Red Willow Park

West Master Plan Update

for

THE CITY OF St. Albert



Gibbs & Brown
Landscape Architects Ltd.

Final Report
September 2003

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EXECUTIVE SUMMARY

BACKGROUND: In 1991, a master plan was approved by City Council for all of Red Willow Park, from River Lot 56 on the east to the shorelands along Big Lake. This 1991 master plan has been providing guidance in developing the Park and in statutory planning activities such as City Plan (1999) and neighbouring Area Structure Plans. Since 1991, utilizing a provincially funded Urban Parks Grant, trails have been extended along Sturgeon River's south shore and park nodes developed including Lions, Woodlands, and Kingswood Parks.

The 2003 master plan update is being completed for the western portion of the Red Willow Park (westward from the railway trestle bridge to Big Lake within the City boundary). The plan will coordinate with a number of concurrent planning initiatives.

MASTER PLAN INFLUENCES: The West Master Plan Update draws from a review of:

- Site attributes including environmental, historical, settlement patterns and land ownership
- Experience with the already built portions of Red Willow Park
- Park objectives and needs, through a stakeholder involvement program with over 35 groups represented including local recreational, environmental, civic and business groups
- Demographic, recreational and opinion surveys and trends analysis representative of general community needs
- Related City policy documents
- Current planning initiatives such as the planning for West Regional Road and the Big Lake Natural Area

The plan seeks a balance between general public, private and stakeholder interests.

RENEWED VISION OF RED WILLOW PARK: The Park is a multi-faceted open space resource for St. Albert. It is also a portal onto the Big Lake Natural Area, an International Bird Area and provincially protected ecological reserve. Big Lake is an important regional destination for bird-watching, nature appreciation, environmental education and leisure pursuits in a natural setting. Together, Red Willow Park and the Big Lake Natural Area provide a unique backdrop around which to build a

vibrant community in which to work, live and recreate. The Park is a city wide and regional resource serving all citizens. Its principal goals are:

- To protect and conserve the Big Lake and Sturgeon River natural environment
- To present and interpret the parks natural and cultural heritage
- To provide opportunities for outdoor pursuits in a natural setting and in particular an interconnected trail system
- To contribute to community economic health through the promotion of a quality community lifestyle and promotion of its capability for environmentally sensitive ecological and cultural tourism.

The master plan has four geographic areas:

- Red Willow Park – Riel
- Red Willow Park – Meadowview
- Red Willow Park – South Big Lake
- Red Willow Park – North Big Lake

GUIDING PRINCIPLES & MANAGEMENT GUIDELINES

Guiding principles for Red Willow Park are as follows:

- Ecological Integrity: Red Willow Park will be managed to conserve environmental biodiversity and ecological integrity.
- Ecosystem Management: Management of the park will recognise that it is part of a larger ecosystem that affects and is affected by the management of adjacent lands and the upstream watershed.
- Integration: Future land use decisions in the Red Willow Park area will strive to integrate conservation, outdoor recreation, and tourism and heritage appreciation. Outdoor recreation and tourism initiatives will be provided and surrounding land uses accommodated to the extent that they are compatible with and do not compromise ecological integrity.
- Shared Stewardship: Partnerships that foster stewardship will be promoted with the private sector, landowners, other governments and departments, volunteers, not for

profit groups and individual citizens in the preservation, planning, management and delivery of opportunities associated with Red Willow Park and Big Lake.

Management guidelines have been developed for the following categories:

- Management
- Parkland Area
- Trail System
- Boundary Conditions

Red Willow Park – Riel

- Minor adjustments to Soccer Club grounds and relocate the Canoe and Kayak Club as a result of the West Regional Road alignment
- Remaining uses and recreational/service groups to be retained
- Work with Kinsmen to redevelop the rodeo grounds including expansion and possible relocation of the RV Campground
- Complete area north of soccer/rugby clubs as a group picnic area and canoe launch
- Reclaim remnant Riel Pond as a constructed wetland
- Maintain BLESS shelter and viewpoint
- Extend major trail along Riel Drive
- Naturalize shorelands and beautify grounds
- Some enhancement of parking for tournament use

St Albert Community Garden & South Shore Parkway Corridor

- Maintain garden home base in current location (south shore, west of trestle bridge)
- Promote initiatives for naturalization and reclamation of disturbances

Red Willow Park - Meadowview

- Encompass environmentally significant and sensitive lands within the park

- Extend major trail system in a trail corridor between future residential development and sensitive areas of the park
- Develop a management plan for sustaining the spruce woodlot and river levy wetland
- Some low key granular trails, interpretive features, trail head and day use area
- Long term development of a historical park focused on Grain Elevator Park and the Métis River Lot settlement (River Lot 24)
- Maintain Meadowview Ball Diamond facility

Red Willow Park – South Big Lake

- Encompass environmentally significant and sensitive lands within the park
- Extend major trail system in a trail corridor between future residential development and sensitive areas of the park
- Develop a natural area management plan for sustaining the ecology of the shorelands
- Potential granular interpretive trails
- Potential site for an Big Lake Nature Centre (secondary or satellite site)

Red Willow Park – North Big Lake

- Granular interpretive trails
- Reconfigure City Tree Nursery as a buffer along west side of West Regional Road and retain land for long term recreational needs
- Potential site for Big Lake Nature Centre (preferred site)
- Potential site for relocated Canoe and Kayak Club, subject to feasibility assessment and property acquisition

PARK IMPLEMENTATION The timeframe of implementation is highly dependant on external factors such as the staging of the West Regional Road and adjacent urban development. Land acquisition, trail development and amenities will require both civic and external fiscal resources. Funding from senior government has in the past and may, in the future, influence implementation schedule and priorities. The plan enables the City to be ready and to respond as external development and funding opportunities occur.

1 INTRODUCTION

The City of St. Albert has become known for its attractive neighbourhoods, scenic parks, and river valley. The City is bounded by unique natural areas including the shorelands of Big Lake. The Sturgeon River meanders through the centre of town creating a unique and diverse environmental setting. The gentle, undulating hills of the river valley is home to Red Willow Park. Since it's inception in the early 1990's, Red Willow Park has become a source of community identity and pride for the citizens of St. Albert.

The Red Willow Park West Master Plan Update is a continuation of the planning process for Red Willow Park. This report is an update of the previous Master Plan, *Red Willow Urban Park Master Plan,* produced by Kipen Gibbs Landscape Architects Ltd. released in 1991. This report will revisit the master plan and develop guidelines for the Park's west end.

1.1 BACKGROUND

In 1991, the City Council of St. Albert approved a Master Plan for Red Willow Park (Kipen Gibbs Landscape Architects Ltd., 1991). The report outlined the master plan for Red Willow Park, which runs throughout the city along the Sturgeon River Valley and River Lot 56. Since the adoption of the Red Willow Park Master Plan, a number of key developments have occurred:

- Construction and operation of $7-8 million of parks and trails in Red Willow Park;
- Continued growth of St. Albert and plans for future growth including an Intermunicipal Development Plan which directs future growth to the west and north of the current city boundary;
- More information about the natural environment such as an update to the Natural Areas Inventory and various Big Lake Studies;
- Further statutory plans including 2000 City Plan (Municipal Development Plan);
- Increased status of Big Lake through its designation as a International Bird Area (IBA) and Provincial Natural Area (Special Places 2002);

- Determination of the alignment for the West Regional Road; and

- Increased interest by land development industry in the Meadowview and south Riel areas.

In the past ten years, some of the community needs, assumptions or development concepts of the original plan may have become dated or superseded by new considerations.

The Red Willow Park Update plan was specifically timed to coincide with the planning of the West Regional Road and anticipated urban development in the near future:

- Construction of the West Boundary Road in the near future means that the Red Willow Park Plan needs to be revisited in order to coordinate the two initiatives and minimize adverse effects of the road on the park; and

- Through anticipated land development activities, lands may be available for the park, and the City needs to be ready to act in a planned manner.

Outside St. Albert's corporate boundaries, the planning of Red Willow Park needs to coordinate with conservation and protection land use designation for the Big Lake Natural Area and the adjacent shorelands, including:

- South Shore – Edmonton: North Saskatchewan River Valley Area Redevelopment Plan Bylaw 7188

- North Shore – Sturgeon County: Agricultural Conservation Designation

- Big Lake – Provincial Natural Area

1.2 PRIOR PARK PLANNING

Two previous planning studies have directed the development of Red Willow Park.

1.2.1 Concept Plan (1988)

The Sturgeon River Valley was recognised as a multi-faceted community resource. The concept plan articulated the vision of an integrated river corridor open space system. The *Red Willow Urban Park: an Heritage Corridor* (Kipen Gibbs Landscape Architects Ltd., 1988) was a conceptual plan for the overall development of the Sturgeon River Corridor which provided a

framework for the creation of heritage corridor which preserved the natural environment and cultural history of the area while providing a place for outdoor pursuits, expanding economic activity and, above all, maintaining St. Albert's special identity. The plan linked the historical with the contemporary, the sacred with the secular, the wilderness with the urban municipality, and the old with the new.

The main feature of the Heritage Corridor is a continuous open space system which is linked by a network of pedestrian and bicycle paths, and a scenic drive. The conceptual plan proposed that areas throughout the corridor be reforested and urban wildlife habitat be created. A continuous bicycle and pedestrian trail system would run along both sides of the river with picnic and day use area scattered along the way.

1.2.2 Master Plan (1991)

The *Red Willow Urban Park Master Plan* (Kipen Gibbs Landscape Architects, 1991) provided detailed inventories for biophysical and heritage resources, community development and community needs; a master plan for the future development of the urban park; and an implementation plan which identifies development priorities, funding sources, and a development strategy. The master plan was guided by the province's Urban Park Program goal which states:

> The purpose of developing urban parks is the establishment of significant areas of open space to ensure urban populations have easy access to natural environments and the development of these areas to enable their sustained and unimpaired use for outdoor recreation (Kipen Gibbs Landscape Architects Ltd., 1991).

Inventory: There are numerous different natural habitats and eco-systems within the park boundaries with varying levels of significance. A number of environmentally sensitive areas are located within the urban park. Big Lake is a provincially significant waterfowl habitat area. The Sturgeon River shorelands are regionally significant natural areas, with a rich variety of vegetation communities and wildlife species. The best areas for park expansion are along the Sturgeon River Valley and the shores of Big Lake. This area also is a rich heritage resource focused on Mission Hill and the surrounding Métis River Lot community.

Master Plan: The master plan developed conceptual plans for various areas within the urban park, ranging from natural areas,

trails, historical interpretation, golf courses, RV parks, to a family/water-play park.

Implementation Plan: Due to the high financial cost of developing the urban park, a process of prioritizing projects was identified:

- Preserve Key Environmental Resources: Environmentally Sensitive Areas (ESA) such as the shorelands of Big Lake, Sturgeon River Corridor (including the spruce forest in Meadowview Park) need the protection of the public parks system. Acquisition strategies should include dedication for environmental reserve, dedication for municipal reserve and outright purchase where necessary.

- Ensure Public Accessibility: The trail systems and radial linkages from the river corridor to the community are very important and a high priority. Also important is auto access along certain park frontage roads.

- Develop Key Destination Nodes: These should strategically form new anchors to the park system. They should be chosen based on demonstrated market demand.

- Provide Development Opportunities for Community Groups: Work together with community and interest groups to meet common objectives is very important. As a result, a number of park sites, projects and funds will be set aside to foster such relationships.

- Create a Park Personality and Image: The image of a unified Red Willow Urban Park is very important. Passive interpretive signs and markers will convey the personality and storyline of the park. Upgrading some of the older parks in the downtown area will ensure consistency with the new portions of the park.

MASTER PLAN UPDATE

In 2002, the City of St. Albert commissioned Gibbs & Brown Landscape Architects Ltd. to prepare an update to the Red Willow Urban Park Master Plan.

1.2.3 Master Plan Update Goals & Objectives

The 1991 Master Plan presented both the long-term development of the River Corridor and the short-term implementation priorities of an $11.1 Million Urban Parks Program. The 2003 Master Plan Update objectives are as follows:

- Update inventory and base information of corridor resources;

- Engage the community and interest groups in a consultation and planning process which includes direct contact with special user/interest groups, related agencies, and the general public;

- Provide a vision plan, program statement, and management guidelines for areas west of the trestle bridge; and

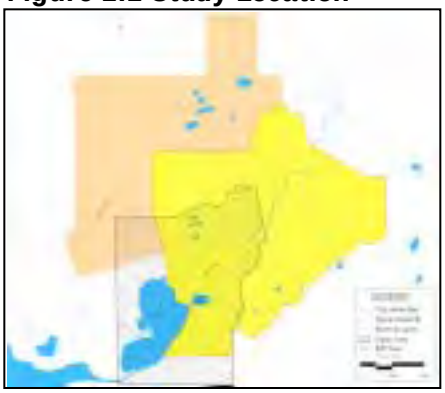
- Coordinate with other related planning and communication initiatives including:

  - Big Lake Natural Area Study, and

  - West Boundary Arterial Functional Plan and Environmental Assessment.

1.2.4 Study Area

Figure 1.1 Study Location



As illustrated in Figure 1.1, the boundary of the study area begins just west of downtown St. Albert and extends westward from the CNR trestle bridge. The study area encompasses the shorelands of the eastern most portion of Big Lake and the shorelands of the Sturgeon River. A setback was also included to incorporate the immediate surroundings and provide a context for the park. The setback was extended westward and northward to include shorelands falling within the City of Edmonton and Sturgeon County and the entire eastern half of Big Lake.

1.2.5 Study Process

The Master Plan Update was divided into four major components as described in Figure 1.2. The process diagram illustrates a parallel process of creating the Master Plan (on the left) and consulting the public (on the right). The following describes the key planning steps which occurred during each phase of the process.

PHASE 1: SETTING THE STAGE

The objective of Phase 1 was to set the stage for planning and consultation through a review of background studies,

reconnaissance of the site, and through a series of discussions with the Steering Committee, City Council, and key persons of the community. Tasks included:

1. Developing a list of contacts for Red Willow Park users and special interest groups.

2. Conducting a review of relevant studies and existing conditions as well as update study area mapping. Background studies reviewed included:

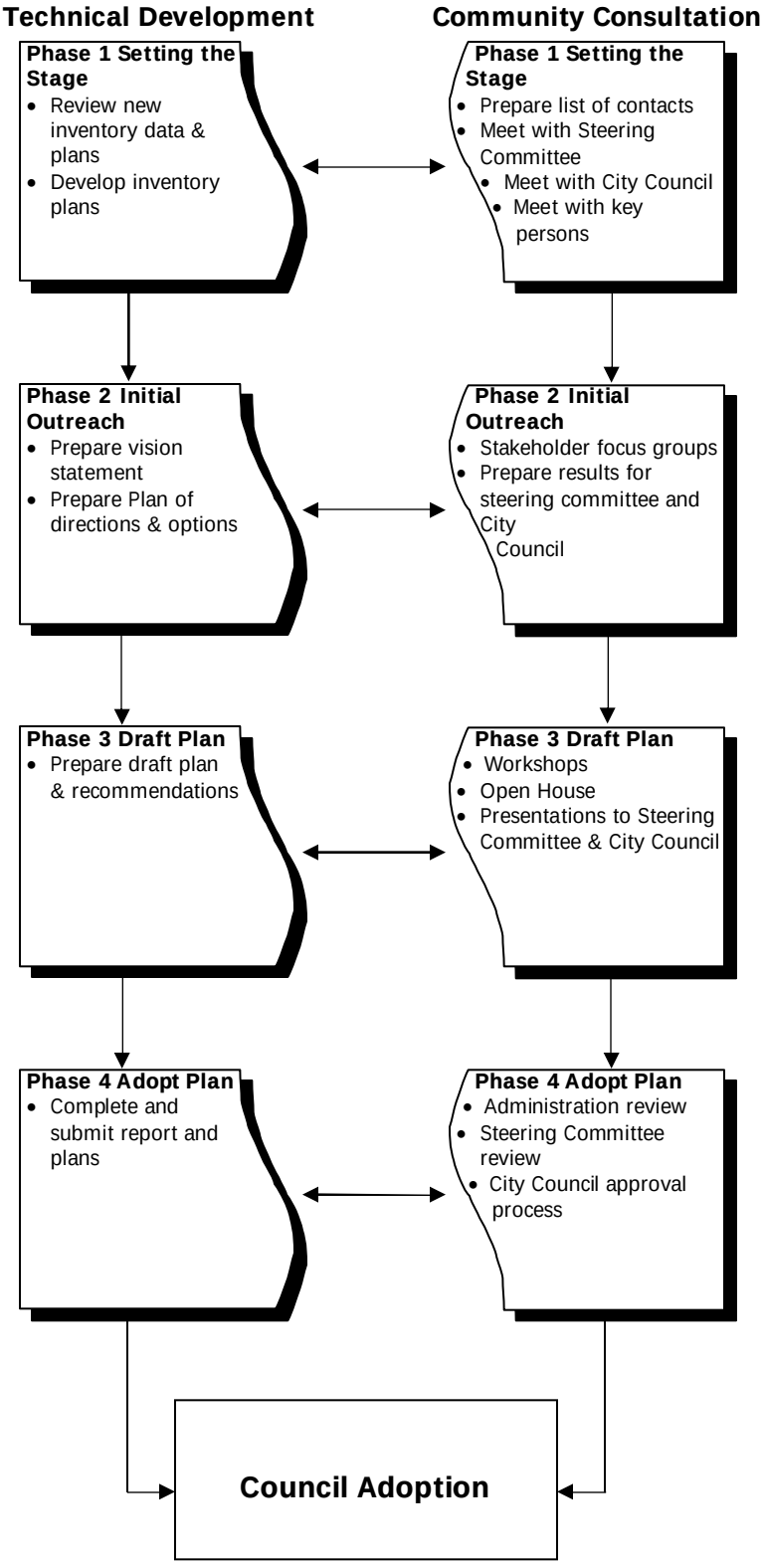
    - Environmental studies;
    - Statutory plans – ASP's, IDP's, MDP;
    - Transportation plans for the West Regional Road;
    - Land Ownership; and
    - Current recreation development and use.

3. Meeting with the Steering Committee (City of St. Albert Senior Leadership Team).

4. Meeting with City Council (September 16th, 2002). Updates were held November 18, 2002 and January 30, 2003.

5. Meeting with over 20 key individuals including elected officials, community leaders, and special interest groups (See Appendix A for results of public consultation).

Figure 1.2 Master Plan Process



PHASE 2: INITIAL OUTREACH

The objective of Phase 2 was to create awareness, engage the community and identify broad issues, opportunities, and directions.

An invitation package to attend a stakeholder focus group was sent out to over 100 members of park users, service clubs, landowners, and interests groups. Two stakeholder focus group sessions were conducted to identify issues and opportunities related to Red Willow Park plans on October 8th & 9th, 2002 (See Appendix A).

The information acquired through the stakeholder focus groups was used to develop:

- A preliminary plan that identified options and directions which was then used as part of a discussion guide for the vision building workshops; and
- A vision statement about the roles, goals, and objectives of Red Willow Park.

PHASE 3: DEVELOP DRAFT PLAN

During this stage, options for each geographic area were evaluated in a workshop process. Four workshops were held:

- Riel user groups (November 13th, 2002);
- 2 general sessions (November 19th & 20th, 2002) of previous focus group attendees; and
- Special session on Big Lake Nature Centre (January 20th, 2003).

A draft master plan update including a map was then developed based on the results of the workshops and presented to the steering committee for review. The draft update was formally presented to city council in a special session on January 30, 2003. An open house with an exit survey was held for the public (February 20, 2003).

PHASE 4: ADOPT WEST RWP UPDATE PLAN

Based on input on the draft plan, a final plan document was prepared for steering committee endorsement and City Council approval in principle.

1.3 RELATED STUDIES – PRECEDENT & CONCURRENT

Since the release of the original Red Willow Urban Park Master Plan, a number of reports have been written or are in the process of being written that may influence the park.

