturbed aspen forest.
- Linkage to wetland on east side which is a confirmed nesting site of the rare black-crowned night heron.
- Previously identified as one of the best wildlife habitats in Edmonton.
- Close to Kinokomau Lake.

Weaknesses:

- Close proximity to industrial site.
- Significant industrial intrusion portion of stand recently cleared for CN intermodal yard, pipeline corridor.
- Current plans for fill removal by Inland Cement agreement to save site would be require identification of alternative sources of fill.
- Site extends into RDA.

Opportunities:

- Potential to establish open space linkage with other regionally significant natural areas (e.g., Kinokomou L.
- Wetland currently considered secure.

Threats:

- Site may be affected by future ring road expansion.
- CN expansion of Intermodal Yard.
- Portion of remaining area may be lost due to fill removal by Inland Cement.

Additional Notes:

- Significant industrial threats may limit conservation opportunity.
- Present landowners have a past record of working constructively to preserve natural sites (i.e., Kinokomu Lake).

Candidate Natural Area: NW7018

Strengths:

- One of the best remaining wetlands in north Edmonton.
- Site contains a diversity of wetland habitats including deep open-water marsh, emergent communities, sedgereedgrass meadow and willow thickets, along with a small (1ha) aspen stand on the east side.
- Wetland margins do not appear to be impacted by livestock grazing.
- Potential connectivity to other habitat areas.
- No development plans in place currently zoned Agriculture.

Weaknesses:

- Future ring road development in RDA may affect south end of site.
- Portions of basin previously cultivated during drought periods.
- If conserved the wetland will likely be incorporated into a stormwater management system.

Opportunities:

- Excellent opportunities for wildlife viewing, outdoor education.
- May be opportunity for provincial and regional involvement.

Threats:

 Southern part of basin will likely be impacted by future roadway development. Alberta Infrastructure in currently examining mitigation options to offset these losses.

Candidate Natural Area: NW 384

Strengths:

- Relatively large, undisturbed, deciduous forest, containing white birch as a codominant species stand.
- White birch stands are rare on tablelands may be unique in Edmonton.
- Linkage to North Saskatchewan River Valley.
- Previously identified as important deer habitat.
- Moderate land cost.

Weaknesses:

- Site is presently remote limited accessibility to existing communities.
- May be perceived as part of the North Saskatchewan River Valley – ie. there are already plenty of trees in the area.
- May be perceived as a source of wildlife pest species by owners of adjacent golf course.

Opportunities:

- Possible linkage to adjacent natural areas in Parkland County to the west.
- Golf and country club may be possible partner.
- May be opportunity to protect site by extending North Saskatchewan River Valley Bylaw to include the upper part of this tributary drainage.
- Site is part of an 80 acre parcel that is currently for sale.
 The landowner has indicated interest in considering various conservation proposals.

Threats:

- Housing development (rural subdivision) around golf course.
- The threat is considered immediate as present owners were denied approval of a rural residential development and are preparing a revised development application.

Additional Notes:

 Linkage to North Saskatchewan River Valley is a major consideration for this site. Agreements with adjacent landowners may be necessary to maintain or enhance this linkage.

Candidate Natural Area: NW7060 Henry Singer Sports Field

Strengths:

- A complex of several permanent and semi-permanent wetlands adjacent to Sports Field and 142 ST.
- A diversity of wildlife species previously recorded at site.
- Portion of site owned by Edmonton Community Services.
- Roadway network will facilitate long-term retention of site.

Weaknesses:

- Wetland only no associated treed upland habitat, although regeneration of woody vegetation is presently occurring.
- Basin previously altered by agricultural use.
- Other wetlands in region provide higher quality wildlife viewing opportunities (e.g., Kinokomau Lake, Big Lake).

Opportunities:

- Wildlife viewing, nature appreciation, outdoor education opportunities in conjunction with use of Sports Field.
- Upland habitat enhancement opportunities.
- Opportunity to develop joint site management plan with Community Services.

Threats:

- Wetlands could be threatened by future sports field development. Development plan is in place for this property.
- Future upgrading of 142 St. would impact wetland.

Additional Notes:

 Since site is presently under City (Community Services) control the site offers excellent opportunity for natural area conservation.

Candidate Natural Area: NW7010

Strengths:

- A wetland-woodland complex consisting of an extensive balsam poplar-dominated woodlot, a large, open-water wetland and a smaller, ephemeral wetland.
- Provides habitat for a diversity of parkland wildlife species.
- The site is believed to contain natural springs.
- The proposed Discovery Village residential development and health and wellness center would conserve a portion of the site.
- City of Edmonton also owns some land associated with this site.
- Good accessibility to neighbourhoods.