1.3.1 Precedent Studies

Studies preceding the update of the Red Willow Park Master Plan include:

- Red Willow Urban Park – The City of St. Albert: Trail Network Plan – Signage & Furnishings Manual (EDA Collaborative, 1991)
- St. Albert Open Space Standards & Guidelines (Kipen Gibbs Landscape Architects Ltd., 1994)
- St. Albert Natural Areas Review & Inventory (Spencer Environmental Management Services Ltd., March 1999)
- City Plan St. Albert: Municipal Development Plan Bylaw 4/2000 (City of St. Albert, 2000)
- Intermunicipal Development Plan: Sturgeon County and City of St. Albert (Armin A. Preiksaitis and Associates, May 2001)
- Big Lake Natural Area Management Plan (AMEC Earth and Environmental Ltd., May 2002)
- A Sustainable Future for St. Albert's Parks & Open Spaces: Recommendations for a Parks & Open Space Management Plan (IMI Strategics, October 2002)

1.3.2 Concurrent Studies

The following is a list of concurrent studies:

- West Regional Road
  - Preliminary & Detailed Engineering, ISL Infrastructure Consultants Ltd.
  - Environmental Assessment, Spencer Environmental Management Services Ltd.
- Big Lake Basin Study (Hydrological), Associated Engineering Alberta Ltd.

- St. Albert Storm Water Master Plan Study, Associated Engineering Alberta Ltd.
- Big Lake Natural Area Management Plan, Alberta Parks & Protected Areas.
- St. Albert Natural Areas Sustainability Assessment (Spencer Environmental Management Services Ltd., 2003)

1.4 REPORT FORMAT

The format of this update plan generally follows that of the original 1991 Master Plan. The original inventory data, policies, and plans are considered to be still valid unless updated by the current document as per Table 1.1.

Table 1.1 Corresponding Inventory Sections between 1991 and 2003 Master Plans

1991 Master Plan		2003 Master Plan Corresponding Updated Section		Page Number
2.1	Climate & Microclimate		Not updated	
2.2	Biophysical Resources	2.1	Biophysical Resources	12
2.2.4	Ecosystem/Interpretation	2.2	Heritage Education & Interpretation	21
2.3	Hydrology & Water Quality	2.3	Hydrology	25
2.4	Visual Resources		Not updated	
2.5	Land Use	2.5	Land Use & Settlement Patterns	29
2.6	Community Facilities	2.5.1	Community Facilities	31
2.7	Ownership	2.4	Ownership	27
2.8	Heritage Resources	2.2	Heritage Education & Interpretation	21
2.9	Transportation/Utilities	2.6	Transportation & Utilities	36
2.10	Demographics, Outdoor Leisure Trends & Community Needs	2.7	Demographics, Outdoor Leisure Trends & Community Needs	38
2.11	Public Consultation Program	2.8	Public Consultation Program	46

The introduction is followed by the following sections:

- Section 2: Inventory Update
- Section 3: Master Plan Update

2 INVENTORY UPDATE

A Master Plan for Red Willow Park needs to consider the characteristics of the natural environment, cultural heritage, community and transportation development, demographics, trends, and the community consultation program.

The *Red Willow Urban Park Master Plan* (Kipen Gibbs Landscape Architects Ltd., 1991) contained a detailed inventory to help understand how best to use and protect this valuable resource. Current and past planning initiatives have enhanced and altered the inventory data. As a result, some of the information contained in the original inventory has become outdated and superseded by new information. The following is an update of the original inventory.

Figure 2.1 provides a pictorial state of the study area as of the year 2001.



Figure 2.1 Air Photo of Study Area

2.1 BIOPHYSICAL RESOURCES

The biophysical resources of the study area were inventoried during the master plan process (Pedocan Land Evaluation, 1990). Natural areas were classified according to:

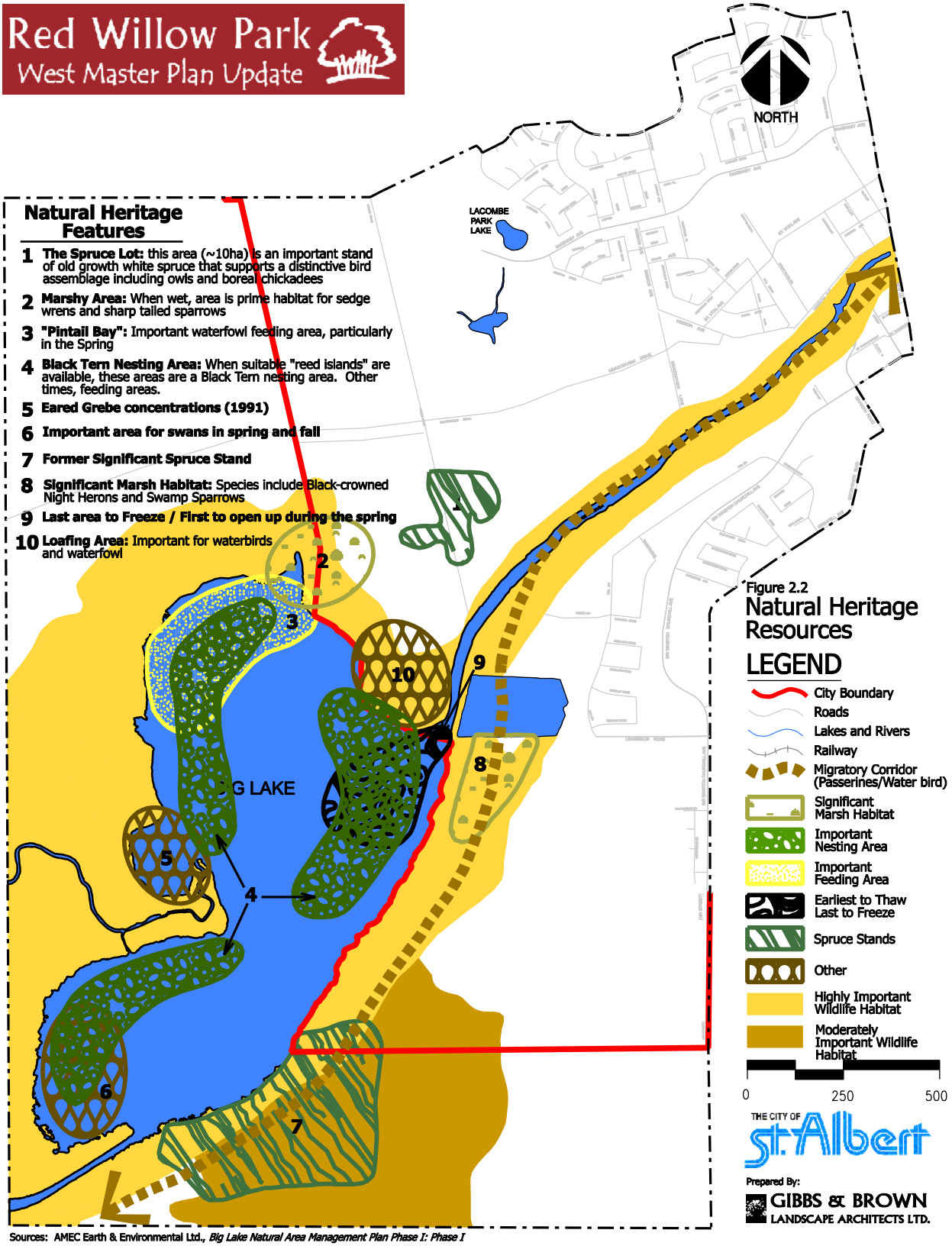
- Ecological land classification
- Environmental sensitivity
- Environmental significance

Since 1991, several significant new sources of environmental data need to be acknowledged in the update for Red Willow Park:

- Big Lake Natural Area Management Plan Phase 1, AMEC Earth and Environmental Ltd, May 2002: formal inventory which will become the basis of a management framework for the Big Lake Natural Area.
- St. Albert Natural Areas: Inventory & Prioritization Studies, Spencer Environmental Management Services Ltd. 1999 & 2003: identified, classified, and prioritised all environmentally sensitive and significant natural areas occurring within the corporate boundaries of St. Albert.

Changes to the status of and knowledge about Big Lake have been significant. Status changes include:

- Formation of the Big Lake Environmental Support Society (BLESS) in the early 1990's to protect and advocate the interests of Big Lake. BLESS operates an extensive website (www.bless.ab.ca), conducts numerous environmental education initiatives and operates an advocacy program.
- Recognition by the Province of Alberta May 5, 1999 through the Special Places 2000 program as the Big Lake Natural Area (BLNA). BLNA places 119 hectares of lake, wetland complexes, and shore lands into a protective designation of a natural area.
- Recognition on June 5, 2001 as a globally significant Important Bird Area (IBA). It was designated due to its importance as a waterfowl moulting and staging site and its large colony of Franklin's Gulls.
- Big Lake Management Plan Committee (Technical Advisory Committee) was established in August 2001 consisting of



Sources: AMEC Earth & Environmental Ltd., *Big Lake Natural Area Management Plan Phase I: Phase I*

the Province (Alberta Community Development, Parks and Protected Areas Division) and the four adjacent municipalities of St. Albert, Sturgeon County, Parkland County, and City of Edmonton. The committee acts as the main administrative group and as the liaison between all other committees, panels and consultants. The goal has been to manage a process of goal setting, inventory and consultation leading to a vision statement and management plan. The political representation is done through a Review Committee that communicates directly with the Technical Advisory Committee.

New information is summarised in the following sections.

2.1.1 Big Lake Natural Area

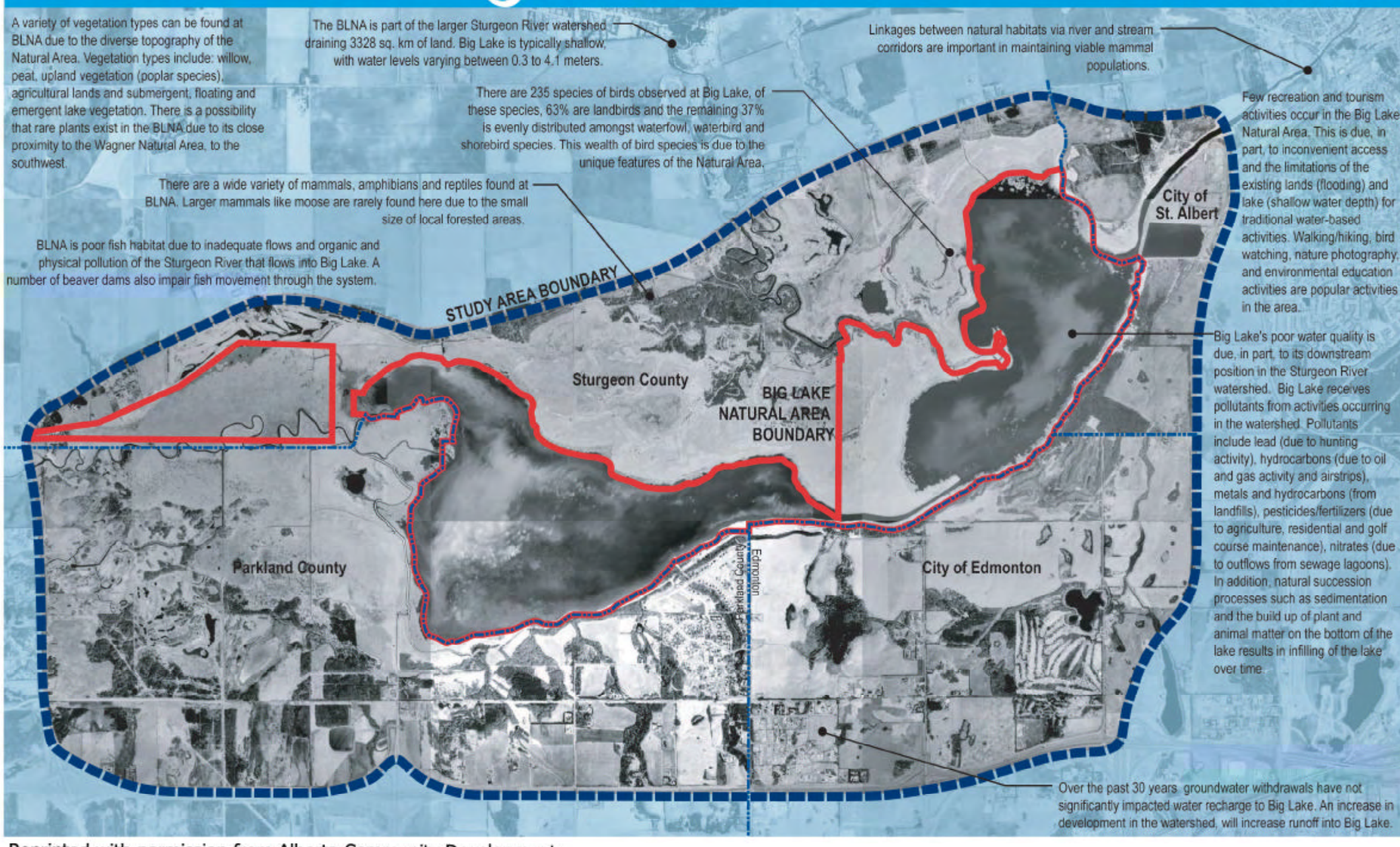
Alberta Community Development, in partnership with the City of Edmonton, City of St. Albert, Sturgeon County and Parkland County, initiated a Management Planning process that will result in the Big Lake Natural Area Management Plan (Figure 2.3). The first phase of the process was a comprehensive, scientifically defensible report that conveyed the management requirements for the Big Lake Natural Area. The report inventoried relevant and available literature regarding Big Lake Natural Area in terms of planning and legislative frameworks, birds, wildlife, vegetation, hydrology and hydrogeology, and cultural resources. The report also provided a resource of measures and actions that can be implemented by landowners, municipalities and other partners.

The Big Lake Natural Area is a provincially significant environmental resource, internationally significant bird area, and an important feature of Red Willow Park. Therefore, knowledge of this environment is important in order to ensure that a park system is developed in a manner that does not impair important biophysical resources.

Big Lake is a large wetland that is a haven for colonial nesting bird species, shorebirds, waterfowl and land-based species. Extensive zones of emergent vegetation such as cattails and bulrushes make Big Lake an ideal nesting area. Many bird species such as Franklin's Gulls and Black Terns use Big Lake as their breeding ground. The gentle sloping banks of the land that are prone to flooding are characterised by mudflat/wet meadow – areas that are favoured by shorebirds. As a result, Big Lake Natural Area has the potential to be an important shorebird-viewing site, due to the many sitings of rare shorebirds and land birds. Big Lake and the Sturgeon River Valley are important parts of the migratory corridor as migrants account for over 80% of the annually occurring birds of Big Lake. Ice free conditions are lengthy at the mouth of the Sturgeon River, due to springs from Horseshoe and

Big Lake Natural Area

the management plan



A number of other plans and initiatives with emphasis on birds and their habitats can influence the management of the BLNA including:

- Important Bird Areas Program
- Partners in Flight - Canada
- Prairie Canada Shorebird Conservation Plan
- The RAMSAR Convention
- Western Hemisphere Shorebird Reserve Network
- North American Colonial Water bird Conservation Plan
- North American Waterfowl Management Plan
- North American Bird Conservation Initiative
- Convention on Biological Diversity

Provincial and federal legislation and regulations also influence the use and management of the BLNA and include:

Federal Legislation

- Canadian Environmental Assessment Act
- Fisheries Act
- Migratory Birds Convention Act
- Navigable Waters Protection Act

Provincial Legislation

- Wilderness areas, Ecological Reserves and Natural Areas Act
- Environmental Protection and Enhancement Act
- Historical Resources Act
- Municipal Government Act
- Public Lands Act
- Water Act

Red Willow Park
West Master Plan Update

Figure 2.3

Big Lake Management Plan

Reprinted with permission from Alberta Community Development

Kirk Lakes. As a result, this area attracts waterfowl (AMEC Earth and Environmental Limited, 2002).

The surrounding area is a unique ecosystem – rich with a diversity of wildlife and vegetation (Figure 2.2). Vegetation ranges from sedge-willow marsh along the lakeshore, to spruce-Balsam Poplar forests running along the Sturgeon River. Stands of White Spruce; Black Spruce, and/or Aspen; conifer-birch-poplar mixed wood forests; tamarack and spruce bogs; and grasslands dot the landscape. Although inventories are incomplete, over 200 plant species have been identified including rare plants like the Turned sedge. The high diversity of habitat attracts a vast variety of wildlife, and over 40 species of mammals and a variety of reptiles, amphibians, butterflies and other insects make their home on the shores of Big Lake.

Ecosystems provide many essential services which benefit and are important not only to wildlife but also human life. As a wetland, Big Lake is a natural filter which cleanses water of pollutants and other contaminants. The lake also serves as a flood control system for St. Albert and other communities downstream along the Sturgeon River. The abundant cattail and emergent vegetation provide many ecological services: food for muskrats; nesting places for red-winged blackbirds, marsh wrens and other birds; and shelter and protection for waterfowl.

Big Lake is an extremely valuable resource to the surrounding municipalities including the City of St. Albert and has great potential for leisure and learning opportunities. There are many magnificent scenic vistas and viewpoints which are ideal for trails and park development. The natural environment of Big Lake is a living classroom and an idyllic location for studying nature and learning how to care for the environment and it cares for us by providing basic functions which make the earth a hospitable place to live. The Big Lake area abounds with endless possibilities for nature appreciation, photography, and interpretive opportunities.

2.1.2 Environmentally Sensitive and Significant Natural Areas

All natural areas are susceptible to some amount of change as a result of surrounding land use or development activities. These changes can be reflected in any (or all) of the landform, soil, vegetation and wildlife habitat parameters.

Disturbance may result in minor, short-lived changes to terrain features that are easily remedied. However, some landscapes will be more strongly or more permanently affected by a given disturbance than others.

Spencer Environmental Management Services Ltd. (1999) updated an inventory of the natural areas, significant natural area, and environmentally sensitive areas with the City of St. Albert in preparation for CityPlan. This report reviewed and updated the information gathered from the Pedocan study done in 1990. The Spencer study developed a broad definition of Natural Area which incorporated the inclusive values stated in the 1998 CityPlan vision statement, "The beauty of nature feeds people's soul, from natural areas such as Big Lake, Sturgeon River and the river valley, our parks and trails, to the tree-lined street and boulevards..." Natural areas are defined "by the presence of one of the following: natural vegetation; naturally-occurring water; some other natural feature. In some instances, Natural Areas may be partially disturbed." This definition allowed for the inclusion of roadside willow scrub shelterbelts or a 0.1 ha temporary wet meadow, to much larger wetlands or woodlots, while recognising that not all natural areas are significant.

The objectives of the study were as follows:

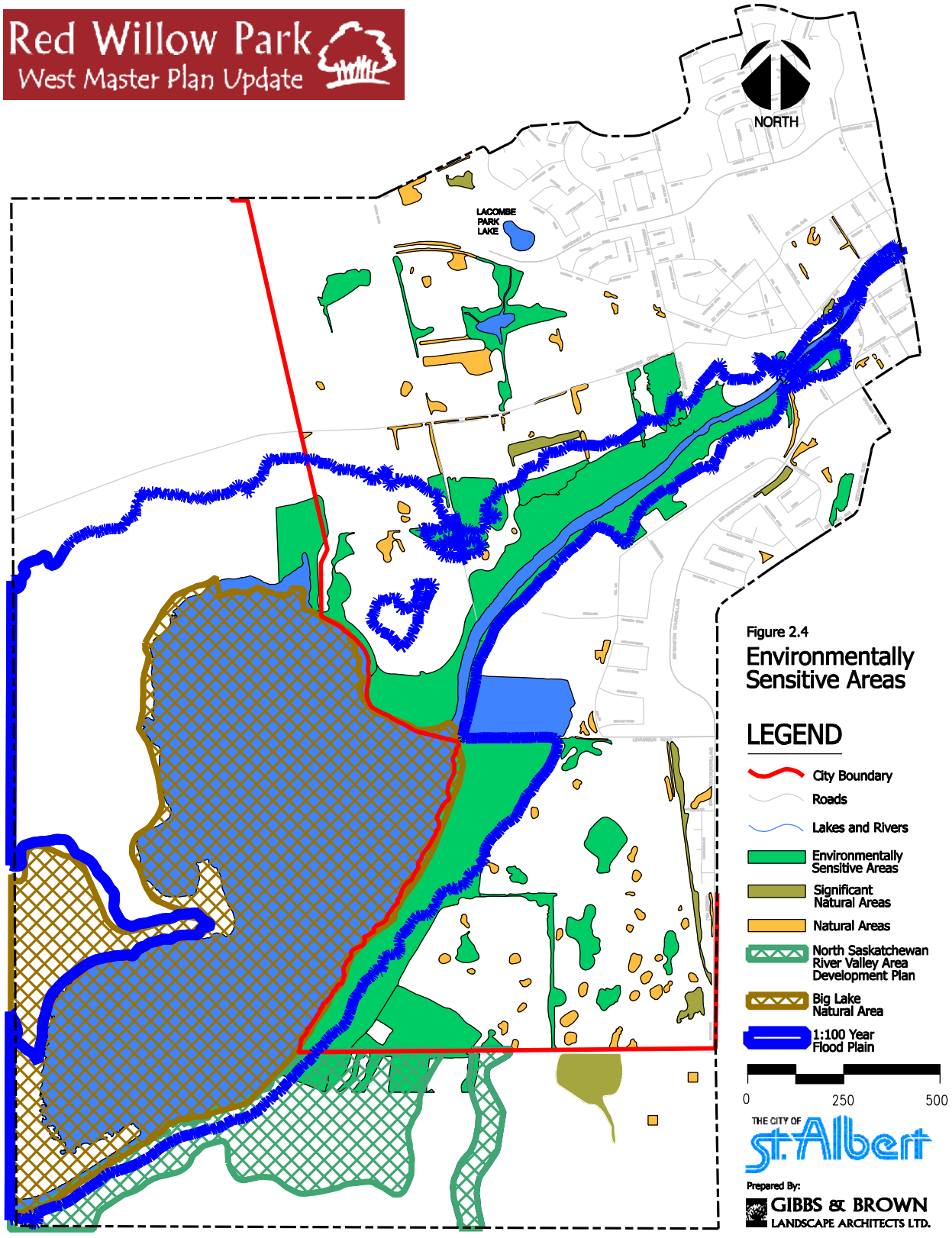
- Review and, if necessary, modify the Natural Area definition and significance criteria used in Pedocan (1990).
- Determine if new sites, including those that are ecologically linked and on lands adjacent to St. Albert's boundaries, warrant recognition as Natural Areas.
- Update the 1990 inventory as necessary.
- Verify the presence of and determine the current ecological conditions of all identified Natural Areas and, building upon Pedocan's data, develop and implement an ecological-based classification system for Natural Areas in and adjacent to St. Albert.

A summary of the key findings of the study are provided in the following sections.

TYPES OF NATURAL AREAS

Spencer identified three types of natural areas:

- Natural Area (NA): is defined by the presence of one of the following: natural vegetation, naturally-occurring water, and other natural features. In some instances, Natural Areas may be partially disturbed.
- Significant Natural Area (SNA): is a Natural Area equal to or greater than 0.5 hectares which, because of its features



Sources: Alberta Environment, *Flood Risk Map St. Albert, Alberta (Sturgeon River)*, 1984
AMEC Earth & Environmental Ltd., *Big Lake Natural Area Management Plan Phase I: Phase I Report*, 2002
Spencer Environmental Management Services Ltd., *St. Albert Natural Areas Review & Inventory*, 1999
City of Edmonton, North Saskatchewan River Valley Area Redevelopment Plan, Bylaw #7188

or characteristics, is significant from an environmental perspective to the community of St. Albert. SNA's can withstand various degrees of human use.

- Environmentally Sensitive Area (ESA): is an undisturbed or relatively undisturbed Natural Area which, because of its features, characteristics or ecological functions, is significant and is highly sensitive to most forms of disturbance (i.e. its values and functions would be significantly altered by natural or human-caused disturbance such as development of surrounding lands of human use of the site).

LEVEL OF SIGNIFICANCE

All areas identified within the study area are considered to be significant. Only the level of significance varies. Each of the identified sites was evaluated for its significance from a local, regional, provincial, nation, and international perspective. The significance level of each site was determined using the following criteria:

Table 2.1 Levels of Significance

Level	Criteria
Local	Natural features that are considered unique or significant from a local perspective. These include sites that have intrinsic appeal due to community interest.
Regional	Natural landscapes or features that are of limited distribution or the best examples of a feature in the region.
Provincial	Natural landscapes or features that are of limited distribution at a provincial level or are the best examples of a feature in Alberta.
National	Natural landscapes or features that are of limited distribution or the best examples of a feature in Canada.
International	Natural landscapes or features that are unique in the world.

Provincially Significant Areas: Any Natural Areas along the shores of Big Lake were considered to be provincially significant. In 1997, Alberta Environmental Protection designated Big Lake as an

Environmentally Sensitive Area at a provincial level. All sites identified as provincially significant were ESA's.

Regionally Significant Areas: Natural Areas within the Sturgeon River Valley corridor are considered to be Regionally Significant. This includes a hydrologically-significant river that is a critical link in a provincially-significant watershed, and SNA's and ESA's found on adjacent river terraces and floodplains. The river corridor is a critical wildlife corridor that allows for the movement of wildlife through St. Albert to other habitats east and west of the City. The wooded river terraces provide critical cover within this passageway. The sites that are located in the 1:100 year floodplain are considered to be regionally significant because they lie within the proposed Red Willow Park boundary, which is of regional importance. All the regional-significant sites are classified as ESA's since they are subject to periodic flooding.

Locally Significant Areas: All other Natural areas are considered locally significant areas.

Figure 2.4 illustrates the locations of the various types of environmentally significant areas which are found within the study area. They can be classed into three areas: natural areas, environmentally sensitive areas, and significant natural areas.

Very few sites, such as Big Lake and its shoreline ecosystems, are known to support special status plant or wildlife species; however, a number of sites have the potential to support special status wildlife. Several sites were classified as significant due to the high diversity of plant communities and their potential for high wildlife diversity.

The majority of the natural area sites were significant due to their habitat diversity. A few of the areas were large enough to provide significant wildlife habitat, such as the areas around Big Lake and along the Sturgeon River Valley and floodplain. The smaller areas, although not large enough to support locally-significant wildlife populations, can serve as breeding habitat for mice and voles and up to several pairs of nesting birds. They can also provide significant wintering habitat for year round avian residents. If the smaller areas are found in close proximity to the larger areas, they can be used by transient larger mammals and as staging areas by migrating birds (Spencer Environmental Management Services Ltd., 1999).

According to the *St. Albert Natural Areas Review and Inventory*, the designation of a site as significant does not necessarily mean that it needs to be conserved, but rather that due consideration to

that site be given prior to any decision which may pose an impact on the area.

The report recommended that the City of St. Albert…

- Adopt a Natural Areas Policy in the MDP, which ensures the preservation of the most significant natural areas, using specific policy objectives. This would include, but not limited to, all provincially-significant and regionally-significant sites;
- When development encroaches on a site proactively designated for conservation, the potential impacts of development should be assessed and mitigation measures developed to ensure effective conservation.
- When a site, under consideration for conservation, could be displaced or compromised by a development proposal, the following should be undertaken to gain an understanding of potential effects of development:
  - Additional field evaluations including a spring bird survey, a rare plant survey and, if a wetland is involved, an amphibian survey;
  - An assessment of the site's post-development sustainability;
  - Evaluation, according to pre-determined criteria, of the merits of site conservation.
- Establish a standardised protocol for what is required of developers when development proposals potentially affect a significant natural site.

In 2002, Spencer Environmental began a prioritization study designed to assess the sustainability of 32 previously-identified significant natural sites on selected undeveloped lands within St. Albert. Sites assessed included those situated within the plan area for the Red Willow Park Master Plan update. The study, which is ongoing, will identify natural sites that would be sustainable, if protected, in a post-development context (i.e., when developed as indicated in the current land use plan). Based on that assessment and the previous significance rating assigned during the 1999 natural site inventory update, a *preliminary* list of sites that should be conserved during future development was provided (Lynn Maslen, personal communication, February 27, 2003).

Study methods were founded on the premise that natural ecosystems are dynamic and conservation of the natural ecosystem processes that currently exist at the sites would,

therefore, be essential for retaining natural resources in the long-term. Study methods were rooted in current landscape ecology theory and, in combination with limited site–specific data, were used to identify the sites that have the highest potential for sustaining ecological processes in a post-development context, as well as the ecological linkages that would be required to realize this. By identifying one list of all sites that should be targeted for conservation, and the important proximal sites, the study enables conservation of a network of sites, which, in turn, increases the likelihood of any one site remaining sustainable.

The lack of site-specific data for many sites resulted in a preliminary list of sites to be conserved. With limited additional site-specific information the list could be finalized.

2.1.3 Conclusions & Implications for Park Update

1. Conservation of Big Lake, the Sturgeon River and the surrounding Environmentally Sensitive Areas is an important regional objective.

2. As a mechanism for conservation, Red Willow Park should encompass all designated natural areas and flooded shorelands under the influence of Big Lake and the Sturgeon River.

3. Natural area management plans are needed for shorelands within the park which are in keeping with Red Willow Park and Big Lake Natural Area goals and objectives.

4. The recommendations of the St. Albert Natural Areas Study (Spencer Environmental Management Services Ltd., 1999) are supported in the *Red Willow Park West Master Plan Update*.

2.2 HERITAGE EDUCATION & INTERPRETATION

Red Willow Park and the Big Lake Natural Area offer high quality destination opportunities to interpret the natural and human heritage of the region benefiting educational, recreational and tourism needs of St. Albert. The stature of resources such as Big Lake and the historic St. Albert settlement will attract visitors from the greater Edmonton region, as well as tourists from beyond, providing a direct economic benefit to the community.

2.2.1 Natural Heritage

A diversity of important natural habitats within Red Willow Park provides exceptional opportunities for nature interpretation and

outdoor education (as illustrated in Figure 2.2). As well, the habitat enhancement and development features proposed for Red Willow Park can serve as demonstration projects to make park visitors aware of the needs of wildlife and methods of preserving or improving wildlife habitat.

A major component of Red Willow Park could be a self-guided interpretive trail system (on land and water) designed to bring users into contact with interesting natural features and provide wildlife viewing opportunities. A major nature center located within the Park and on the shores of Big Lake could provide opportunities for informing visitors about the park setting, important ecological processes, and the importance of habitat management for the preservation of fish and wildlife populations.

MAJOR THEMES

A number of interpretive themes could be developed to take advantage of unique features and environmental settings. These themes could form the basis for outdoor education programs, highlighted at the outdoor classroom/interpretive center, and could be illustrated at the various interpretive stations located along the trail systems. Themes of potential relevance include:

- Geology and landforms
- Wetlands, ecology, and birds (Big Lake)
- Riparian habitats
- Habitat enhancement
- Urban wildlife
- Food chains
- Feature species

Further discussion of interpretive themes may be found in the 1991 Red Willow Urban Park Master Plan.

2.2.2 Cultural Heritage

The historical and cultural highlights within the study area are identified in Figure 2.5. Important historical sites and buildings such a Mission Hill and the Little White School House are located in the heart of St. Albert. The Grain Elevators and Métis River Lot, situated to the west of the trestle bridge, are designated historical resources with the potential for development as a destination

attraction. Figure 2.5 also illustrates the former river lot boundaries and trails from the seigniorial system of the Métis. The area around Big Lake and along the Sturgeon River has a high potential for historical archaeological sites. Indicated on the map are archaeological sites registered with Alberta Archaeological Site Survey.

Initiatives:

- Red Willow Urban Park Master Plan, 1991: the plan first proposed a heritage theme farm focused on the retention of the grain elevator site and extending it to the river and to the west of the ball diamonds.

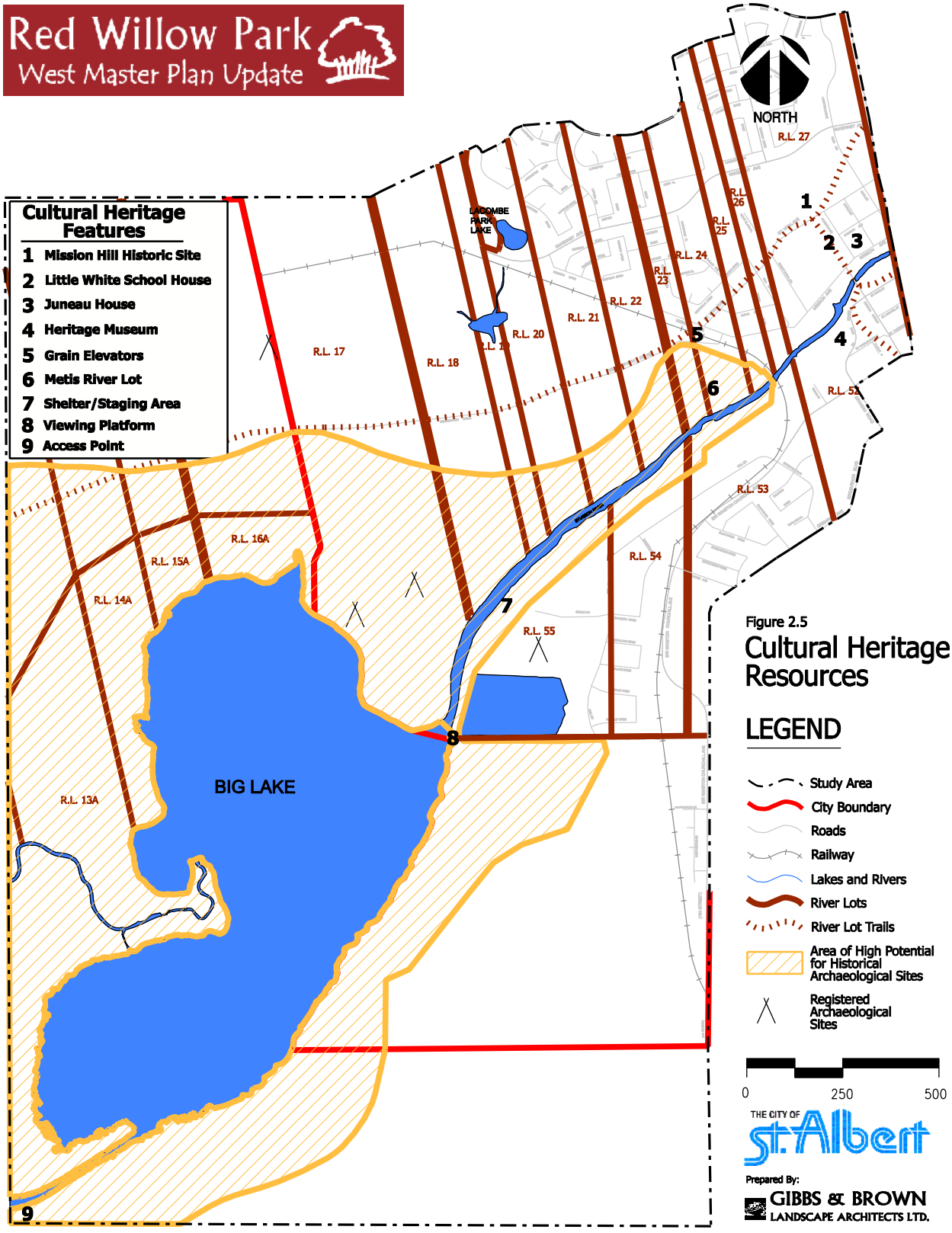
  Since the 1991 master plan, the City has acquired the elevators and obtained a provincial historic site designation. The City has also acquired River Lot 24 and begun plans for a heritage park focused on a pioneer Métis River Lot theme.

- St. Albert Heritage Preservation Master Plan, 1996: a study which recommended that St. Albert develop a heritage policy and establish a Heritage Services Responsibility within City Administration. The policy would 1)preserve and present heritage resources as an expression of community identity and pride; and 2)integrate heritage resources into St. Albert's development strategies.

- Arts & Heritage Foundation of St. Albert – Master Plan: Under the direction of a new director, a Master Plan is being established by the Arts & Heritage Foundation. The Master Plan will outline guidelines of the development of:

  - Grain Elevator Sites: the grain elevator will be maintained as is due to the registered historical site designation. The Arts & Heritage Master Plan will conform to current legislation while striving to make the site a world class facility. The master plan will promote and display agricultural theme and movement of grain.

  - Métis Heritage Site: River Lot 24 will be developed as a Métis village up to the river edge. The site will portray the various activities of the daily lives of the Métis at the turn of the century. The site will depict the Métis lifestyle as a nomadic people. The village will progress throughout the era commencing with the establishment of St. Albert in 1861 to present days.



Sources: AMEC Earth & Environmental Ltd., *Big Lake Natural Area Management Plan Phase I: Phase I Report*, 2002
Kipen Gibbs Landscape Architects Ltd., *Red Willow Urban Park Heritage Corridor Master Plan*, 1991

2.2.3 Economic Benefits

NATURAL HERITAGE

Many Canadians and people around the globe spend a lot of time taking part in nature-related activities such as bird watching, photographing and studying wildlife. Often, access to public lands, water and wildlife for purposes of pursuing such activities is free. Modern academic economics does not take into account the economic significance of such wildlife-related activities. Yet these "goods" and "services" still have an economic value and benefit to the economy in both direct and indirect ways. Direct benefits are defined as "the economic values that people place on the utilization of a resource". Indirect benefits are "indicators of the economic activity generated by the use of a resource" (Environment Canada, 2000).

The vast majority of those who participate in nature-related activities derive considerable enjoyment from their participation and many are willing to pay for the enjoyment they receive while partaking in nature-related activities. A Canadian survey reported that in 1996, Canadians would be willing to pay $13.0 billion. Table 2.2 illustrates the monetary amount that Albertans spent on recreational activities in 1996.

Table 2.2 Expenditures on Nature-Related Activities by Alberta in 1996, by Type and Activity

Category of Expenditure	Outdoor Activities in Natural Areas		Wildlife Viewing		Recreational Fishing		Hunting Wildlife		Other[1]
	$ million	%	$ million	%	$ million	%	$ million	%	$ million
Accommodations	135.3	15.0	4.4	2.6	7.4	5.0	1.8	2.5	
Transportation	229.0	25.4	15.8	9.2	35.0	23.7	20.2	28.5	
Food	183.2	20.3	9.5	5.5	23.5	15.9	7.2	10.1	
Equipment	293.6	32.6	142.0	82.7	50.9	34.4	29.0	40.8	
Other items	60.5	6.7			31.0	21.0	13.0	18.3	
Costs for other nature-related activities									70.2
Total[2]	901.7	100	171.6	100	147.8	100	71.0	100	70.2
Average Yearly	836		171.6		147.8		843		
Average Daily	56		23		22		51		

Notes:

[1] Costs for other nature-related activities include expenditures on maintaining, restoring or purchasing land for conservation, nature-related organisations and residential wildlife-related activities. Data on these activities were not broken down by expenditure category

[2] Some figures may not total perfectly because of rounding.

Source:

Environment Canada. 2000. *The Importance of Nature to Canadians: The Economic Significance of Nature-Related Activities*. Public Works and Government Services Canada.

In 1987, the University of Alberta conducted a survey which looked at the economic benefits of bird watchers to Point Pelee, Ontario. Point Pelee National Park is one of the most desirable bird watching locations in the world for the spring passerine migration. In 1987, it drew over 57 000 birding gate visits and nearly 17 000 birders. They collected data on travel and equipment expenditures, willingness to pay for their experience (consumer surplus), and socio-economic and recreational characteristics. The results revealed that the willingness to pay for birding at Point Pelee amounted to $4.1 million for the month of May (daily average of $76/birder). The total expenditures ensuing from the bird watchers amounted to $3.8 million, $2.1 million of which was spent in the local area of Leamington, Ontario. Major expenditures fell into four major categories: travel (27%), food (26%), accommodation (23%), and equipment (13%). On average, birders spent $244/trip or $66/day of birding at Point Pelee (Hvenegaard, 1989).

Table 2.3 Expenditures by Bird Watchers at Point Pelee National Park – May 1987

Category	Avg $/trip for all Birders	Total $ for May	Percent of Total Expenditures
Travel	$60.95	$1,027,374	27.2%
Food	$58.89	$992,659	26.3%
Accommodations	$50.45	$850,300	22.5%
Equipment attributed to PPNP trips	$30.03	$506,087	13.4%
Film	$10.89	$183,519	4.9%
Souvenirs	$8.17	$137,785	3.6%
Entrance Fee	$1.00	$16, 855	
Entertainment	$0.90	$15, 147	
Other	$2.95	$49,641	2.1%
Total:	**$224.23**	**$3,799,367**	

Source:

Hvenegaard, Glen Timothy. 1989. *The Economic Values of Bird Watching at Point Pelee Nation Park, Ontario*. Edmonton, Alberta: University of Alberta.