Weaknesses:

- Land costs are comparatively high.
- Lewis Farms Area Structure Plan in place.

Opportunities:

 A portion of the site is likely to be conserved as part of the proposed Discovery Village development. An opportunity may exist to acquire additional acreage that in conjunction with Discovery Village and land currently owned by City would comprise a significant natural area complex.

Threats:

 Unprotected portions of site could be lost to urban and infrastructure development.

Additional Notes:

 By building on conservation plans developed for Discovery Village, further conservation efforts may have a good likelihood of success ('quick win').

Candidate Natural Area: NW7009 Mcdonagh Peatland

Strengths:

- Site may be unique in Edmonton a remnant of a tamarack-black spruce bog. containing a diverse assemblage of wetland vegetation species including a number of rare species of plants.
- Presence of marl pools represent interesting geological and ecological feature.

Weaknesses:

- A legitimate concern exists about the sustainability of the site, given the amount of disturbance that has occurred to date and the potential for alteration of site hydrology to adversely affect the ecology of the peatland.
- NSP and ASP in place.
- Land costs are comparatively high.

Opportunities:

May have high value for nature interpretation and outdoor education.

Threats:

Residential and infrastructure development.

Additional Notes:

 A hydrological or hydrogeological assessment may be required to determine site sustainability if conservation opportunities are identified.

Candidate Natural Area: SE 5007

Strengths:

- Previously identified as a regionally significant site.
- Diverse upland-wetland complex.
- Good example of hummocky moraine landscape.
- High wildlife diversity.

- Wetlands intact (land use was hay production and cultivation rather than livestock grazing).
- May have linkage with nearby sites in counties of Leduc and Strathcona.
- Site accessible to residents of Millwoods, Sherwood Park, Leduc, Beaumont.
- No plans in place.
- Land is comparatively cheaper.

Weaknesses:

- Approximately 60% of site was previously cleared for agriculture.
- The land is subdivided for large acreages. A (20 acre) conservation program would require involvement of a number of landowners.
- Previous contacts by City indicates that one landowner is cynical towards natural area conservation initiatives.

Opportunities:

- Potential to complex with adjacent candidate natural areas as well as natural areas in Counties of Strathcona or Leduc.
- Excellent recreation potential (wildlife viewing, walking trails, outdoor education).
- Some of the landowners that have been contacted indicated willingness to preserve natural areas.
- High potential to attract conservation partners..

Threats:

- Potential conversion to livestock operation, which would further degrade site.
- Potential for additional country residential development.

Additional Notes:

 Currently may represent best opportunity for conservation of a large, ecologically diverse site on Edmonton tablelands.

Candidate Natural Area: SE5004 - Southeast Natural Area

Strengths:

- Diverse upland-wetland complex.
- Site comparable to SE 5007, which was previously rated Regionally Significant.
- Best example of hummocky moraine landforms in City.
- High wildlife diversity.
- May have linkage to adjacent natural areas or sites in Counties of Leduc and Strathcona.
- No plans in place.
- Land costs comparatively low.

Weaknesses:

- Approximately 70% of site previously cleared for agriculture.
- Some wetlands heavily grazed by cattle.
- Large number (as many as 10) landowners (acreage development).
- Not quite as accessible to population base.
- Potential for wildlife mortality because of proximity to Highway 14.
- Service access needs might add to cost.

Opportunities:

- Excellent recreation potential (wildlife viewing, walking trails, outdoor education).
- Potential conservation partnership opportunities with province or regional neighbours.
- Potential servicing costs for residential might be higher.

Threats:

- Site potential could be lost through more intensive agricultural use.
- Appears to have high potential for golf course or country residential development.

Candidate Natural Area: SE5010 -

Strengths:

- Largest open-water wetland in south Edmonton.
- Site partially conserved.
- Breeding and staging habitat for a diversity of waterfowl species.
- Shorelines relatively intact.
- Previously identified as a REGIONALLY SIGNIFICANT wetland.
- No development plans in place.

Weaknesses:

- South end of wetland bisected by Ellerslie Road and 17th Street.
- Country residential development along portion of shoreline.

Opportunities:

- Excellent wildlife viewing opportunities.
- Potential for linkage to Koroluk-Kozub Natural Area and other natural areas in region.
- Land along east shoreline is currently for sale. At least one landowner has expressed an interest in developing conservation program.

Threats:

- May be impacted by future upgrading of Ellerslie Road or 17 Street.
- Potential for further agricultural encroachment or additional country residential development.

Additional Notes:

 Need to verify current land status. Site was listed in Geowest report as being either fully or partially conserved, however some of the land bordering the lake is currently for sale and landowners contacted were not aware of existing conservation agreements.