HERITAGE & CULTURAL INTERPRETATION

In recent years the concept of "Total Economic Value" (TEV) has emerged, which takes into account the value-added benefits of a source. This new concept can address the important conceptual matters that were over looked in traditional economic analysis. The concept of TEV quantifies the economic values derived from a

particular activity, area or institution. Heritage institutions produce many benefits, many of which cannot be measured in monetary terms. A study by the Canadian Government divided the beneficiaries of the Heritage Institutions into three categories: Personal, Commercial, and Societal.

> *Personal benefits are those gained by individuals from the use or non-use of the institution. Commercial benefits are the net value added gained by businesses as a result of spending attributable to the institution. Societal benefits are those benefits which go beyond those received by individuals or businesses and exhibit "public good" characteristics* (The Outspan Group Inc, 2001).

Table 2.4 describes the generalised framework that was used for this study.

Table 2.4 Generalised Framework of the Total Economic Benefits Derived from Heritage Institutions

<table>
<tr><th>Personal</th><th>Commercial</th><th>Societal</th></tr>
<tr><td colspan="3">Definition:</td></tr>
<tr><td>Benefits accruing to individual stakeholders (users and non-users</td><td>benefits derived from the redistribution of commercial activity from one area to another</td><td>Benefits that are not allocatable to either individuals and/or businesses yet indivisible and tending to be societal in scope (public goods).</td></tr>
<tr><td colspan="3">Benefit Components:</td></tr>
<tr><td rowspan="2">Use Values:
• direct use
• indirect use</td><td rowspan="9">Impacts associated with attributable spending by stakeholders and by institutions on management and development; as measured by increases in gross domestic product (GDP), labour income, employment, tax revenue and other measures of impact.</td><td>health effects - mental, physical, spiritual</td></tr>
<tr><td>education benefits</td></tr>
<tr><td rowspan="7">Non-Use Values:

• option value
• existence value
• bequest value</td><td>international responsibilities and agreements</td></tr>
<tr><td>business location decisions</td></tr>
<tr><td>scientific benefits</td></tr>
<tr><td>transfers from outside account</td></tr>
<tr><td>national identity</td></tr>
<tr><td>community cohesion</td></tr>
<tr><td>"quality of life"</td></tr>
<tr><td>others</td></tr>
</table>

Source:
The Outspan Group Inc. March 2001. *Heritage Institutions in Canada: Impacts and Benefits*

Table 2.5 illustrates information for the average heritage institution.

Table 2.5 Selected Operations Ratios for All Heritage Institutions in Canada, 1989-90 to 1997-98

Ratios	Year				
	1989-90	1991-92	1993-94	1995-96	1997-98
Average visits per institution	26,919	25,960	25,885	22,796	22,836
Operating Revenue per Institution	$348,392	$409,404	$409,677	$397,535	$429,791
Ratio of Unearned to Earned Revenue	3.94	4.02	3.45	2.67	2.45
Earned as % of Total Revenue	20.2%	19.9%	22.5%	27.3%	29.0%
Operating Revenue per Visit	$12.94	$15.77	$15.83	$17.44	$18.82
Volunteers as % of Total Personnel	62.3%	65.4%	69.6%	69.2%	66.4%

Source:
The Outspan Group Inc. March 2001. *Heritage Institutions in Canada: Impacts and Benefits*

- Phase 3: The master plan will include a farm theme of the early stages of development in St. Albert (Roger Belley, Personal Communication, March 28, 2003).

2.2.4 Conclusions & Implications for Park Update

1. The Red Willow Park Master Plan should link and coordinate the development of natural and cultural heritage resources.

2. Big Lake Natural Area is a significant ecological and heritage resource that will require cooperation between the Red Willow Park and Big Lake Natural Area planning initiatives.

3. The status of the Big Lake Natural Area warrants a natural history education and interpretation centre.

4. Red Willow Park shorelands are an interface between urban St. Albert and Big Lake Natural Area that needs to be managed to promote sustainable ecological functions and services provided by the Big Lake Natural Area.

5. The diversity of wetland habitat and wildlife/bird species provides a significant destination resource for environmental education, research, nature-based leisure activities, and heritage tourism.

6. Further planning of the Elevator and Métis River Lot 24 as a heritage destination is warranted and integral to Red Willow Park.

7. All connecting trails should be enhanced with interpretive features and signage.

2.3 HYDROLOGY

Throughout the update planning process, hydrology and water quality were important issues identified in the consultation process.

The following summarises two concurrent studies that dealt with these issues.

2.3.1 Big Lake Drainage Study

Associated Engineering was engaged by the Province of Alberta to conduct a hydraulic assessment which is to be completed in June 2003. The report will investigate drainage problems and recommend stormwater drainage guidelines for the Big Lake/Sturgeon River Drainage Basin. Issues and concerns addressed in the report include:

- Flooding of Atim Creek, Sturgeon River and Riviere Qui Barre, Big Lake, St. Albert, and downstream of St. Albert;
- Lake levels of Lac Ste Anne and Big Lake;
- Water quality of Big Lake and Isle Lake;
- Water quantity of Big Lake and Sturgeon River Basin; and
- Other issues such as flood plain protection, encroachment impacts, development delays, consistent drainage criteria, and urban drainage (controlled vs. uncontrolled).

Potential strategies explored by the report include:

- Protect the flood plain
- Develop City of St. Albert policy prohibiting the filling of flood fringe areas
- Environmental Stewardship
- Development Discharge
- Water Quality
- Water Management Plan
- Establishment of Planning Tools

2.3.2 Stormwater Management Study

The City of St. Albert has contracted Associated Engineering Ltd. to develop a Stormwater Management Regional Master Plan. In response to the growing demand due to increase in population, an expansion of infrastructure is needed to provide basic services to St. Albert and the Intermunicipal Development Plan Area.

A Stormwater Management System would minimize the impacts of changes in the flow regimes and patterns resulting from development. Stormwater management will protect the natural environment, particularly the water quality of the Sturgeon River and Big Lake.

The Master Plan will address such issues as:

- Infrastructure: an inventory and assessment was conducted which examined the hydraulic and structural conditions of current stormwater management and conveyance systems within St. Albert.
- Sturgeon River: the majority of stormwater is discharged into the Sturgeon River. The report will assess the impacts of these discharges, natural erosion, and sediment deposition on the river.
- Big Lake: the report will look at the impact of development on the lake's water level and quality.
- Water Quality: Changes to the Sturgeon River and Big Lake from either man-made or natural factors can result in changes to the water quality which can result in degradation to the aesthetics and biophysical environment of the river, lake and surrounding area.
- Natural Areas: The report will look at how stormwater management planning can be integrated with parks and natural areas without compromising their integrity.
- Development: In response to the expansion of St. Albert, the city has begun to incorporate stormwater management facilities in new developments. Design standards and guidelines will be developed for consistent application across the city.

2.3.3 Conclusions & Implications for Park Update

1. The current and future land resources of Red Willow Park are inextricably linked with the water resources of Big Lake and

Sturgeon River and therefore land and water management initiatives need to be coordinated.

2. Flood affected lands should be included in the Park.

3. Issues such as flood fringe filling are to be addressed in the two concurrent technical reports for the Big Lake Basin and St. Albert Storm Water Management Plan (storage and conveyance) (Red Willow Park West Master Plan Update would support a City of St. Albert policy to prohibit flood fringe filling).

2.4 OWNERSHIP

Figure 2.6 illustrates the land ownership within the study area. Major blocks of land are owned by private landowners including:

- South Riel
- Meadowview Area

The City is also a significant land owner with Municipal Reserve, Environmental Reserve, and individual lots in the following locations:

- Sturgeon River South Shore: all of Riel Park plus a parkway corridor behind businesses fronting Riel Drive.
- Meadowview: land occupied by Meadowview Ball Diamonds, Elevator Historic Site, River Lot 24, and various nearby lots.
- Big Lake North Shore: a large parcel of land at the mouth of the Sturgeon River, west of Hogan Road, which is occupied in part by the Municipal Tree Farm and in part by farmland and naturalised shoreland.

Land Holdings of the Province for the Big Lake Natural Area are also noted in Figure 2.6.

2.4.1 Conclusions and Implications for Park Update

1. Acquisition of a land base by the municipality is partially complete in the study area.

2. The balance of land needed for the Park will be acquired largely through the land development process using statutory environmental reserve (ER) and municipal reserve (MR) dedication and outright acquisition.

3. The extent of the park land base will be negotiated with existing land owners for the major parcels of land in Meadowview and South Riel during the Area Structure Plan (ASP) planning and approval process.

4. The City may potentially negotiate the prededication of land for the park at the ASP approval stage.

2.5 LAND USE & SETTLEMENT PATTERNS

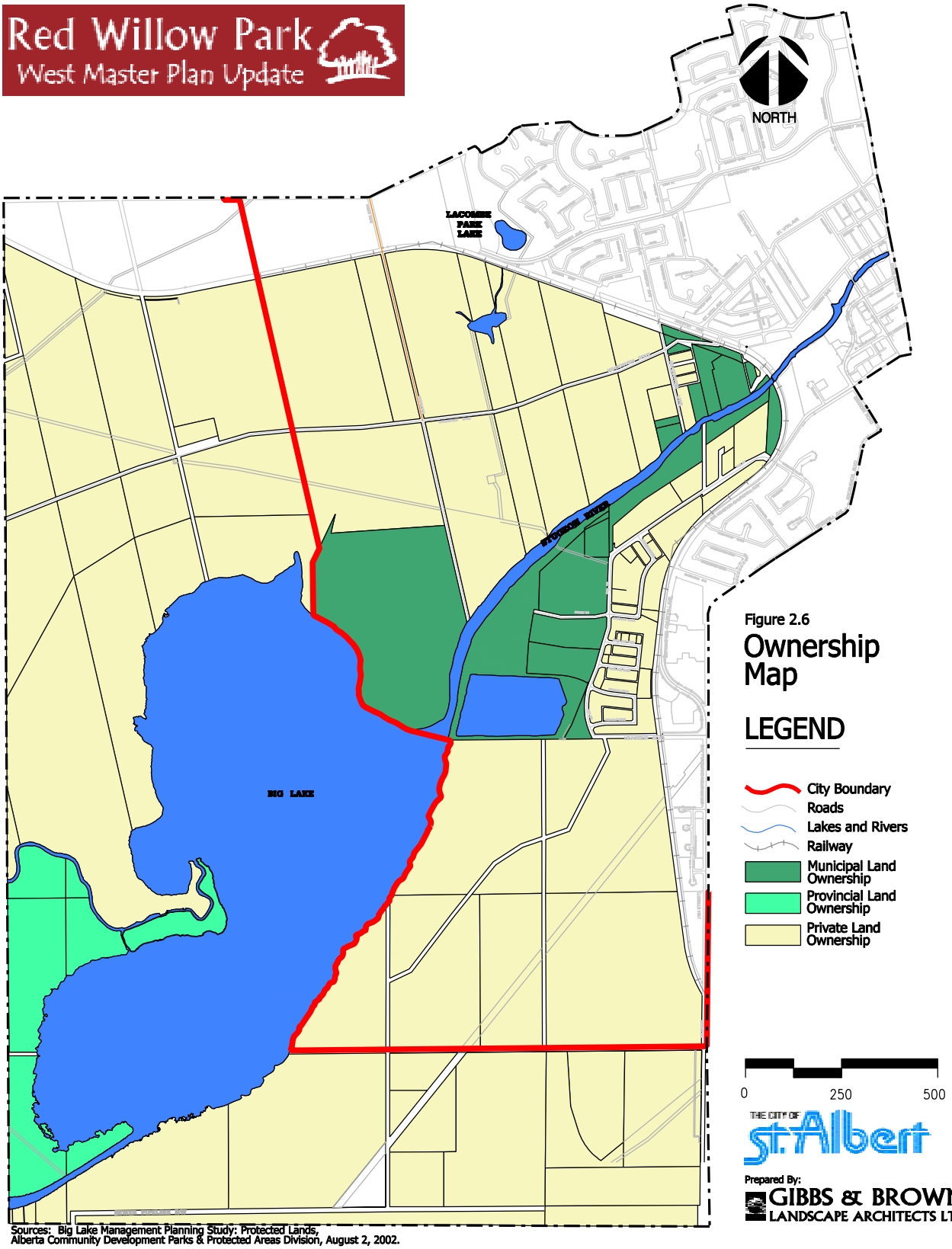
Figure 2.7 illustrates the existing and proposed settlement patterns for St. Albert. Existing land uses in the update study have not changed significantly since the release of the 1991 Master Plan. Agriculture is the main land use on both Meadowview and Riel Park sides of the Sturgeon River. There has been some growth in the Riel Industrial Area.

On the south bank, west of the railway trestle, the corridor has both industrial (Riel Industrial Park) and recreational (Riel Recreation Area) development. Negative impacts resulting from industrial development are minimal, except for isolated operations. The wide strip of reserve land between the industrial park and the river helps to mitigate the negative visual impacts stemming from industrial operations. In addition, the Riel Recreation Area further to the west consists of athletic fields, the rodeo grounds, and vacant City-owned land along the river which all contributes to the openness of the corridor in this area. On the north bank of the river, the Meadowview Park ball diamonds have been developed right up to the riverbank. The remainder of the north side of the corridor is primarily in agricultural use, which has large areas of forest and marshland closer to Big Lake.

Planning for future development has advanced and is presented in Figure 2.7.

Planning initiatives to accommodate new urban development have been advanced on a number of fronts:

- The municipal development plan (CityPlan): was approved in 2001 which continued to protect shorelands for Red Willow Park, promoted residential expansion in the northwest sector of the City, and industrial expansion in the south Riel lands.


Red Willow Park
West Master Plan Update
NORTH
LACOMBE PARK LAKE
BIG LAKE
Figure 2.6
Ownership Map
LEGEND
City Boundary
Roads
Lakes and Rivers
Railway
Municipal Land Ownership
Provincial Land Ownership
Private Land Ownership
0
250
500
THE CITY OF St.Albert
Prepared By:
GIBBS & BROWN
LANDSCAPE ARCHITECTS LTD.
Sources: Big Lake Management Planning Study: Protected Lands,
Alberta Community Development Parks & Protected Areas Division, August 2, 2002.

- St. Albert Sturgeon County Intermunicipal Development Plan (Armin A. Preiksaitis & Associates, 2001): extends residential development beyond the north and west city boundary into Sturgeon County and the Carrot Creek drainage basin.

- Genstar Lands ASP (UMA 2001): Genstar Developments has initiated an ASP planning process. Because Ray Gibbon Drive transportation initiative was rejected by the current City Council, the plans need to be revised before council approval can be obtained.

- South Riel: a group of landowners under the leadership of Qualico Development (Edmonton) Ltd. are promoting a municipal development plan amendment changing, the general land use designation from industrial to residential.

2.5.1 Community Facilities

For the purpose of this report, community facilities are outdoor and indoor developments where capital has been invested to satisfy a specific leisure need. Riel Recreational Area has been leased out to several clubs:

- St. Albert Canoe & Kayak Club – facilities which will be displaced by the road;

- St. Albert Soccer Association – leases city land for clubhouse, 4 tournament quality soccer fields and 2 practice fields;

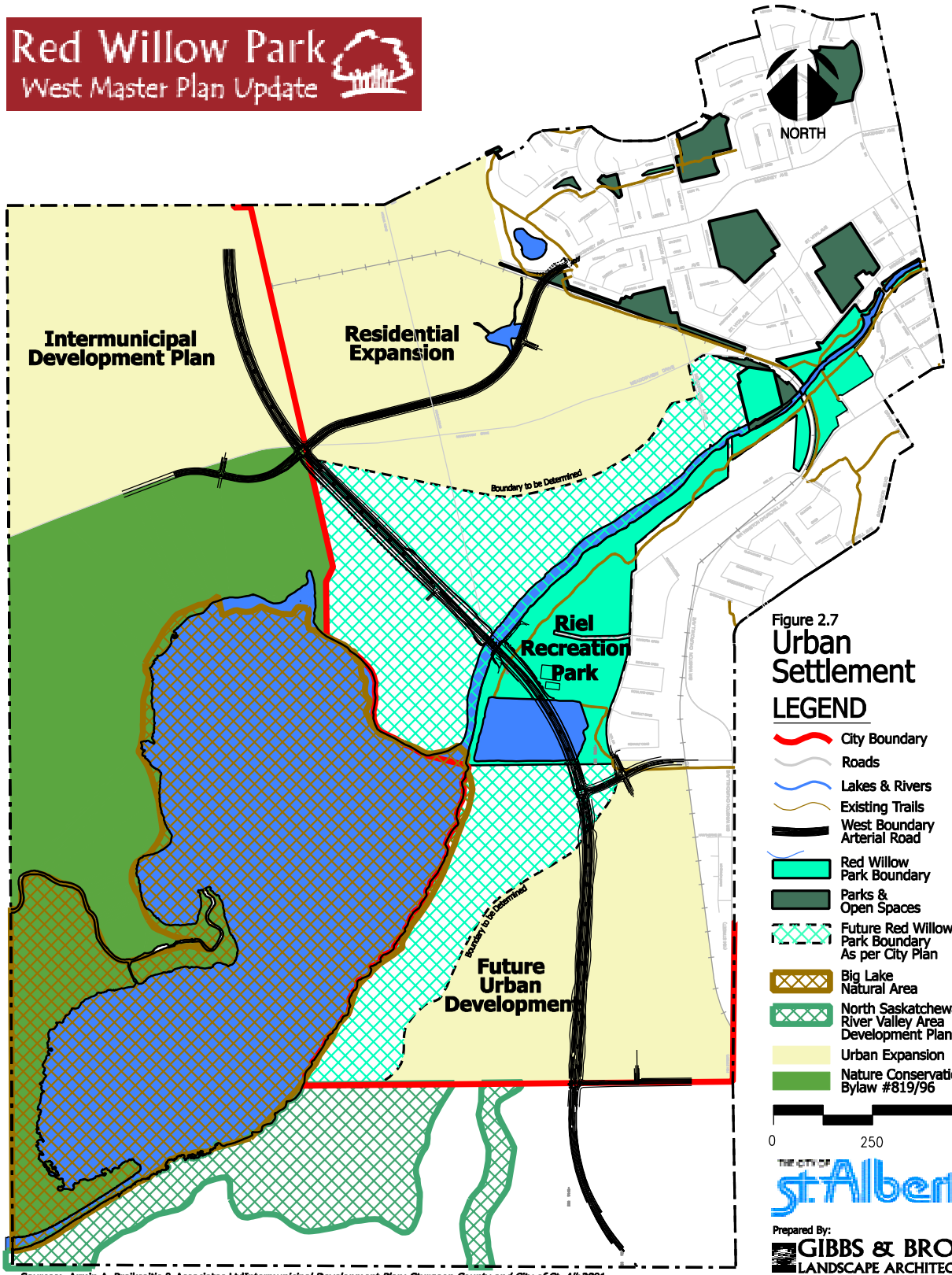
- St. Albert Rugby Club – leases city land for clubhouse and fields;

- St. Albert Kinsmen Club – operates a hall, rodeo grounds, RV Park, and baseball diamonds. Currently seeking to redevelop facilities in near term;

- St. Albert BMX Association – developed facility and operated for local BMX enthusiasts and tournaments (sublease from Kinsmen); and

- Meadowview Ball Diamonds – leases city land for diamonds.

In addition, two environmental education initiatives have been developed in conjunction with the Big Lake Environmental Support Society (BLESS):



Sources: Armin A. Preiksaitis & Associates Ltd. *Intermunicipal Development Plan: Sturgeon County and City of St. Albert* 2001
CityPlan Advisory Committee. *City Plan St Albert: Municipal Development Plan (Bylaw #4/2000)* 2000
City of Edmonton, North Saskatchewan River Valley Area Redevelopment Plan, Bylaw #7188
Infrastructure Systems Ltd. *City of St. Albert West Boundary Arterial Council Communique* 2002
Sturgeon County. *Land Use Bylaw #819/96*

- BLESS environmental education shelter – staging area and rest stop for trail users

- BLESS viewing platform – observation platform at mouth of Sturgeon River

The facilities have been connected to the rest of the Red Willow Park and east side of St. Albert through extensions of paved trails into Riel Park.

2.5.2 Precedent and Concurrent Studies

The following is a description of preceding or concurrent planning studies which influence Red Willow Park.

CITY PLAN ST. ALBERT: MUNICIPAL DEVELOPMENT PLAN BYLAW 4/2000

City Plan is St. Albert's Municipal Development Plan which conveys the community's vision, goals, objectives and policies to steer the city's physical, social and economic development to the year 2014. The plan outlines goals in the following areas: population growth; growth management and urban form; housing and neighbourhood design; economic development; downtown; commercial development; industrial development; parks, recreation, open spaces and schools; environmental management of natural areas; transportation and infrastructure; health, social and protective services; heritage preservation; and intermunicipal planning and regional cooperation.

The main goal for parks, recreation, open space and schools is to maintain and develop a city-wide integrated system of parks, open space and recreation facilities which enhance the quality of life for all residents and helps preserve the natural environment. The plan's guiding principle is that "St. Albert's parks and trails systems is important and should be conserved and protected for future generations." The central focus of St. Albert's park system is Red Willow Park.

According to City Plan, when developing parks and open spaces, the developer should strive to:

- Develop the connectivity of city-wide trail system;
- Develop the areas in an environmentally sensitive and sustainable manner;
- Preserve sustainable locally significant natural areas, where possible;

- Investigate opportunities to integrate passive recreational uses in locally significant areas as a form of site conservation; and
- Explore intermunicipal options and public/private partnerships for the delivery of recreational services and the development of recreational facilities.

According to City Plan, environmental management of Natural Areas should strengthen the protection of sustainable natural areas and minimize the negative impacts of development on these areas. The General Municipal Plan (GMP) of 1992 stated that "locally significant Environmentally Sensitive Areas and new Area Structure Plan neighbourhoods should be incorporated into the parks and open space system." The objective is "to preserve and integrate, wherever possible locally significant Environmentally Sensitive Areas in the development of parks and open space."

The objectives established in City Plan for environmental management are to:

- Prioritise the natural areas on the basis of their significance and potential for sustainability.
- Review the impacts of development on natural areas, considering issues of land use compatibility, buffering, linkages, recreational uses, etc.
- Implement policies which will minimise the negative impacts of development on natural areas, incorporating such policies in the Land Use Bylaw and Area Structure Plans.
- Implement policies to preserve and/or sensitively integrate natural area wherever possible, giving consideration to their individual merits.
- Consider creating "manmade", natural areas in locations where no such places currently exist (e.g. naturalised wetlands for storm water management).

ST. ALBERT OPEN SPACE STANDARDS, 1994

The purpose of this report was to give direction to those involved in the process of developing and refurbishing St. Albert Parks & Open Spaces. It set out city policy in three areas:

- Underlying principles and rationale for neighbourhood open space in St. Albert.

- A set of standards for the development of neighbourhood open space.
- A procedure for developing and refurbishing neighbourhood open space.

Principles:

Open space serves several important functions:

- Facilitates programmed unstructured activities
- Provides passive leisure spaces
- Promotes new residential areas
- Provides long term healthful environment for the community
- Enhances property value of nearby homes
- Promotes St. Albert as a community and assists in establishing a "sense of place" for St. Albert.

Open spaces objective is [1)] to enhance the attractiveness, [2)] Promote long term environmental health of St. Albert, and [3)] to facilitate specific programming requirements of the community, school and recreation systems. The goal is further defined by the following objectives:

- Facilitation: Joint occupation and programming by schools, City recreation program and community groups in the pursuit of education and leisure programming sites uses dependant on the type of school and the functions those sites serve in a neighbourhood in relationship to other recreational opportunities.
- Passive Leisure Pursuits: must provide passive unstructured leisure use opportunities. Components of site must provide for activities such as walking, biking, picnicking, relaxing and children's play.
- Marketing: Developing neighbourhood open spaces should be structured to promote city as a desirable residential area in the metropolitan Edmonton region and specifically design to promote marketing of lots within the new subdivision areas.
- Community Health: present opportunities to experience nature, to retreat from busy lives and families, to delight the senses and other active leisure opportunities, which together provide St. Albert residents with a long-term healthy environment.

- Sense of Place: The image that St. Albert wants to project to residents, visitors and prospective homeowners is found in the overall appearance of treed boulevards, developed park land, and special street landscaping. Open space design expressed in each of the new subdivision in St. Albert may express an individual character wherever possible.

Two tiered classification system:

- Neighbourhood level: provides recreation and leisure opportunities for a single neighbourhood unit; and
- Community open space: provide opportunities for leisure and recreation pursuits in the form of sports fields and outdoor facilities, or a multi-neighbourhood or community-wide basis. Should be distributed in a manner which reduces the need to traverse the main physical barriers of the City such as St. Albert Road and the Sturgeon River.

A SUSTAINABLE FUTURE FOR ST. ALBERT'S PARKS & OPEN SPACES, 2002

This study looks at how St. Albert can leave its legacy as a "City within the trees" by developing a Parks & Open Spaces Management Plan which balances the natural with manicured spaces, active and passive recreation, and the full range of competing demands for space.

Recommendations:

- Endorsement of Municipal Development Plan: St. Albert has developed a policy foundation that supports healthy management of natural areas. It is recommended that the MDP "strengthen the protection of sustainable natural areas and minimize the negative impact of development on natural areas".
- Tree Inventory: the City should develop a comprehensive inventory of trees within the City.
- Tree Bylaw: A tree bylaw should be developed to protect trees within the City.
- Criteria for Naturalisation: The City should develop criteria for identifying areas where naturalization could be encouraged either naturally or with assistance. These areas include buffer strips, small isolated communities, edge communities and riparian zones.
- Protection of Natural Areas on Private Lands Subject to Development: The City should identify significant natural

areas within the City that are currently privately owned, and proactively seek to protect these areas through land acquisition, exchange or agreement.

- Maintenance Procedures: The City should initiate a document to outline comprehensive long-term maintenance strategies and procedures for maintaining parks and natural areas.
- Parks & Trails: the City should develop an integrated strategic long-term plan for parks and trail development.
- Resource Allocation: Areas that meet criteria for naturalization should be managed to increase bio-diversity and decrease maintenance obligations.
- Public Awareness: the City should develop community education initiatives to inform and engage the public regarding the naturalization programs.
- Involvement: the City should ensure that residents in the community have ample opportunity to be involved in the design and maintenance of our open spaces.

2.5.3 Conclusions & Implications for Park Update

1. Land use planning controls are in place that will generally protect shorelands from development and which will provide the land base for Red Willow Park.

2.6 TRANSPORTATION & UTILITIES

2.6.1 Transportation & West Regional Road

The West Regional Road (former St. Albert Bypass) has been located in both the 1988 Concept Plan and 1991 Master Plan. This transportation route has been the source of community debate over need and alignment particularly since the adoption of the 1991 Red Willow Urban Park Master Plan and the emergence of local environmental advocacy groups such as BLESS.

The current City Council has adopted the alignment shown in Figure 2.7 on September 3, 2002 and has modified the Municipal Development Plan on February 3, 2003 to agree with the alignment.

A concurrent engineering implementation study is being conducted by Infrastructure Systems Ltd. A dialogue has occurred between the road and park master plan studies through an ad hoc coordination committee.

Characteristics of the road which affect the park are:

- Alignment of roadway: east of the 1991 alignment to provide greater separation from Big Lake. The alignment will dislocate the Canoe and Kayak Club and cause some adjustments to the Soccer Club.
- Classification of roadway: expressway with limited intersections and a 2 lane initial configuration.
- Design of bridge: three span structure permitting trail underpasses along both river banks and a multi-purpose trail crossing of the river on the bridge.
- Design of drainage and related roadway systems: need for a SWMF in Meadowview Park east of the road.
- Grade line: varies from slightly elevated to embankments at bridge approaches.
- Park access: all way intersections to park destination locations where warranted.
- Trails systems: a multi-use hard surface trail will be built on the east side of the road right-of-way.
- Landscape development: tree planting

Figure 2.8 shows a typical cross-section of the road within Red Willow Park.

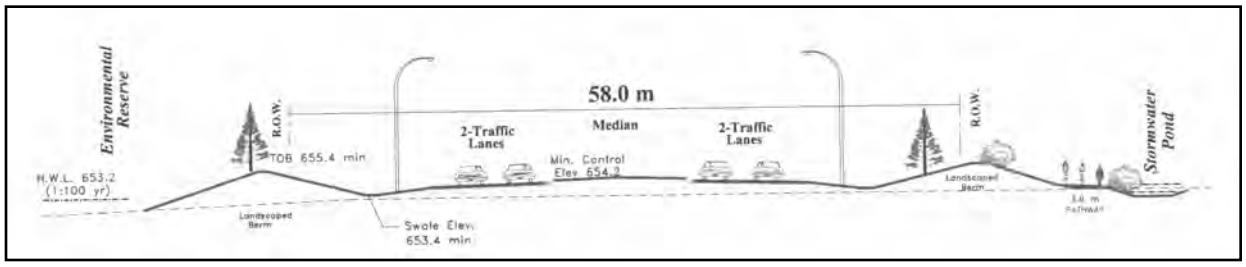


Figure 2.8 Roadway Typical Section
Source: Infrastructure Systems Ltd.

The road project is subject to a number of environmental approvals including:

- Federal:
  - Fisheries Act
  - Navigable Water Protection Act

- Canadian Environmental Assessment Act (CEAA)

- Provincial:

  - Public Lands Act

  - Alberta Environmental Protection and Enhancement Act

  - Alberta Water Act – Code of Practice for Watercourse Crossing

Under a joint agreement, provincial and federal approval processes will be coordinated. Under CEAA, the project will be subject to a screening type of environmental assessment where adverse effects, mitigation measures, residual effects and cumulative effects are evaluated.

The proponent's environmental assessment report is being prepared by Spencer Environmental Management Services Ltd.

Though the Environmental Assessment has yet to be finalised, mitigation measures contemplated include:

- Berming along soccer field

- Berming next to White Spruce Stand as noise attenuation

- Borrow pit for potential relocation of Canoe and Kayak Club

- Reclamation/remediation of Riel Pond

- Berm and landscape along expressway right of way edges to reduce visual and sound affects

2.6.2 Conclusions & Implications

1. Roadway alignments are often associated with or transect linear urban open space systems.

2. The road provides some benefits to the park in terms of accessibility to planned park destinations, a trail river crossing (significant enhancement to trail access) and clear separation of some Big Lake shoreland from adjacent residential development.

3. Environmental adverse effects are being addressed in the project environmental assessment study.

2.7 DEMOGRAPHICS, OUTDOOR LEISURE TRENDS & COMMUNITY NEEDS

This chapter examines Park needs relating to the changes in the demographic profile of St. Albert and in relation to outdoor leisure trends. The data sources for the analysis include:

- Alberta Recreation Survey (Alberta Community Development, 1996 & 2000)
- 2000 Census City of St. Albert (St. Albert Economic Development & Tourism, 2000)
- The City of St. Albert 2002 Community Survey: Analysis of Findings (Criterion Research Corp, June 2002)
- City of St. Albert Public Opinion Survey: Final Report (Banister Research & Consulting Inc., September 23, 2002)
- City of St. Albert 2003 Community Satisfaction Survey, Final Report (Banister Research & Consulting Inc. August, 2003)

2.7.1 Socio-Demographic Profile and Trends

Population & Population Growth

Beginning with the suburban development of St. Albert in the 1960's, the City has grown steadily from 3 940 people in 1960 to 51 716 people in 2000. As Figure 2.9 suggests, St. Albert has consistently gained population over the past three decades. The net rate of growth has fluctuated between 30% and 3% before stabilising around 5% growth rate.

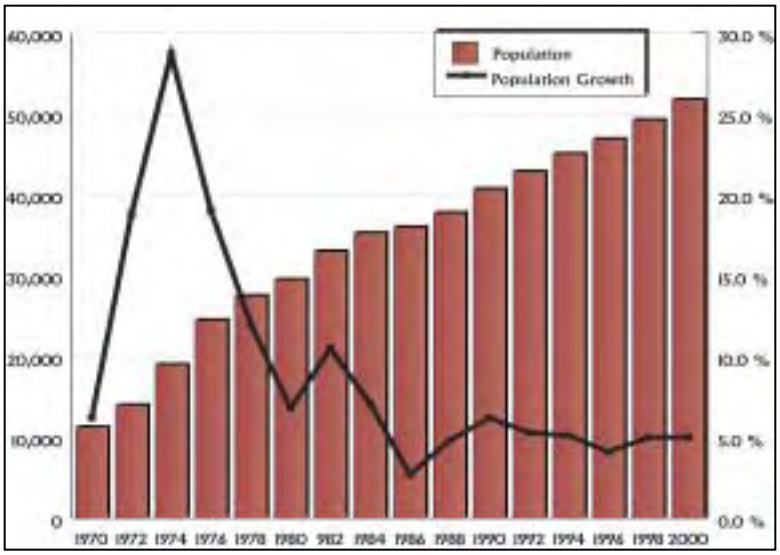


Figure 2.9 St. Albert Population & Growth 1970 – 2000
SOURCES: 2000 Census City of St. Albert
Red Willow Urban Park Master Plan, 1991

Population growth in St. Albert since the 1960's has been primarily driven by the in-migration of young, newly-formed households, and family households with children in the 0-14 year age range. Due to its close location to Edmonton, and as factor of the origin of in-migration, St. Albert tends to have characteristics of a major urban metropolis rather than a small rural town. In descending order, in-migration is from Edmonton (41.9%), Alberta (29.3%), Canada (21.9%), and other places (6.9%).

These household size and age trends are projected to dominate the future in-migration pattern. However, like other communities in Alberta, St. Albert will be subject to the aging trend which is evident in Canada. The aging process will increasingly become

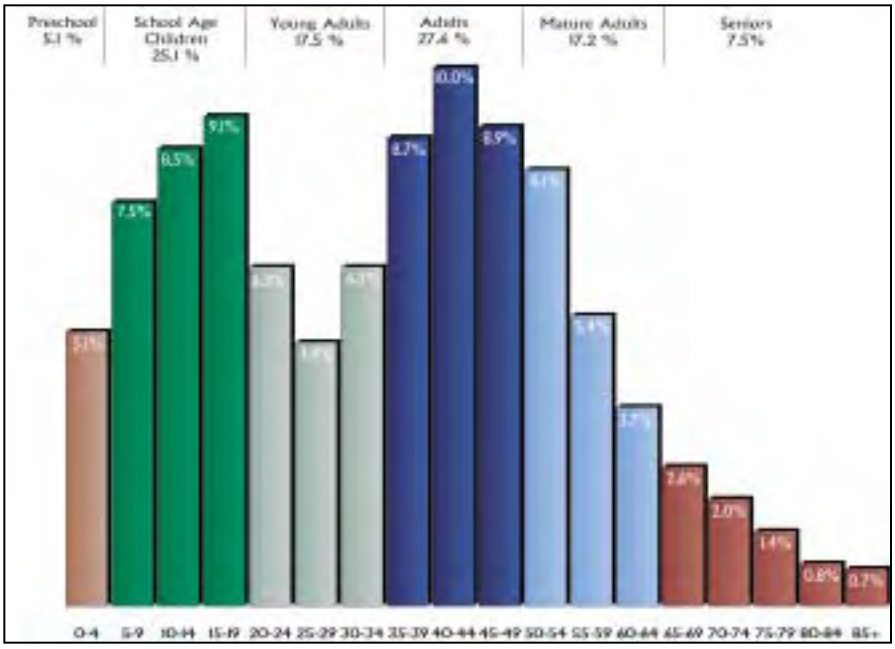


Figure 2.10 St. Albert Age Composition
SOURCES: 2000 Census City of St. Albert

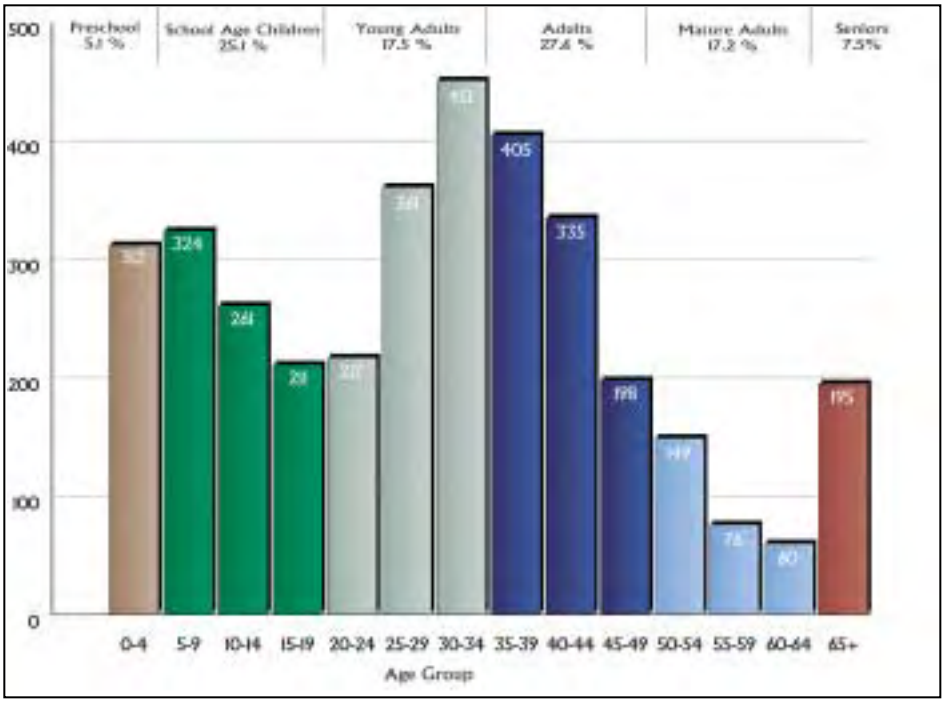


Figure 2.11 Age Composition of New Residents to St. Albert
SOURCES: 2000 Census City of St. Albert

apparent as the in-migration waves of the 1960's and 1970's have generated a substantial number of residents who are retired or elderly. Figure 2.10 illustrates the population break down by age group.

Due to its role as a suburban residential community, it is projected that the demographic structure of St. Albert will not age as rapidly as older non-suburban communities. The predominant in-migration trends will continue to replenish the population with newly-formed and young family households, though smaller in size. This will have a somewhat countervailing effect on the aging trend projected for the population overall. Residents younger than nineteen will still exist in significant numbers but will decrease in proportion to the overall population.

Notably 25% of immigration will come from mature adults and seniors which added to the aging population, will increase demands for senior/adult housing in St. Albert (see Figure 2.11).

Socio-Demographic Trends

Due to St. Albert's suburban role and relatively recent burgeoning growth, the community has a relatively youthful, family-oriented population, as demonstrated by Figure 2.10.

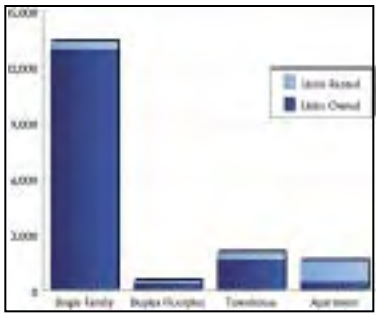


Figure 2.12 Tenure by Dwelling Type
SOURCES: 2000 Census City of St. Albert

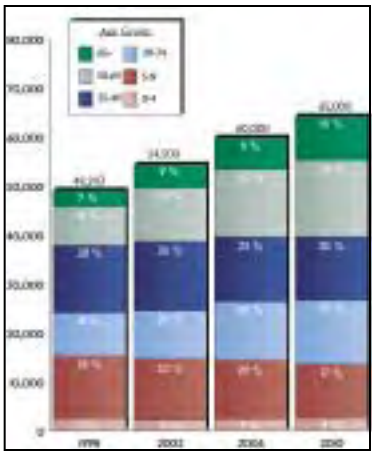


Figure 2.13 Projected Population Growth by Age Composition
SOURCES: 2000 Census of St. Albert

Household Tenure & Type: The development industry is primarily focussed on the provision of single-family units, and more recently multiple-family units for the senior or adult ownership market; although in the late 1970's and 1980's, some multiple-family rental units were built in response to a very high demand for such housing. As Figure 2.12 shows, St. Albert is comprised of both a high proportion of single-detached housing, and ownership tenure.

Aging Trend

Figure 2.9 shows how the age structure of St. Albert has evolved while the population projections in Figure 2.13 show how the age structure of St. Albert will change, in terms of age composition over the next five to ten years (the population is projected to reach 70 000 person by 2011).