Candidate Natural Area: NE8002

Strengths:

- Complex of upland deciduous forest, permanent and semi-permanent wetlands.
- Site contains some old-growth balsam poplar which may provide important habitat for cavity-dependant wildlife species.
- Stand appears to be largely undisturbed by surrounding agricultural usage (cultivation rather than livestock grazing).
- Good visibility from Manning Fwy access road from Fort Road.
- Comparatively low lost.

Weaknesses:

 Isolated site situated between Manning Fwy and Fort Road – long distance from current residential development.

Opportunities:

- May represent best opportunity to conserve natural woodland on tablelands in NE Edmonton.
- May be opportunity for conservation easement.
- One of the current landowners indicated willingness to consider conservation proposals.

Threats:

- High risk for wildlife collisions with vehicles.
- Potential for future country residential development.
- Possible conversion of current agricultural use to cattle grazing.
- Some clearing of trees is presently occurring on south end of site.

Additional Notes:

 Threat to natural area may be imminent. Immediate action may be required to conserve site.

Candidate Natural Area: Moran Lake

Strengths:

- Largest unprotected permanent natural waterbody in Edmonton (other than Kinokomau Lake).
- Best candidate for a wetland natural area in NE Edmonton.
- May be hydrologically important to Horsehills Creek.
- Adjacent lands in cultivation shoreline not degraded by livestock use.
- No development plans in place.
- Land currently owned by Province of Albert.

Weaknesses:

- Connection to Horsehills Creek has been degraded by past land use (no functional riparian zone along creek in reach immediately downstream of Moran Lake.
- Cultivation within 50m on east side of lake.
- On flight path to Namao airport DND may have concerns with potential bird collisions with aircraft.

Opportunities:

- Excellent wildlife viewing opportunities.
- Good access (adjacent to Manning Fwy).
- Potential green space corridor link with lower Horsehills Creek and North Saskatchewan River Valley.
- Potential partnership opportunities with Province or private organization (Ducks Unlimited or an industrial partner because of exposure on Manning Freeway).
- Servicing costs might be very low.
- Current agricultural lessee has strong conservation interests and has indicated willingness to participate in conservation and stewardship program.

Threats:

- Minor noise and pollution concerns associated with proximity to Manning Fwy.
- Adjacent to RDA south end of site might be influenced by future expansion of Anthony Henday.

- Water quality might be affected by agricultural chemicals.
- Potential for future country residential development.
- Anthony Henday servicing cost may make site appealing for other development.

Additional Notes:

 Site is currently under provincial ownership. Initial contacts with Alberta Infrastructure and Alberta Environment indicate interest in site conservation.

Candidate Natural Area: Lower Horsehills Creek Natural Area

Strengths:

- The only portion of Horsehills Creek that still has a relatively intact riparian zone.
- High habitat diversity.
- Functional linkage to North Saskatchewan River Valley.
- Good accessibility only available natural area or green space for Evergreen mobile home park.
- Partially protected under river valley bylaw.

Weaknesses:

- North side of natural area has been extensively disturbed by agricultural and recreational (off highway vehicle) use.
- Flow altered by upstream impoundment (irrigation water for tree nursery) and upstream agricultural uses.
- Possible water quality impacts from upstream uses.
- Proximity to residential impacts (ie. dogs, cats, kids, dumping etc.).

Opportunities:

- Excellent recreation opportunity potential trail system linking with North Saskatchewan River Valley.
- Good educational opportunities good example of fluvial morphology and riparian vegetation succession.
- Potential to acquire through ER.

Threats:

- Loss of upstream hydrological function.
- Uncontrolled recreational use.

Additional Notes:

 'RECONFIRM' status under North Saskatchewan River Valley Bylaw. It is not clear whether Bylaw is achieving conservation objectives for potential natural areas or whether additional protection for this site is needed.

Candidate Natural Area: Riverbend

Strengths:

- Best and most extensive example of relatively undisturbed riparian forest in Edmonton.
- At least REGIONALLY SIGNIFICANT.
- Excellent example of fluvial geomorphology and point bar succession.
- Very high wildlife habitat value.
- Likely strong regional partner support.
- Comparatively low land costs.

Weaknesses:

- Portions (approx 20%) of site previously disturbed by logging, agricultural clearing, road construction and gravel removal.
- Present accessibility is poor.

Opportunities:

- Could be an integral component of Edmonton's North Saskatchewan River Valley and Ravine System and natural areas network.
- Accessible by water.
- Site affords excellent recreational and educational opportunities.
- Present landowners indicate an interest in considering conservation proposals.

Threats:

- High threat for gravel extraction as a result of recent increases in aggregate prices.
- Potential for agricultural expansion (e.g., market garden).

Additional Notes:

 'RECONFIRM' status under North Saskatchewan River Valley Bylaw. It is not clear whether Bylaw is achieving conservation objectives for potential natural areas or whether additional protection for this site is needed.

Appendix 6 - Legal Tools to Conserve Natural Areas within the City of Edmonton

Category 1: Designation Tools

TOOL	ADVANTAGES AND BENEFITS	DISADVANTAGES AND COSTS	COMMENTS	
Sale to and establishment by the federal government as a national park, park reserve, national historic site, migratory bird sanctuary or national wildlife area	 High degree of protection Difficult to undo Flexible protection Federal government carries out monitoring, upkeep and enforcement, less costly to City and developer 	 Dependent on action from the federal government Provincial government must agree Costly to the federal government Difficult to meet criteria 	See the Canada National Parks Act, the Migratory Birds Convention Act, the Canada Wildlife Act	
Gift to and establishment by the federal government as a national park, park reserve, national historic site, migratory bird sanctuary or national wildlife area	 High degree of protection Difficult to undo Flexible protection Federal government carries out monitoring, upkeep and enforcement; less costly to City and developer Tax advantages if a gift of capital property Could be an ecological gift 	 Dependent on action from the federal government Provincial government must agree For best tax benefits must qualify as an ecological gift Costly to the land owner Difficult to meet criteria 	See the Canada National Parks Act, the Migratory Birds Convention Act, the Canada Wildlife Act	
Sale to and designation by the provincial government as a provincial park, wildlands park, recreation area, ecological reserve, natural area, wilderness area or wildlife sanctuary	 Varying degrees of protection depending on designation Some designations are difficult to undo Flexible protection Provincial government carries out monitoring, upkeep and enforcement; less costly to City and developer 	 Dependent on action from the provincial government Costly to the provincial government Difficult to meet criteria 	See the Wilderness Areas, Ecological Reserves and Natural Areas Act, the Provincial Parks Act and the Wildlife Act	

Category 2: Sales and Purchase Transactions

TOOL	ADVANTAGES AND BENEFITS	DISADVANTAGES AND COSTS	COMMENTS
Sale to the City	SimpleFlexible protectionHigh degree of protection if City agrees	 Costly for the City Land owner must be willing to sell the land City free to develop land in future Does not bind future owners 	
Sale of Conservation Easement to City or other Government Body	 Simple Flexible protection High degree of protection Binds future owners Less costly than sale of land itself 	 Costly to the City or other government recipient Easement must fit within purpose set out in s. 22.1(2) of EPEA Easement can be terminated by agreement or by the Minister of Environment 	 The City, Alberta or government agencies qualify to accept a grant of a conservation easement.
Sale to an ENGO	 Simple Flexible Unlikely to be undone ENGO carries out monitoring, upkeep and enforcement; less costly to City and developer 	 Costly to the ENGO Land owner must be willing to sell the land 	
Sale of Conservation Easement to ENGO	 Simple Terms of the agreement can be modified by agreement Binds future owners ENGO carries out monitoring, upkeep and enforcement; less costly to City and developer 	 Costly to the ENGO who must pay market value for the easement Easement must fit within a purpose set out in s. 22.1(2) of EPEA Easement can be terminated by agreement or by the Minister of Environment 	The ENGO must be a "qualified organization" as set out in s. 22.1(1)(e)(iv) of EPEA.