Over the 1981-1991 period, St. Albert experienced the last influx of the baby boom generation. Over the 2001-2011 period, it is projected that the age composition of St. Albert will become characterised by a mature population.

Significant increases are projected for the 55-65+ age range (the aging baby boom generation), and slight increases for the 30-39 age range (the offspring of the baby boomers).

2.7.2 Outdoor Leisure Trends

Leisure trends are a combination of needs and preferences. This analysis focuses on the leisure trends derived from the General Recreation Surveys conducted by Alberta Recreation and Parks in 1996 & 2000.

The main indicators of leisure trends generated from the latter surveys are participation rates for common leisure activities. A participation rate is calculated from the number of respondents and/or household members who participated in an activity at least once in the previous twelve months. Participation is dependent upon factors related to access including income, facilities, and location. Therefore a participation rate reflects the available set of leisure opportunities and respondent/household resources and preferences.

Participation Rate

Table 2.6 provides a summary of the provincial sample data for household participation in outdoor leisure activities according to ranking by participation rate.

Table 2.6 also includes the provincial data for respondent participation in 1996 and 2000 to allow for comparison of household figures. The household trends, because they incorporate data for spouses and children, are of greater relevance for needs and preferences in St. Albert.

Table 2.6 Participation Rates for Outdoor Leisure Activities, Alberta 1996 and 2000

SOURCES: Alberta Recreation Survey Analysis, 1996
2000 Alberta Recreation Survey Summary of Results

Activities	Household Participation – 1996 (%)	Respondent Participation – 1996 (%)	Household Participation – 2000 (%)	Respondent Participation – 2000 (%)
Walking for Pleasure	**88.96**	84.28	**91.3**	88.7
Bicycling	**61.08**	49.17	**59.9**	48.1
Camping-Overnight	**46.26**	40.66	**47.6**	42.6
Golfing	**44.02**	35.14	**46.6**	38.3
Picnicking-in country	**43.17**	41.14	**40.6**	39.1
Ice Skating-not hockey	**38.81**	27.48	**33.7**	23.6
Picnicking-in city	**36.70**	34.48	**35.7**	33.4
Day Hiking	**36.12**	32.76	**38.3**	35.1
Fishing	**34.82**	25.47	**31.5**	23.8
Swimming-in lakes	**33.82**	27.56	**33.9**	18.3
Sledding	**32.36**	22.09	**28.0**	18.1
Downhill Skiing	**30.73**	21.66	**29.6**	19.9
Jogging	**30.52**	21.80	**32.8**	23.5
Softball/Baseball	**29.09**	18.65	**22.5**	13.9
Motor Boating	**21.11**	18.86	**20.8**	18.7
Ice Hockey	**20.61**	10.49	**18.0**	8.1
Soccer	**18.41**	7.82	**23.0**	9
Cross-country skiing	**18.10**	14.06	**16.7**	14.2
Bird watching	**16.70**	14.48	**18.6**	16.9
Canoeing	**14.19**	11.47	**14.4**	11.6
Mountain Biking (off road)	**4.99**	3.7	**18.1**	14.4
In-line skating	**n/a**	n/a	**26.2**	12.9

As Table 2.6 shows, the rankings for both household and respondent samples for 1996 and 2000 are similar for the first 5 activities. The variation in the remaining categories is to be partly attributed to an increase in popularity of exercise-oriented, creative-cultural activities and golf since 1981, due to benefits to overall individual health and well-being.

Table 2.7 Survey Rankings

SOURCES: Alberta Recreation Survey Analysis, 1996
2000 Alberta Recreation Survey Summary of Results

	Households	Rank 1996	Rank 2000
*	Walking for pleasure	1	1
*	Bicycling	2	2
*	Camping	3	3
*	Golfing	4	4
*	Picnicking (in country)	5	5
*	Ice Skating	6	9
*	Picnicking (in city)	7	7
*	Day Hiking	8	6
	Fishing	9	11
*	Swimming	10	8
	Sledding	11	13
	Downhill Skiing	12	12
*	Jogging	13	10
	Softball/ Baseball	14	15
	Motor Boating	15	16
	Ice Hockey	16	18
	Soccer	17	14
	Cross-country skiing	18	19
	Bird watching	19	17
	Canoeing	20	20

The following outdoor leisure trends for Alberta households are identified from Table 2.7:

1. The top 20 household leisure activities show little variation over the 1996-2000 period, although shifting of preferences is apparent, as indicated by changes in ranking;

2. Walking for pleasure has retained first rank over the 1996-2000 period;

3. Bicycling, camping, golfing and picnicking in the countryside have also retained their rank and popularity;

4. Ice skating, tobogganing/sledding, fishing, softball/ baseball, ice hockey, and cross-country skiing have dropped in both rank and share of population participating;

5. Day hiking, swimming in lakes, jogging, soccer, and bird watching have climbed in rank.

There has been an increased interest in mountain biking and in-line skating

Increase participation in golfing over the 1980-1984 period was primarily attributed to increased participation by couples with children (5% increase), couples without children (4% increase), and single-parent families (14% increase).

According to the Albert Recreation Survey, the highest ranked reasons for participation are for pleasure, for physical health/exercise, to relax, to enjoy nature, and to do something different from work.

The role leisure plays in an individual life, varies as they age, as revealed by the 2000 Alberta Recreation Survey. Noticeable patterns relating to age are provided in Figure 2.14. The most prominent reason for participation in leisure activities is for pleasure.

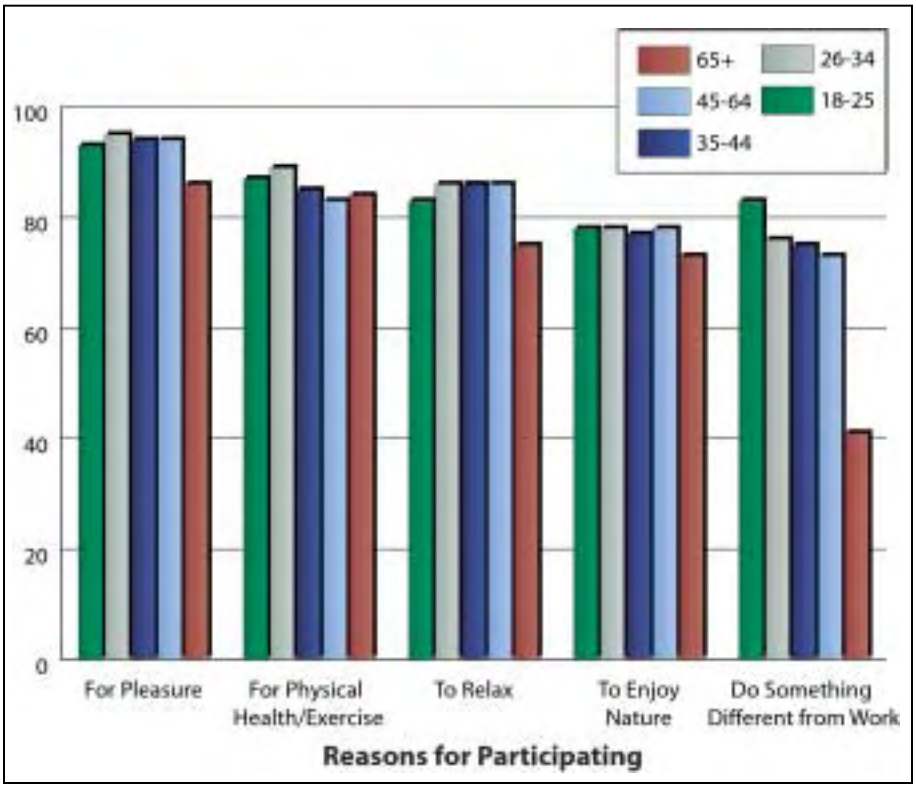


Figure 2.14 Reasons for Participating in Leisure Activities
SOURCES: Alberta Community Development, *A Look at Leisure #41*, 2000

Although there is a variation in leisure and recreation preferences throughout people's life cycle, some activities are continuous throughout their life. Involvement in an activity as a child or adolescence is more apt to stimulate participation in these same activities as an adult.

Key benefit measures, identified by the Alberta Recreation Survey, that are useful in planning leisure programs are:

- Enjoyment Level: is the activity fun?
- Program-related: program details that provide benefits.
- Supportive environment: a safe environment to pursue leisure activities.

Continuation: variety and choice in program offerings, cost-sensitivity, convenience, and accessibility.

2.7.3 Community Preferences for Red Willow Park

2002 COMMUNITY SURVEY

The City annually conducts a survey of public opinion about the performance of its municipal services. Criterion Research Corp. was engaged to conduct the 2002 edition of the Community Survey. The results indicated that the majority of St. Albert residents were satisfied or very satisfied with the parks and trails system in the city (96-97%) and felt that parks and trails were very or critically important (98-99%). In fact, the parks and trails system received are among the highest ratings for any municipal services.

2002 PUBLIC OPINION SURVEY

As part of the public involvement program for the West Regional Road, Banister Research & Consulting Ltd. was commissioned by the City of St. Albert to conduct a quantitative survey which would gather resident's opinions and perceptions regarding the proposed West Regional Road. The study showed that the majority of St. Albert residents felt that the Red Willow Park Trail System (72%) and the Sturgeon River corridor (50%) are an important contributing factor to their overall quality of life and enjoyment in the city (Figure 2.15). When compared to other areas

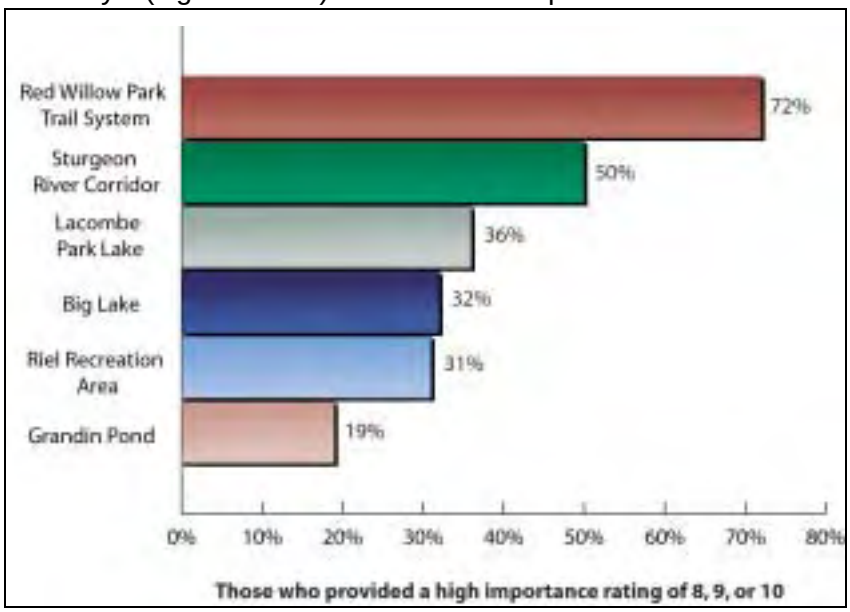


Figure 2.15 Importance of Park to Quality of Life and Enjoyment in St. Albert
SOURCES: Banister Research & Consulting Ltd.

investigated, respondents were generally more likely to visit these areas on a weekly basis. About a third of the respondents felt that Big Lake (32%) and Riel Recreation Area (31%) were highly

important areas that impact their quality of life and enjoyment. When asked which was more important, the West Regional Road or residents' ability to enjoy Big Lake, 59% said the road was more important, while 32% felt that Big Lake was a greater priority.

2003 COMMUNITY SATISFACTION SURVEY

Banister Research & Consulting Inc. conducted the 2003 Community Satisfaction Survey. The results indicated that 97% of St. Albert citizens were satisfied with the quality of life in the City (61% highly satisfied and 36% moderately satisfied). The top reason which attributed to the positive quality of life is the City's parklands, green spaces, river, and trail and park system. The vast majority (95%) of St. Albert residents are satisfied (81% highly satisfied and 14% moderately satisfied) with the parks and trail system.

2.7.4 Conclusions & Implications

1. While the population is aging, younger families will continue to be a characteristic of St. Albert, especially in new developing areas, that needs to be considered in the Park priorities. Trail activities (walking, cycling, rollerblading, boarding, etc) educational opportunities, family outings, and recreational activities need to be supported in the park master plan.

2. Red Willow Park and in particular its trail system has one of the highest endorsement ratings of any municipal service provided by the City of St. Albert (a new significant fact given only twelve years of existence). Trail systems, quality destinations, and opportunities for leisure activities in a leisure setting need continued support in the master plan.

3. Red Willow Park fits well into changing leisure trends providing access to a variety of leisure opportunities in a natural setting.

2.8 PUBLIC CONSTULATION PROGRAM

The public consultation process has been an integral component of the process to update the Master Plan for Red Willow Park. Throughout each of the four phases of the Master Plan there has been continuous dialogue with members of the general public and special interest groups.

The objectives of the public consultation program were:

1. To ensure that a broad base of ideas, concerns, and issues have been addressed

2. To test ideas and options

3. To improve general public awareness of the Park

4. To identify controversial and conflicting issues

5. To measure public support

2.8.1 Consultation Process

The public consultation program consists of a variety of tasks and techniques to elicit public and special interest group input. Individual tasks are identified below.

Detailed results of the following process have been assembled and included in Appendix A. The following is a summary of the results

Phase 1: Setting the Stage

Key-person Interviews: Key person interviews were conducted with opinion leaders to gain an appreciation of issues, opportunities, and constraints affecting future plans for Red Willow Park. Individuals included elected officials, community leaders, and special interest groups.

Phase 2: Initial Outreach

Stakeholder Focus Groups: An information package regarding the master plan update and an invitation to attend focus group sessions was sent out. During the sessions, issues and opportunities related to Red Willow Park plans were identified which led toward a vision plan for the park. Two sessions were held on October 8th and 9th of 2002. Each session included:

- General introduction and review of original Red Willow Park plans and West Regional Road update;

- Structured group discussions focused on assessing issues and opportunities; and

- Group presentations.

Phase 3: Draft Master Plan

Vision Building Workshops: The results for the focus groups were used to develop a draft directions and options plan which was presented at two vision building workshops. Workshops are a way of developing, expanding, and validating ideas based on knowledgeable local individuals. Participants of the stakeholder focus groups who expressed on interest in further involvement in the consultation process were invited back to participate in the workshops which were held on the 19th and 20th of November 2002. At these sessions, participants were asked to provide comment on Red Willow Park in three Geographic areas:

- Big Lake Shorelands
- North Sturgeon Shorelands
- South Sturgeon Shorelands.

Open House: An open house was held to present the draft Master Plan to the general public. Media notices were placed in both local newspapers and on the City website. A draft of the West Master Plan Update was on display for comment; and gave the public a chance to view plans, meet project staff, and provide comment. Also a Big Lake Natural Area information display and staff was available to provide information and answer questions.

Phase 4: Adopt Plan

Based on the input from the open house, the draft plan was modified and update and presented in the final plan. The final plan document was prepared for steering committee approval and council endorsement. City Council, in its approval process, will provide an opportunity for public comment from interested individuals and user groups.

2.8.2 Conclusions & Implications

1. The park is an important community based initiative which is supported by a variety of interest groups and stakeholders.

2. A clear statement of common vision is evident and presented in the master plan to follow.

3 MASTER PLAN UPDATE

The updated Master Plan for Red Willow Park consists of:

- A vision statement
- Statement of goals and objectives
- Statement of guiding principles and management guidelines
- The overall Master Plan (text & plan)
- Description of plan components
- Description of implementation priorities

The plan is built on the inventory presented in Section 2 including characteristics of the resource base, anticipated settlement patterns, human need and community aspirations.

The Master Plan is a guide for the future conservation, management and development of Red Willow Park. Flexibility will be needed to achieve an integrated open space system from a land inventory which is largely in private hands. The vision statement, goal and objectives, principles and guidelines need to be referenced where future initiatives were unforeseen in the master plan.

3.1 PARK VISION

Red Willow Park is a multi-faceted open space resource for St. Albert which serves as a portal onto the Big Lake Natural Area—an International Bird Area and provincially protected ecological reserve. Big Lake is an important regional destination for bird-watching, nature appreciation, environmental education and leisure pursuits in a natural setting. Together, Red Willow Park and Big Lake Natural Area provide a unique backdrop around which to build a vibrant community in which to work, live, and recreate. The Park is a city wide and regional resource serving all citizens.

Environmental Protection: Red Willow Park and the Big Lake Natural Area is a means for the protection and conservation of the Big Lake and Sturgeon River environment with associated water bodies, shorelands, wetlands, forests and White Spruce stand.

The park encompasses the significant natural area with sufficient buffers to maintain ecosystem functions.

Heritage Interpretation/Education: Red Willow Park and the Big Lake Natural Area is a living museum where the natural and cultural heritage assets need to be conserved, enhanced and interpreted. The Big Lake Natural Area has the potential for a world class nature centre which should be located in Red Willow Park and which should be integral to the presentation of St. Albert's rich cultural heritage.

Trails & Open Spaces, Leisure Activities: As a destination park, Red Willow Park provides opportunities for outdoor pursuits in a natural setting. Trail systems should be extended through the park and link surrounding neighbourhoods and regional trail systems. Focus should be placed on passive recreation amenities. Recreation and trail development need to be appropriate to the environmentally sensitivity of the natural area.

Community & Economic Development: Red Willow Park is an indirect source of economic health through the promotion of a quality community lifestyle and environment. Red Willow Park and the Big Lake Natural Area have the potential to become a world class destination capable of supporting environmentally sensitive ecological and cultural tourism.

Big Lake Natural Area: Red Willow Park and Big Lake Natural Area are regional resources which are managed cooperatively under a management framework. The shorelands encompassing Big Lake are managed cooperatively or more formally developed as a regional open space network or as a regional wetland park.



Figure 3.1 Interactions between Red Willow Park and Big Lake Natural Area

3.2 GUIDING PRINCIPLES

Any planning, development and operational management of Red Willow Park should occur within some framework. A set of park management principles and guidelines are a component of the master plan which are written rather than laid out on a map. The combination of written principles/guidelines and conceptual plans, together convey the intent of the master plan. Where Red Willow Park interfaces with the Big Lake Natural Area, management principles and guidelines should be harmonised.

ECOLOGICAL INTEGRITY

Red Willow Park will be managed to conserve environmental biodiversity and ecological integrity.

Red Willow Park and Big Lake area offers a tremendous richness in terms of the number of plant and animal species it supports. Though inventories are incomplete, over 200 plant species have been identified including water plants, grasses, orchids, mosses, lichens, trees and shrubs. Over 40 species of mammals and a variety of reptiles, amphibians, butterflies and other insects add to the diversity of the area. Big Lake is most noted for its birds, at least 235 species. Three quarters of the species are found annually; the remainder appear on an irregular basis.

Future planning and development decisions affecting the Park area will strive to retain and enhance the ability of the lake, wetlands, and riparian corridor to provide these ongoing environmental services and preserve the rich biological diversity of the area.

ECOSYSTEM MANAGEMENT

Management of the Park will recognise that it is part of a larger ecosystem that affects and is affected by the management of adjacent lands and the upstream watershed.

Sturgeon shorelands and Big Lake are a vital link in local, regional and continental ecological functions. On a single day during the fall migration as many as 26 000 ducks, geese and swans have been observed on the lake. The Big Lake area and Sturgeon River corridor contains both incomplete and altered ecosystems. This, combined with increasing multiple, cumulative and interactive stresses from sources such as adjacent lands use, downstream effects of air and water pollution, invasion of exotic species, impacts of visitor use and climate change can result in degradation of ecosystems and loss of biodiversity.

Ongoing planning initiatives will be mindful of the need for networks of natural areas and corridors that connect the Park and Big Lake with other natural landscapes in the region. Management of activities in the watershed upstream of Big Lake will strive to reduce negative downstream impacts. Adaptive management together with biomonitoring will guide park management decisions.

INTEGRATION

Future land use decisions in the Red Willow Park area will strive to integrate conservation, outdoor recreation, and tourism and heritage appreciation. Outdoor recreation and tourism initiatives will be provided and surrounding land uses accommodated to the extent that they are compatible with and does not compromise ecological integrity.

As urban development advances, the greatest assets of Red Willow Park and Big Lake are the peace and serenity offered by a rich natural area and the vast educational and interpretive opportunities it provides to a busy and growing urban community.