Category 3: Gifts

TOOL	ADVANTAGES AND BENEFITS	DISADVANTAGES AND COSTS	COMMENTS
Gift to City	 Simple Flexible protection Tax benefits if a gift of capital property Could be an ecological gift High degree of protection if City agrees 	 Costly to Owner Land owner must be willing to give the land For best tax benefits must qualify as an ecological gift City free to develop land in future if not an ecological gift Does not bind future owners if not an ecological gift 	 An ecological gift must be land that is certified by the federal Minister of the Environment to be ecologically sensitive land. A sale, transfer or land use change of land donated as an ecological gift without the approval of the federal Minister of Environment will give rise to a tax penalty
Gift of Conservation Easement to City or other Government Body	 Simple Flexible protection High degree of protection Binds future owners May by tax deductible if capital property Could be an ecological gift Less costly than sale of land itself 	 Easement must fit within a purpose set out in s. 22.1(2) of EPEA For best tax benefits must qualify as an ecological gift Costly to land owner 	An ecological gift can be an easement if certified by the Minister of the Environment to be ecologically sensitive land the conservation and protection of which is important to the preservation of Canada's environmental heritage.
Gift to an ENGO	 Simple Certain May by tax deductible if capital property Could be an ecological gift ENGO carries out monitoring, upkeep and enforcement; less costly to City and developer High degree of protection 	 Costly to Owner who gives up the difference between market value of the land and the value of any tax deduction for a gift to charity For best tax treatment must qualify as an ecological gift Land owner must be willing to give the land 	 An ecological gift must be land that is certified by the Minister of the Environment to be ecologically sensitive land. The beneficiary of the gift must be a registered charity one of the main purposes of which is the conservation and protection of Canada's environmental heritage.
Gift of Conservation Easement to ENGO	 Simple Terms of the agreement can be modified by agreement May by tax deductible if capital property Could be an ecological gift High degree of protection ENGO carries out monitoring, upkeep and enforcement; less costly to City and developer Binds future owners 	 Easement must fit within a purpose set out in s. 22.1(2) of EPEA For best tax treatment must qualify as an ecological gift 	The ENGO must be a "qualified organization" as set out in s. 22.1(1)(e)(iv) of EPEA. The ENGO must be a "qualified organization" as set out in s. 22.1(1)(e)(iv) of EPEA.

Category 4: Personal, Term And Common Law Partial Interests

TOOL	ADVANTAGES AND BENEFITS	DISADVANTAGES AND COSTS	COMMENTS
Voluntary action by owner to refrain from or limit development	Simple	 Easy to undo Expensive to land owner Does not bind future owners Limited protection 	
Lease to City	 Simple Flexible Unlikely to be undone during term of lease City carries out monitoring, upkeep and enforcement 	 Could be costly to City Leases usually must be of an entire parcel and not to part of a parcel Land owner must be willing to lease land No protection after term expires 	 Must be registered at Land Titles if for over three years in order to bind future purchasers
Lease to ENGO	 Simple Flexible Unlikely to be undone during term of lease ENGO carries out monitoring, upkeep and enforcement; less costly to City 	 Could be costly to ENGO Leases usually must be of an entire parcel and not to part of a parcel Land owner must be willing to lease the land No protection after term expires 	 Must be registered at Land Titles if for over three years in order to bind future purchasers
License to City or ENGO	Owner could give a license to enter onto land to carry out a conservation program	 Is not an interest in land, so does not bind future purchasers Could be costly to City or ENGO No protection after term expires 	•
Profit a Prendre to City (right to enter onto land an take some "profit" of the soil)	 Owner could give City exclusive right to trees or other vegetation while City holds right, no one else may remove vegetation City carries out monitoring, upkeep and enforcement High degree of protection if rights not exercized Could be for a term or be granted in perpetuity 	 Could be costly to City to purchase right Conservation goal only realized if City chooses not to exercize right Land owner must be willing to sell a profit a prendre 	 Profits a prendre are interests in land and bind subsequent purchasers if registered on title
Profit a Prendre to ENGO (right to enter onto land an take some "profit" of the soil)	 Owner could give ENGO exclusive right to trees or other vegetation while ENGO holds right, no one else may remove vegetation ENGO carries out monitoring, upkeep and enforcement so less costly to City High degree of protection if rights not exercized Could be for a term or be granted in perpetuity 	 Could be costly to ENGO to purchase right Conservation goal only realized if ENGO chooses not to exercize right Land owner must be willing to sell a profit a prendre 	 Profits a prendre are interests in land and bind subsequent purchasers if registered on title May exist in gross, meaning, no need for a dominant tenement as in easements and restrictive covenants
Common-law Easement from Owner Regarding Neighbouring Land	 Binds future owners May contain positive or negative covenants Less expensive than sale of land itself Could be for a term or be granted in perpetuity 	 Easement on a parcel (servient tenement) must benefit another land (dominant tenement) Can be undone by owner of the dominant tenement 	See ss.71 & 72 of Land Titles Act
Restrictive Covenant Regarding Neighbouring Land	 Binds future owners Less expensive than sale of land itself Could be for a term or be granted in perpetuity 	 Restriction on one parcel (servient tenement) must benefit another parcel (dominant tenement) Covenants can only be negative and not positive Can be undone by owner of dominant tenement Can be removed by the Court in the public interest 	See s. 52 of Land Titles Act

Category 5: Administrative and Planning Tools, Traditional

TOOL	ADVANTAGES AND BENEFITS	DISADVANTAGES AND COSTS	COMMENTS
Municipal Reserve required by City	 May be required by the subdivision authority as a condition for subdivision Simple Not costly to municipality 	 Is only triggered by an application for subdivision Amount of land is limited by ss 666 and 668 of Municipal Government Act 	 See ss. 661 - 670 of <i>Municipal Government Act</i> Municipal reserve is dedicated without compensation
Environmental Reserve required by City	 May be required by the subdivision authority as a condition for subdivision High degree of protection Simple Difficult to undo Not costly to municipality 	 Is only triggered by an application for subdivision Must comply with s. 664(1) of MGA so not apply to all environmentally sensitive land 	 See s. 664 of Municipal Government Act Environmental reserve is dedicated without compensation
Environmental Reserve Easement required by City	 If the owner and city agree can replace the environmental reserve High degree of protection Simple Flexible Not costly to municipality 	 Is only triggered by an application for subdivision Costly to the developer as the easement is granted without compensation Must comply with s. 664 of MGA so not apply to all environmentally sensitive land 	 See s. 664(2) & (3) of Municipal Government Act Environmental reserve easement is dedicated without compensation Title stays in name of developer
Natural Area Land Use Designation under Land Use Bylaw of City and other exercizing of municipal authority involving downzoning to regulate land use	 Uses the City Land Use Bylaw and zoning powers Simple Flexible Binds future owners unless changed by City If a legitimate use of zoning powers no compensation is payable 	 May be politically difficult for the City Requires the definition of new land use category Can be changed by City Downzoning must be in pursuit of long term planning objectives 	 See s. 640 of Municipal Government Act Case law has shown that there is ample scope to downzone land for protection of environment without having to pay any compensation. See F. Laux, Planning Law and Practice in Alberta, Second Edition, Chapter 8.

Category 6: Administrative/Planning Novel

TOOL	ADVANTAGES AND BENEFITS	DISADVANTAGES AND COSTS	COMMENTS
Conservation easement instead of environmental or	Could be more flexible than municipal or environmental reserve	 Can be discharged by the Minister of Environment in the public interest 	 See Environmental Protection and Enhancement Act, s. 22.1
municipal reserve			 Title remains in the landowner
Formal transfer of development potential by City to developer from one parcel to another	 Equitable Cost Effective Complex if possible Flexible Could have high degree of protection 	Would require legislative changes	 Is not specifically anticipated by existing legislation
Informal transfer of development potential by City to developer from one parcel to another	 Equitable Cost effective Simple Flexible Could have high degree of protection 	 May be legally challenged if part of process is City taking reserves in excess of those technically allowed by law in exchange for approval of other development Is voluntary Owing to novelty of tool, may be difficult to get City' staff and Council "on-side" 	 "Informal" means that current legislation does not specifically authorize transfers of development potential "Potential" is used instead of "right" since all relevant development is subject to municipal regulatory approvals
Bareland Condominium (unit owners own a common interest in a portion of parcel)	 Flexible Allowed by current legislation Unit owners manage natural area for mutual benefit Could use in conjunction with a conservation easement over common area to better protect natural values 		See Land Titles Act and Condominium Properties Act
Bonusing (City approving authority provides added subdivision or development potential, for example, density, in return for protecting an area.)	FlexibleUnlikely to be undone	 May be legally challenged if part of process is City taking reserves in excess of those technically allowed by law in exchange for approval of other development, e.g. greater density Is voluntary Owing to novelty of tool, may be difficult to get City' staff and Council "on-side" 	
Building scheme restrictive covenants	Binds future owners	 Covenants may only be negative and not positive Can be removed by the Court in the public interest 	 Has been used in Strathcona County in a subdivision to protect natural values in conjunction with conservation easements

Category 7: Regulatory and Administrative Tools

TOOL	ADVANTAGES AND BENEFITS	DISADVANTAGES AND COSTS	COMMENTS
Municipality's general bylaw making	 Could regulate many aspects of land uses (e.g. Surrey BC has a tree cutting bylaw) Can protect land before subdivision and development stage Flexible protection City must carry out monitoring, upkeep and enforcement 	 Must have Council on side Could be unpopular with landowners Could be challenged if conflicts with Provincial regulation or goes beyond municipal jurisdiction 	See the Part I, Division 1, Municipal Government Act
Municipal taxation	 In limited circumstances could be used to lower or exempt taxes where landowner helps realize natural area municipal policy 	 Exemption or reduction only allowed by <i>Municipal Government Act</i> in limited circumstances 	