Red Willow Park offers choices for leisure, learning, and living. As a leisure environment, Red Willow Park's potential includes: trails and boardwalks for walking, cycling, cross-country skiing and barrier free access; eco-tourism destinations; active recreation areas; bird watching; scenic vistas and viewpoints; picnic areas; manicured parks; sports fields (soccer, rugby, and baseball diamonds); and untouched wetlands.

As a learning environment, the Red Willow Park and Big Lake areas are a natural, living museum for people studying nature, water, birds and animals and learning how to care for our environment so it, in turn, can care for us. Lifelong education potentials abound: nature appreciation; photography; plant studies; interpretive centre displays and videos; volunteering with a stewardship group; etc.

SHARED STEWARDSHIP

Partnerships that foster stewardship will be promoted with the private sector, landowners, other governments and departments, volunteers, not for profit groups and individual citizens in the preservation, planning, management and delivery of opportunities associated with Red Willow Park and Big Lake.

Shared stewardship requires co-operation with surrounding land owners and among government agencies in managing natural resources beyond the boundaries of Big Lake. Efforts will be

made to seek mutually satisfactory solutions to trans-boundary concerns associated with the management of shared ecosystem components, the effects of adjacent land use practices on the Sturgeon River Corridor and Big Lake or the effects of the management practices on the use of adjacent lands. Shared stewardship is dependant upon public support. Area residents and visitors will have opportunities to contribute to future plans that affect Big Lake.

The private sector and non-government organisations are playing an increasingly important role in stewardship of Alberta's natural and cultural heritage. BLESS has volunteered to be stewards of the Big Lake Natural Area. They bring a wealth of skills and knowledge that support management of the natural area and assist visitors to understand, appreciate and enjoy this natural treasure. Ducks Unlimited, as a major landowner on Big Lake, may play a significant role in preserving the natural landscape and providing opportunities for nature appreciation.

3.3 PARK OBJECTIVES

The principal objectives of Red Willow Park are:

- To protect, conserve, and manage the Big Lake and Sturgeon River natural environment;
- To present and interpret the park's natural and cultural heritage;
- To maintain existing recreation while expanding opportunities for outdoor pursuits in a natural setting and in particular to provide an interconnected trail system; and
- To contribute to community economic health through the promotion of a quality community lifestyle and the promotion of its capability for environmentally sensitive ecological and cultural tourism.

3.4 MANAGEMENT GUIDELINES

MANAGEMENT

- The Park will be managed to conserve ecosystem integrity;
- Environmental management will be coordinated with the Big Lake Natural Area;

- Access, interpretive facilities and related park improvements will be in keeping with the environmental management plans, balancing preservation and use;

- Maintenance and operational activities will be adapted to support environmental objectives of the park;

- Naturalisation and restoration of disturbed natural shorelands should emulate natural ecosystems;

- Park management and ecosystem health is to be monitored, assessed, and refined over time with community input;

- The City should adopt a Natural Areas Policy in the MDP, which ensures the preservation of the most significant natural areas, using specific policy objectives. This would include, but not limited to, all provincially-significant and regionally-significant sites (Spencer Environmental Management Services Ltd., 1999);

- When development encroaches on a site proactively designated for conservation, the potential impacts of development should be assessed and mitigation measures developed to ensure effective conservation (Spencer Environmental Management Services Ltd., 1999);

- When a site, under consideration for conservation, could be displaced or compromised by a development proposal, the following should be undertaken to gain an understanding of potential effects of development (Spencer Environmental Management Services Ltd., 1999):

  - Additional field evaluations including a spring bird survey, a rare plant survey and, if a wetland is involved, an amphibian survey;

  - An assessment of the site's post-development sustainability;

  - Evaluation, according to pre-determined criteria, of the merits of site conservation;

- Establish a standardised protocol for what is required of developers when development proposals potentially affect a significant natural site (Spencer Environmental Management Services Ltd., 1999); and

- As parcels of land come into the custody of the municipality, Natural Areas Management Plans and Area Master Plans should be developed together prior to detailed planning and implementation.

- The City should adopt a policy to prohibit filling of the flood fringe (see glossary) areas. These areas are valuable for natural wetland process and habitats and are the land base for Red Willow Park and clearly protected under the Environmental Reserve provisions of the Municipal Government Act (Section 664).

PARKLAND AREA

- The parks should include:

  - Environmentally sensitive and significant natural areas which are contiguous to and under the influence of the Big Lake Natural Area and Sturgeon River as defined by Spencer Environmental Management Services Ltd. (1999 & 2003);

  - Lands which store and convey floods (flood risk areas);

  - Buffer zone against environmentally sensitive areas; and

  - Lands for specific Park purposes.

TRAIL SYSTEM

- Continuous multi-use trail system connecting the entire park;

- Separate main trails from environmentally sensitive lands in a buffer zone;

- Low impact granular trails as secondary trails in selected natural areas;

- Extension of Red Willow Park signage and furnishings to maintain consistent identity;

- Main trails at edge of flood risk area or outside edges of sensitive natural areas;

- Trail heads clearly identified; and

- Extend trails into the subdivision to create a network of feeder trails.

BOUNDARY CONDITIONS

- Adjacent setback containing major trail alignment or road providing public access to park and trail system;

- Some location integral to the subdivision for vehicle access and parking along park frontage;
- Some clear point of park entry from adjacent subdivision with name of park using Red Willow Park naming convention and identity treatment; and
- Appropriate supportive MR development.

3.5 MASTER PLAN OVERVIEW

The updated Master Plan is presented in Figure 3.2. The plan identifies major park components, facilities contained in each component, and the layout of the key elements such as roads, parking areas, trails, and reforestation. The West Master Plan Update is intended to give direction to the organisation of the park; however, variations are expected in the final constructed layouts. When sites become available to the City it is expected that a management plan and detailed master plan will be prepared together which will review in detail the environmental site conditions and revisit all planning concepts.

3.5.1 Initiatives & Top Priorities

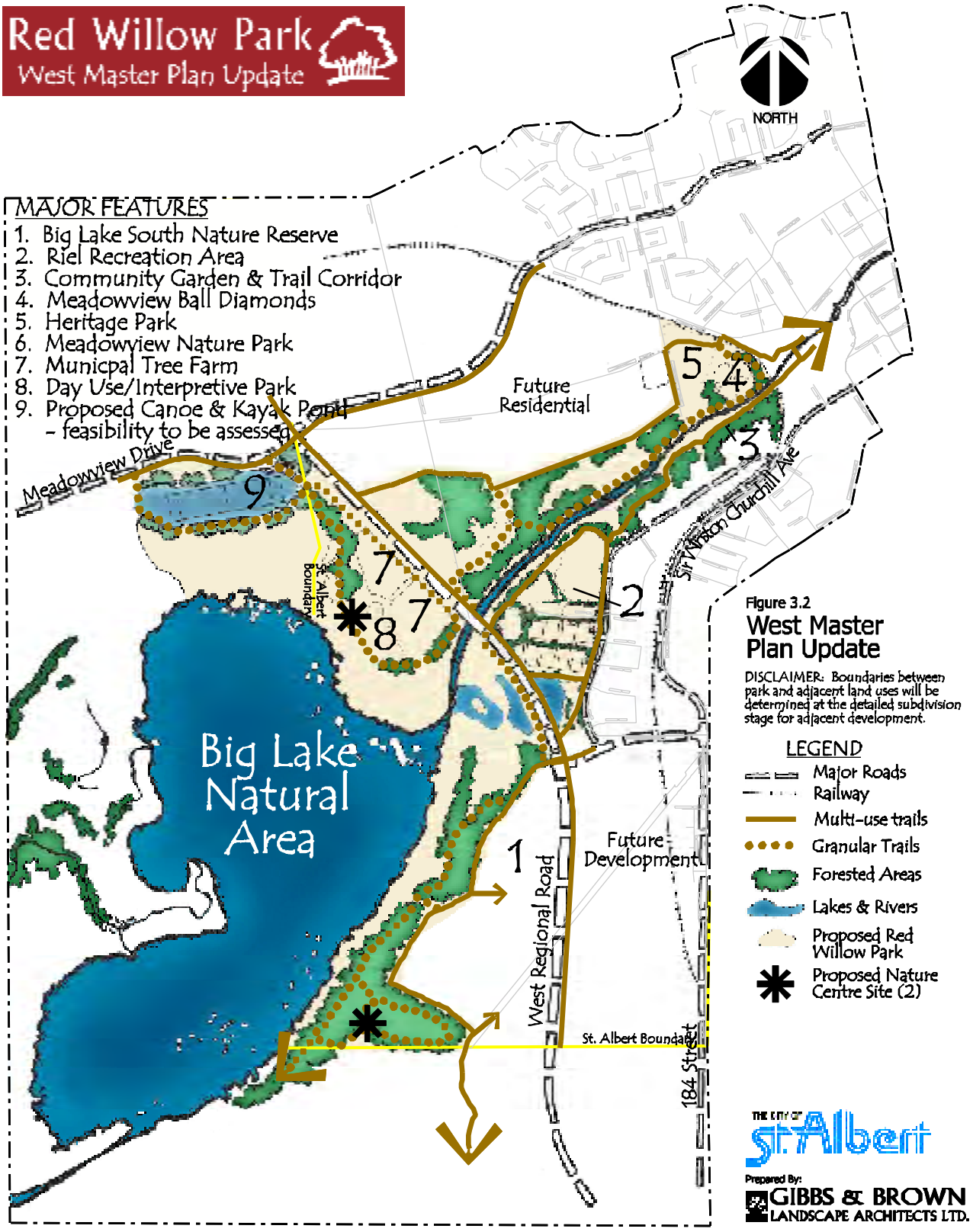
The following are initiatives and top priorities identified during the public consultation process.

Big Lake Shorelands

- Conservation of Environmentally Sensitive and Significant Natural Areas with protective land designation and management;
- Natural History education/interpretation centre plus passive interpretation; and
- Environmentally sensitive trails development.

Meadowview

- Conservation of Environmentally Sensitive Areas and Significant Natural Areas – particularly the White Spruce Stand and River Levy Wetland;
- Cultural history education/interpretation focused on Métis River Lot 24 and Elevator Historic Site plus passive interpretation;
- Maintain Meadowview Ball Facility; and


Red Willow Park
West Master Plan Update
NORTH
MAJOR FEATURES
1. Big Lake South Nature Reserve
2. Riel Recreation Area
3. Community Garden & Trail Corridor
4. Meadowview Ball Diamonds
5. Heritage Park
6. Meadowview Nature Park
7. Municpal Tree Farm
8. Day Use/Interpretive Park
9. Proposed Canoe & Kayak Pond
- feasibility to be assessed
Meadowview Drive
Future Residential
Sir Winston Churchill Ave
St. Albert Boundary
Big Lake Natural Area
Future Development
West Regional Road
184 Street
St. Albert Boundary
Figure 3.2
West Master Plan Update
DISCLAIMER: Boundaries between park and adjacent land uses will be determined at the detailed subdivision stage for adjacent development.
LEGEND
Major Roads
Railway
Multi-use trails
Granular Trails
Forested Areas
Lakes & Rivers
Proposed Red Willow Park
Proposed Nature Centre Site (2)
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- Passive recreation, trails and interpretive features.

Riel Recreation Area and South Sturgeon Corridor

- Restore/reforest disturbed lands and river edge;
- Maintain and upgrade existing trails and recreation facilities (soccer, rugby, rodeo ground, BMX);
- Enhance interpretive and viewing areas; and
- Group use area.

3.5.2 Natural Environment

The park incorporates either land within the 1:100 year floodplain or delineated natural areas. All development and related land use within the park must be compatible with periodic flooding without excessive damage and financial loss.

Ecological processes, biological diversity and life-support systems need to be managed for the preservation of environmentally sensitive areas and designated natural areas around Big Lake. To conserve wildlife habitat, shorelands and critical habitat should be managed in a natural state and that the natural tree cover, such as the White Spruce Stand, and wildlife habitat should be maintained as much as possible.

3.5.3 Parks & Open Spaces

A goal of the original Master Plan was the development of a continuous linked system of parks along the Sturgeon River. The continuous multipurpose trail system is an essential feature of Red Willow Park. The current multipurpose trail system runs along the south shore to Riel Park. The updated Master Plan recommends the extension of the multipurpose trail in buffer zones between conserved areas and future adjacent development in three areas:

- South shores of Big Lake.
- North bank of the Sturgeon River running from Meadowview Ball Diamonds to the northern shores of Big Lake along the outer fringe of the Park boundary.
- East side of West Regional Road including river crossing on proposed bridge.

Secondary low impact granular trails with passive interpretive signage may occur within the Park in selected areas – particularly the North Big Lake site.

Ecological site restoration is proposed throughout various locations of the study area to restore natural systems and improve the aesthetics of the park. Attractive sets of site furnishings and signage will complement landscape development throughout the western portion of Red Willow Park.

3.5.4 Recreation & Leisure

A variety of leisure facilities are situated with the boundary of Red Willow Park. A number of community organisations have invested in outdoor facilities such as ball diamonds, soccer and rugby fields, as well as the Kinsmen Rodeo Grounds. These existing facilities will be maintained where possible; however in a few instances relocations are necessary. In the case of the St. Albert Canoe & Kayak Club, the proposed West Regional Road will bisect the existing Riel Pond, and will preclude use by the club. The Master Plan Update illustrates a potential alternate location. The feasibility of this location needs to be determined as the proposed new site for the club lies outside of city boundaries and is dependant upon the approval of Sturgeon County.

The Master Plan Update proposes sites for a group picnic site and naturalised low impact day use areas.

3.5.5 Interpretation & Heritage Tourism

The Master Plan continues to support interpretive and heritage tourism (ecological and cultural tourism) through three initiatives:

- Linking system of trails with passive interpretive nodes
- Big Lake Nature Centre on the shores of Big Lake
- A Heritage Park at the site of the grain elevators and Métis River Lot 24

Together these three initiatives will serve a number of community needs and opportunities including:

- Appreciation and conservation of Big Lake, the Sturgeon River and surrounding shore land
- Enhanced trail user enjoyment
- Support of school programs and curricula

- Conservation and presentation of St. Albert's Historical roots
- Promotion of heritage tourism as an economic endeavour

The park as a whole is intended to attract visitors to St. Albert.

3.6 MASTER PLAN COMPONENTS

In order to systematically plan the development of the western portion of Red Willow Park, the study area has been divided into four segments including:

- Red Willow Park – Riel
- Red Willow Park – Meadowview
- Red Willow Park – South Big Lake
- Red Willow Park – North Big Lake

The following describes the Master Plan Update concept for the above areas.

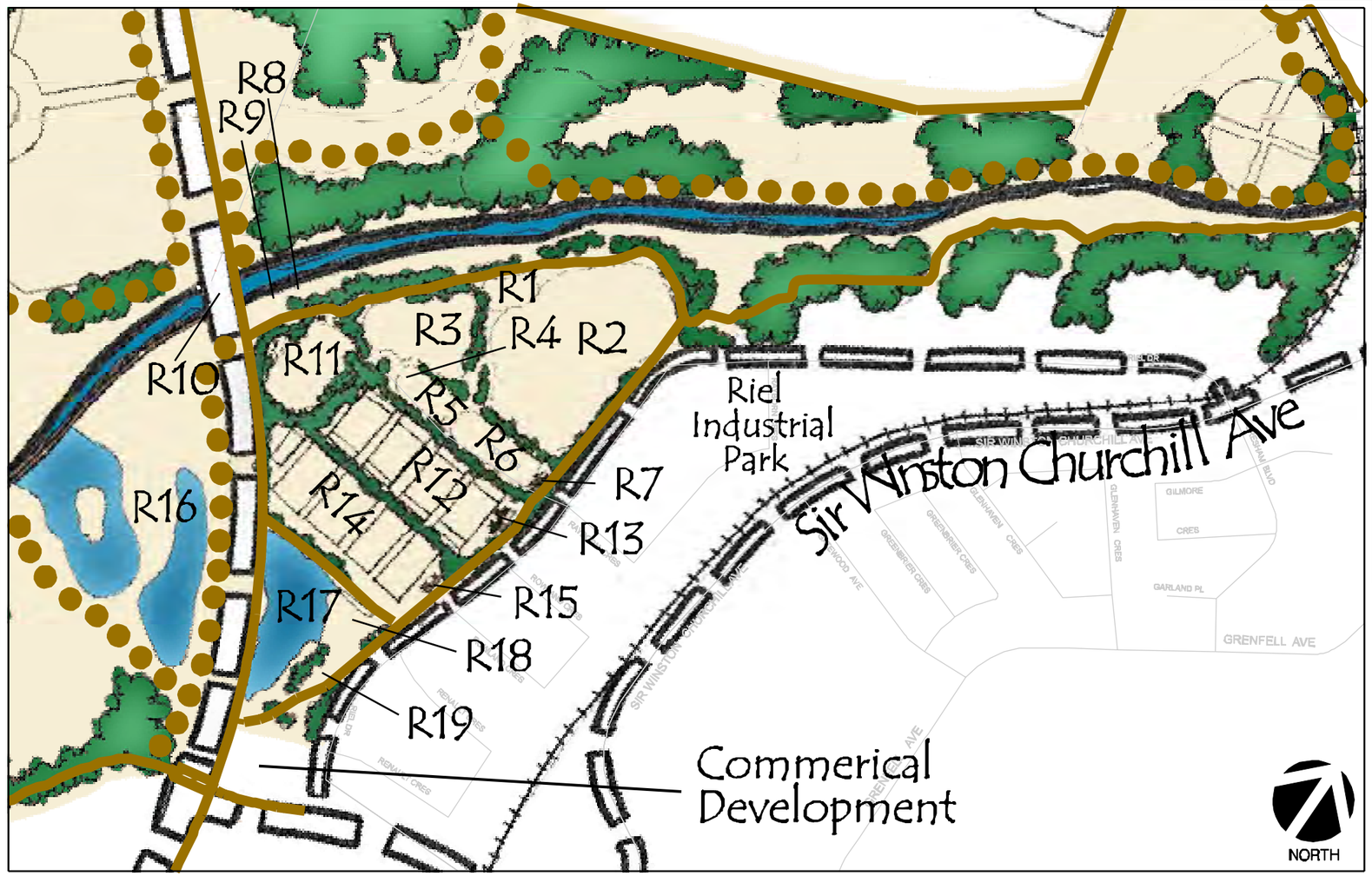
3.6.1 Red Willow Park – Riel

The existing Red Willow Park – Riel area will be intersected by the West Regional Road. The road will bisect Riel Pond and cause the dislocation of the St. Albert Canoe & Kayak Club from its current site. The road also infringes on the Soccer Club fields and necessitates the adjustments to the soccer practice fields (See

Figure 3.3). The Park has been leased by the City to the St. Albert Soccer Association, St. Albert Rugby Association, and Kinsmen Club. Key recommendations of the plan are described below.

Rugby & Soccer Fields: Reconfiguration of soccer grounds practice fields displaced by West Regional Road. The road project will have to address safety and noise concerns of the club, and in particular, ensure the playability of the northern most tournament soccer pitch.

Group Use Area: Landscape development will include an access loop to allow room for buses to turn around, dispersed parking, and group use amenities, providing for group picnic bookings



Red Willow Park - Riel

R1 BMX Association
R2 Rodeo Grounds
R3 RV Park Expansion
R4 Rodeo Drive
Bus Turn Around
R5 Expanded Parking
R6 Existing Parking
R7 Kinsmen Korral
R8 Environmental Education Shelter
R9 Canoe Launch
R10 Bridge with Trails
R11 Group Picnic Area
R12 Rugby Club
R13 Rugby Clubhouse
R14 Soccer Club
R15 Soccer Clubhouse
R16 Remediation
R17 Riel Pond
R18 Additional Soccer Parking
R19 Day Use & Group Site

Red Willow Park
West Master Plan Update

Figure 3.3
Red Willow Park - Riel
Concept Plan

DISCLAIMER: Boundaries between park and adjacent land uses will be determined at the detailed subdivision stage for adjacent development.

Legend

- City Boundary
- Multi-use Trail
- Granular Trail
- Roads
- Railway
- Forested Areas
- Lakes & Rivers
- Proposed Red Willow Park

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servicing the community of St. Albert. Maintain existing nature shelter and add a canoe launch.