Appendix 7 – Stakeholder Participation Survey

Organization	Newsletter	Frequency	Contact	Web Site	E- mail	Annual Conference	Monthly Meetings	Special Events
Canadians for Responsible Development	No			No	No	No	No	Meetings as needed to promote wind power in southern Alberta.
Alberta Native Plant Council	Yes	4/year; mailed.		www.anpc.ab.ca		No real trade show; some displays the annual meeting.	No	Sometimes with annual meeting.
Ducks Unlimited	Yes	3/year; mailed.	Linda Martin	www.ducks.ca	No	No trade show aspect.	No	Yes; dinners and other activities.
North Saskatchewan River Alliance	Yes	4/year; mailed.	Adele Mandryk	www.nswa.ab.ca	Yes	No	Yes	
Canadian Federation of University Women	Yes	Monthly; mailed and faxed.				The Nature Federation has an annual conference and the Edmonton Branch has an annual general meeting.	Yes; third Monday	Yes; scholarships for women.
Alberta Sport, Recreation, Parks and Wildlife Foundation	Yes	4/year; mailed.	Tom Cameron	www.gov.ab.ca	No	No trade show component.	No	Yes; fundraising for general and specific purposes.
Vegetarians of Alberta Association	Yes	3 or 4/year; mailed.	D.J. Parker	www.planet.eon.net	Yes	No		Yes; Earth Day, Cook Off (November).
Edmonton Bird Club	Yes	6/year.	Bob Parsons				Yes; third Friday: Sept. to Apr.	Yes; Christmas banquet, Snow Goose Express.
Sierra Club, Prairie Chapter	Yes	4/year; mailed	Sonja Michelcic	www.sierraclub.ca			Bi-monthly	Yes; Great Human Race, bingo, priority for funding is projects.
Edmonton Natural History Club	Yes	3/year; Edmonton Naturalist 5/year	Audrey Gordey	www.enhc.com	No	Planning a conference for September 2001.	Yes; First Tuesday during winter	Yes; Fall fundraiser with celebrity speaker, Christmas Bird Count, Snow Goose Festival, casinos.

Stakeholder Participation Survey (continued...)

Organization	Information Brochures	Training Workshops	Videos	Displays	Attend Trade Shows	Sponsor Community Events	Media Events	Regular Advertising
Canadians for Responsible Development	Wind power	Wind power	Wind power	Wind power	Technical relating to wind power		No	No
Alberta Native Plant Council	Yes	Yes	No	Yes	No	No	No	No
Ducks Unlimited	Yes	No	Yes	Yes	Yes	Yes; Beaverhill Snow Goose Festival, Hanna Canada Goose Festival, etc.	Yes; e.g., Kinokamau Lake Project.	Yes
North Saskatchewan River Alliance	Yes	No	No	Yes	Yes; relating to water/land use	No	No	No
Canadian Federation of University Women	Yes	No	No	No	No	Yes; scholarships.	No	No
Alberta Sport, Recreation, Parks and Wildlife Foundation	Yes	No	Yes	Yes	Yes	Yes	Yes; Alberta Summer/ Winter Games, Seniors Games, Future Leaders Program, etc.	Yes
Vegetarians of Alberta Association	Yes	Yes	Yes	Yes	Yes; Earth Day, Global Vision	Yes; potluck suppers and guest speakers		No
Edmonton Bird Club	Yes	Yes		Libraries/ seniors centres	Snow Goose Festival, John Janzen events	Yes; One \$500 Student Award/ Snow Goose Festival/May species counts.	Yes; Edmonton Christmas Bird Count.	No
Sierra Club, Prairie Chapter	Yes	Yes	Yes	Yes	Yes; Parkland Institute, Global Visions, festivals.	No	Yes; constant outreach to media for campaigns	Yes
Edmonton Natural History Club	Yes	No	No	Yes	No	Yes; Assist with Snow Goose Festival, major organizer of Christmas Bird Count	No	No

Stakeholder Participation Survey (continued...)

Organization	Fund Raising	Administrative Duties	Communication Assistance	Advocacy Assistance	
Canadians for Responsible Development	No	No	No	No	
Alberta Native Plant Council	No	No	Yes	Yes; if agreed to by the Board	
Ducks Unlimited	Yes; depending on the purpose of the fund raising.	Yes	Yes	No	
North Saskatchewan River Alliance	No	No	Yes	No	
Canadian Federation of University Women	No; but might assist others.	No	Yes	Yes	
Alberta Sport, Recreation, Parks and Wildlife Foundation	Yes; could participate in a special event to support conservation or to support regional initiatives.	Yes; willing to head up a fund raising committee.	Yes	Yes	
Vegetarians of Alberta Association	Yes; proposals to foundations.	No	Yes	Yes	
Edmonton Bird Club	No	No	No	No	
Sierra Club, Prairie Chapter	No	Partially; may attend meetings.	Yes; associated with urban sprawl issues and material.	Yes	
Edmonton Natural History Club	Possible; to a very limited extent.	No	Yes; sponsoring a conference in September 2001/other activities to educate the public.	Yes	

Stakeholder Participation Survey Contact Information for Edmonton, Alberta

Organization	Address	Postal Code	Telephone	Fax	E-mail	Web Site	Contact Name
Canadians for Responsible Development	11911 University Avenue	T6G 1Z6	436 – 4913		espaschen@freenet.edmonton.ab.ca		Jerry Paschen
Alberta Native Plant Council	Garneau Postal Outlet, Box 52099	T6G 2T5				www.anpc.ab.ca	
Ducks Unlimited	#200, 10720 - 178 Street	T5S 1J3	489 – 2002	489 – 1856	b.calverly@ducks.ca	www.ducks.ca	Brett Calverly
North Saskatchewan River Alliance	6 th Floor, 9803 – 102 A Avenue	T5J 3A3	496 - 3474	496 - 5674	adel.mandryk@gov.edmonton.ab.ca	www.nswa.ab.ca	Adele Mandryk
Canadian Federation of University Women	8413 – 118 Street	T6G 1T2	439 - 285		shklanka@freenet.edmonton.ab.ca		Olga Shlanka
Alberta Sport, Recreation, Parks and Wildlife Foundation	905 Standard Life Centre	T5J 4RT	415 - 0266	415 – 8141	tom.cameron@gov.ab.ca	www.gov.ab.ca	Tom Cameron
Vegetarians of Alberta Association	#201B, 10832 Whyte Avenue	T6E 2B3	988 - 2713		voa@planet.eon.net		David Parker
Edmonton Bird Club	Box 1111	T5J 2M1	488 - 1344	425 - 6471			Bob Parsons
Sierra Club, Prairie Chapter	10511 Saskatchewan Drive	T6E 4S1	439 - 1160	437 - 3932	sierraclub@connect.ab.ca	www.sierraclub.ca	
Edmonton Natural History Club	Box 1582	T5J 2N9	492 - 9084	431 - 8769		www.enhc.com	David Stepnisky

Stakeholder Participation Survey Mandate and Priorities Information

Organization	Members			Mandate	Priorities		
Organization	Edmonton Alberta Other		Other	wandate	riioniles		
Canadians for Responsible Development	25	50	100	To help direct development in a sustainable, wholesome community centered and inspired activities.	Wind power generation to reduce greenhouse gases.		
Alberta Native Plant Council	50	220		To educated, coordinate information and activities around native plants, encourage research, preserve habitats and encourage appropriate use.			
Ducks Unlimited		18,000		Conservation of wetlands and associated upland habitats for the benefit of waterfowl, other wildlife and society.	Conservation of waterfowl habitat in areas of greatest wetland abundance and waterfowl production potential.		
North Saskatchewan River Alliance	41	34	1	To protect and improve water quality and ecosystem functioning in the North Saskatchewan watershed by improving peoples ability to make informed decisions about the value of watershed protection and the value of an integrated approach to land and water stewardship; maximizing communications, relationships, and partnerships; and promoting a balanced approach to watershed management.	Outreach, State of the Basin report, eco-canoe guide.		
Canadian Federation of University Women	153	400	10,000	To promote environmental awareness through an active environmental study group.	To promote the educational interests of women in Alberta through the pursuit of knowledge, promotion of education, improved status of women, active participation in public affairs.		
Alberta Sport, Recreation, Parks and Wildlife Foundation	20	5		Committed to the enhancement of sport, recreation, parks and wildlife for all Albertans; grants related to these program areas.	Parks and Wildlife Ventures Program; services to partners and local land trusts, support private land conservation; manage Foundation lands and resources; accept ecological gifts and donations.		
Vegetarians of Alberta Association	200	10		Encourage a vegetation diet.	Sustainable farming methods; reduction of degradation diseases; land and resource conservation; reduction of pathogenic elements in the environment.		
Edmonton Bird Club	145	15		To enjoy bird watching and a social and learning events. Introduce nature lovers to fresh air, the countryside and birds.	To have a good club where members and friends can enjoy bird watching, learn and educate at the same time.		
Sierra Club, Prairie Chapter	100	400	600,00	To develop a diverse, well-trained grassroots network working to protect the integrity of our global ecosystems.	Locally, priority issues are climate change, urban sprawl, alternative transportation, and endangered species.		
Edmonton Natural History Club	225	25		Foster an appreciation and understanding of natural history, particularly in the Edmonton region with members and the general public.	Organize field trips throughout the year; sponsor a program of lectures/presentations during fall and winter; participate in the Christmas Bird Count and Snow Goose Festival. In some years, use grant funding to sponsor summer students in special projects; members participate in city advisory boards and other committees.		