Kinsmen: The Kinsmen Club is currently embarking on a redevelopment program for their facilities and would like to relocate and expand the RV Park (12) as a high priority. They may be interested in taking up management of other functions such as the group use area.

Remnant Riel Pond: Redevelopment for day use and/or group site with possible off-street parking for St. Albert Soccer Club.

Remediation (Severed portion of Riel Pond): Assessment and remediation of the severed portion of Riel Pond may be necessary. Possible options could include creation of a constructed wetland, or remediation of lagoon. Maintain existing observation platform. Any modifications in dykes and access to the platform would require input from BLESS.

General Initiatives: Beautification program for lease areas in terms of planting buffers and landscape development or continued reforestation and naturalisation of river edge. Trail development along Riel Drive to provide a continuous circuit is proposed. Some enhanced off street parking is proposed to deal with tournament needs.

St. Albert Community Garden: recognition of the garden and work with the club to enhance the surrounding trail corridor.

3.6.2 Red Willow Park – Meadowview

Timberlea (Genstar) ASP Area: Genstar Development Company is currently reworking its ASP in response to West Regional Road and McKinney Ave realignment. Genstar is willing to negotiate pre-dedication and release of lands to park prior to subdivision.

The resource sensitivity of the park area and in particular the White Spruce Stand (5) and the River Levy Wetland (7) means that most of the area will be left in a conserved state (See Figure 3.4). One auto access trail staging area and a naturalized walk-in park/day camp site is the only proposed recreation development. Three new residential subdivisions to the north of the park will create a high demand for trail use and the need for trail connections along the park frontage and surrounding community. The master plan advocates that a trail corridor be built between residential subdivision and environmentally sensitive areas of the park to accommodate primary trail users and to protect the park from incompatible recreational use. The trail corridor should be

designed to a 4.5m trail standard and an allowance (min 20m) is recommended between residential neighbourhoods and sensitive natural areas.

Historic Park: St. Albert has a rich cultural heritage beginning with pre-contact aboriginal use of the area. St. Albert's settlement history begins with the establishment of the Oblate Mission and the development of a Francophone Métis Settlement, based on the French Seigniorial System (River lots), and agricultural community. Both the grain elevator site and River Lot 24 have historical significance. There is a mixture of private and publicly held lands in this area. The Red Willow Park West Master Plan Update advocates the long term development of the Historic Park, beginning with further planning and land acquisition.

The Meadowview Ball Diamonds: have been fully developed and no change is recommended for the facility. Meadowview Drive will be terminated in the park and therefore the road access can be ultimately reconfigured to the needs of the Historic Park and Meadowview Ball Diamonds.

3.6.3 Red Willow Park – South Big Lake

The landowners, led by Qualico Developments, are promoting a change in the MDP from industrial to residential and mixed-use development in the near term. Negotiations are underway with the City which will ultimately result in the release of lands for Red Willow Park.

The shorelands of Big Lake in this area have a high degree of diversity including wetlands components and various forest cover types which are relatively undisturbed and highly sensitive. Some of this land is vulnerable to development as it would not normally be eligible for environmental reserve. Compared to the 1991 plan, boundaries have changed – less land in the center but more land to the south (see Figure 3.5).

At the south end of the park is one of two sites for the nature centre. A clearing for an existing oil production facility (which is at the end of its life cycle) will leave sufficient area for parking and a building. The site will be readily accessible off of the West Regional Road via 137th Ave (see Nature Centre).

3.6.4 Red Willow Park – North Big Lake

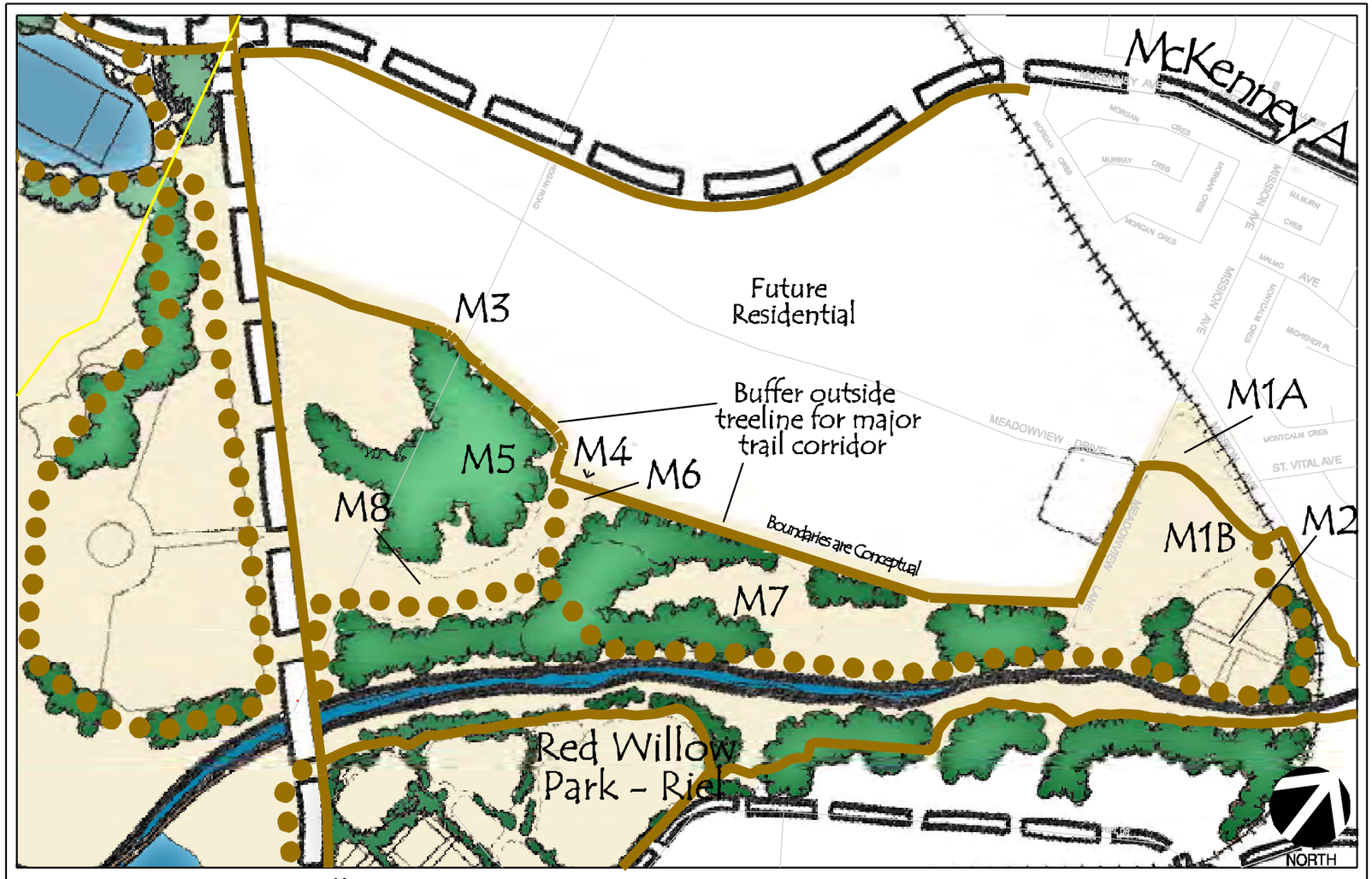
Lands within St. Albert: The new alignment of the West Regional Road creates the largest parcel of undeveloped recreational land within the boundary of Red Willow Park. At the same time the road bisects the municipal Tree Farm causing the

Red Willow Park
West Master Plan Update

Figure 3.4

Red Willow Park - Meadowview

Concept Plan



DISCLAIMER: Boundaries between park and adjacent land uses will be determined at the detailed subdivision stage for adjacent development.

Legend

- City Boundary
- Multi-use Trail
- Granular Trail
- Roads
- Railway
- Forested Areas
- Lakes & Rivers
- Proposed Red Willow Park

Red Willow Park - Meadowview

M1 Historic Park
- Grain Elevators Park (1A)
- Métis Riverlot Francophone Settlement (1B)

M2 Meadowview Ball Diamonds

M3 Close Hogan Road & convert to trail

M4 Park Entry & Auto Access

M5 White Spruce Special Area
- Conservation management
- Limited acess
- Interpretive node & trail

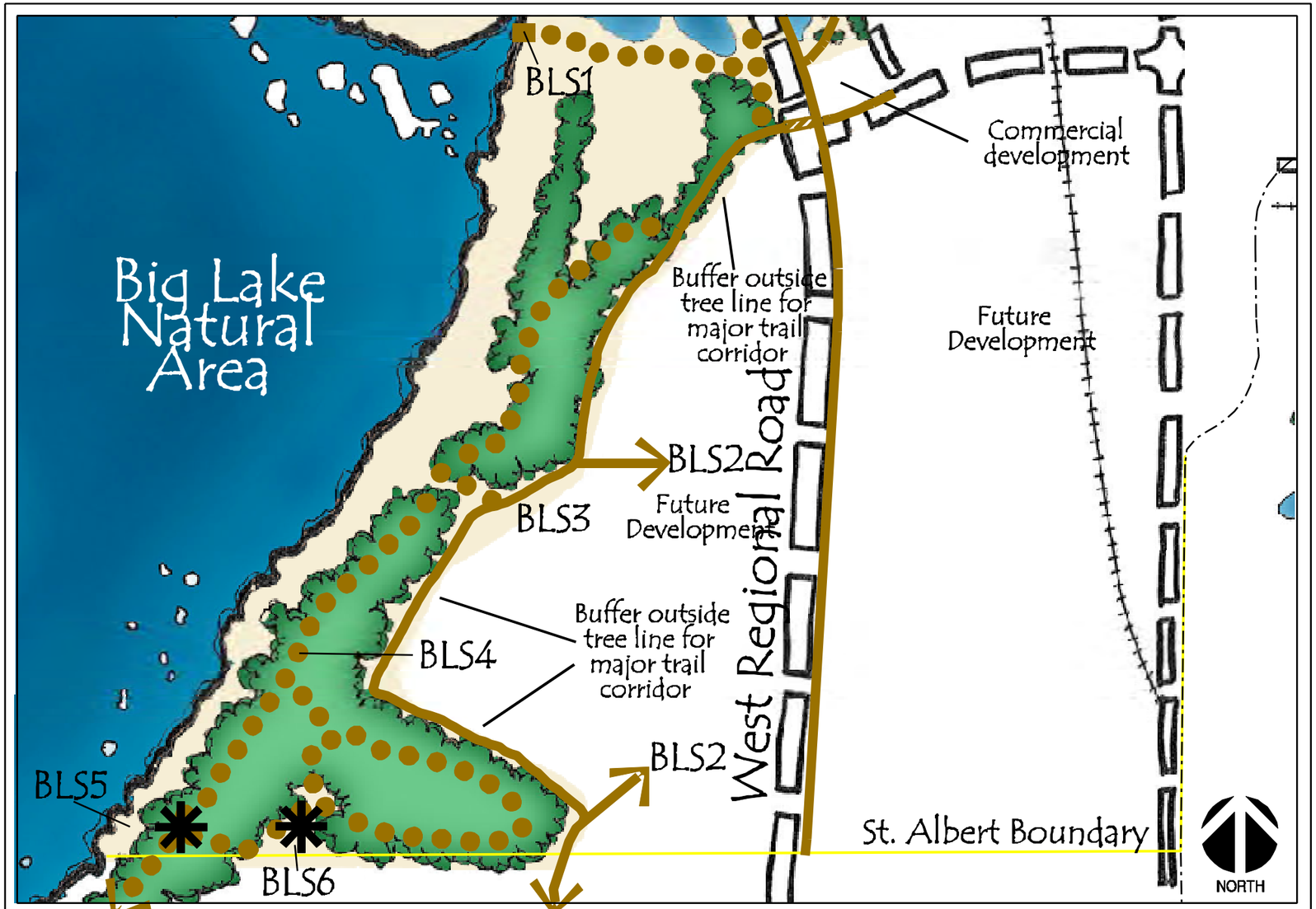
M6 Parking lot & trailhead

M7 Floodplain Wetland Special Area
- Conservation managment
- Interpretive trail
- Possible stormwater treatment

M8 The Meadow
- prairie restoration
- foot paths
- walk-in picnic sites
- potential day camp

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Red Willow Park – South Big Lake

BLS1 BLESSPlatform
BLS2 Trail Extension into Community
BLS3 Complementary MR & Frontage Road
BLS4 Interpretive Trails
BLS5 Observatory
BLS6 Auto Access Trail Head, Nature Centre & Parking
BLS7 PotentialRavine Top of BankTrail
BLS8 Potential Shoreline Trail

Red Willow Park
West Master Plan Update

Figure 3.5
Red Willow Park South Big Lake Concept Plan

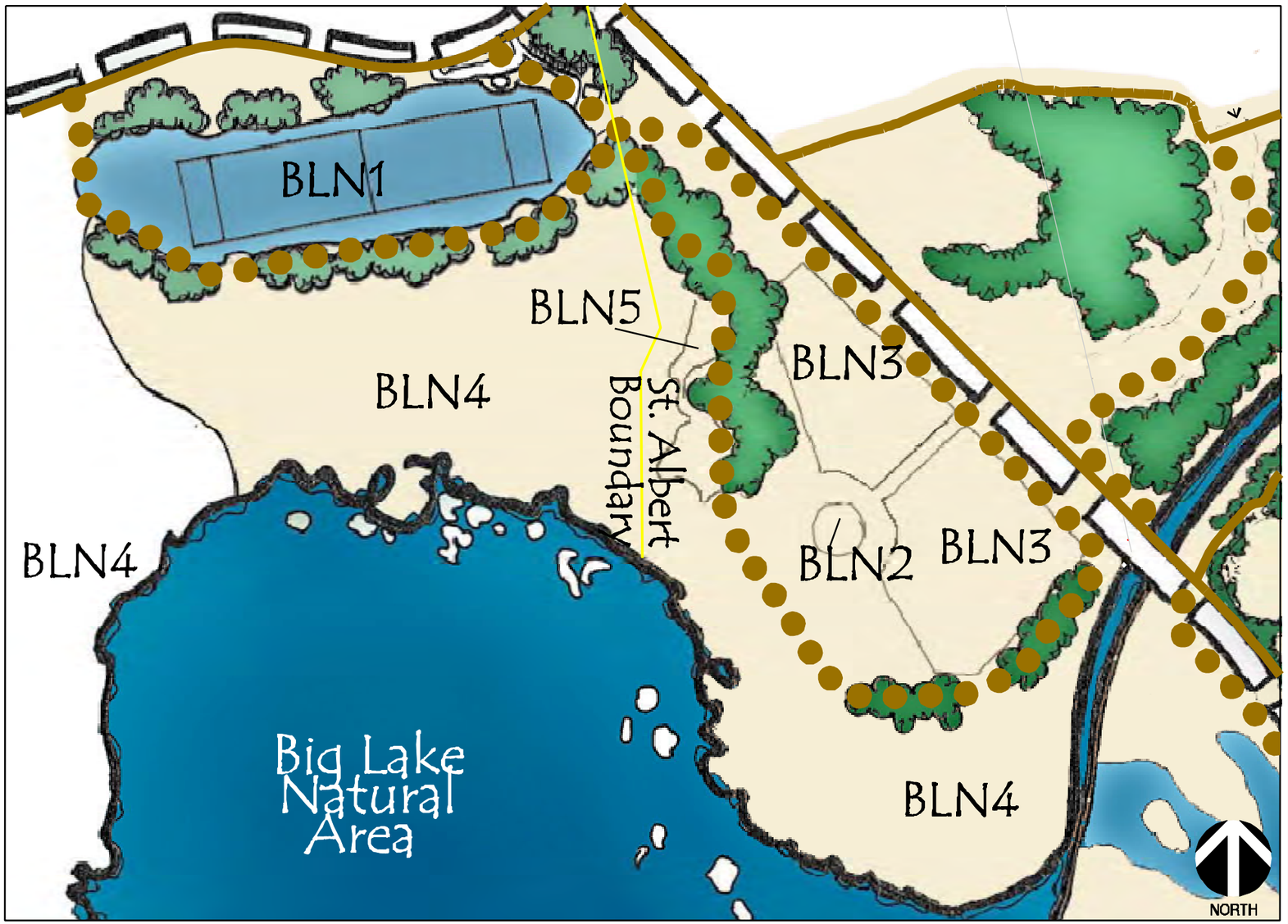
DISCLAIMER: Boundaries between park and adjacent land uses will be determined at the detailed subdivision stage for adjacent developments.

Legend

- City Boundary
- Multi-use Trail
- Granular Trail
- Pedestrian Crossing
- Roads
- Railway
- Forested Areas
- Lakes & Rivers
- Proposed Red Willow Park
- Potential Site of Nature Centre

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Red Willow Park - North Big Lake

BLN1 Proposed Road Borrow Pit / Canoe & Kayak Club & Stormwater Management
- preliminary concept
- feasibility to be assessed

BLN2 Naturalised Day Use Area / Potential Big Lake Nature Centre

BLN3 Reconfigured City Tree Farm (Long Term - Day Use Area)

BLN4 Shoreland Conservation

BLN5 Reclaimed Wetland

Red Willow Park
West Master Plan Update

Figure 3.6

Red Willow Park - North Big Lake

Concept Plan

DISCLAIMER: Boundaries between park and adjacent land uses will be determined at the detailed subdivision stage for adjacent development.

Legend

- City Boundary
- Multi-use Trail
- Granular Trail
- Roads
- Railway
- Forested Areas
- Lakes & Rivers
- Proposed Red Willow Park

THE CITY OF St. Albert

Prepared By:
GIBBS & BROWN
LANDSCAPE ARCHITECTS LTD.

need to relocate the facility. The Public Works Department is interested in maintaining long term plantings immediately west of the West Regional Road and may be interested in developing an arboretum in relationship to the nature centre. Relocation of the Tree Nursery to a site outside of Red Willow Park is under consideration and subject to land availability. Figure 3.6 illustrates the proposed changes.

From a nature-based recreational perspective and as an alternate site for the nature centre, the site has a commanding view of Big Lake and related bird activity. A nature centre or naturalized day use area would be a very visible and accessible from the new road (some screening and noise control would be desirable). The shoreland margins are sensitive and are extremely important for shorebirds and waterfowl.

The Master Plan proposes to accommodate both needs accessed from one entry from the West Regional Road. The tree farm would be located in a zone west of the West Regional Road. The naturalised day use area / potential nature centre site would occupy high ground or the west side of the site and adjacent to the shore.

A nature-based day use area is the highest and best long-term use of the land but the need for land will materialise as the Intermunicipal Development Plan (IDP) area develops. The tree farm is compatible use with proposed walking trail development in the park area. Buffers around the tree farm perimeter should be developed with groves of native trees which will ultimately provide microclimate and wind protection for the ultimate conversion of the tree farm to recreational purposes as dictated by the build-out of the IDP area.

Proposed Canoe & Kayak Club: As a result of the dislocation of the Canoe & Kayak facilities, the road project is proposing to develop a borrow pit on land in Sturgeon County south of Meadowview Drive which could ultimately house the Canoe & Kayak Club. The concept has been endorsed by the Canoe & Kayak Club. The feasibility of this undertaking has yet to be fully proved. Acquisition of land would require Sturgeon County approval. From the perspective of Red Willow Park, the addition of these lands would have a major benefit to future residents of St. Albert living in the IDP area, by providing adjacent recreation amenities and park frontage along Big Lake.

3.6.5 Big Lake Nature Centre

The results of a workshop on a proposed nature centre (See Appendix A) indicated support for a centre which focused on

environmental education with ancillary components of interpretation and tourism gateway for both the Red Willow Park and Big Lake Natural Area. The nature centre is an integrated extension of St. Albert's existing network of cultural and natural heritage infrastructure – all tied together by nature trails and related interpretive signage.

The nature centre would:

- Provide a focal point for an internationally recognised natural history resource and International Bird Area of Big Lake.
- Enhance the stature of St. Albert as a liveable community and as a tourism destination.
- Provide needed facilities to support education curricula and extension needs of the general public.
- Promote the conservation and sustained use of Big Lake and Sturgeon River shorelands in the face of adjacent development.

Two sites were assessed and both have merits for further consideration.

- Big Lake South Shore: a forested site accessed from West Boundary Road via 137th Ave: with a diversity of forest cover types, ravine system, wetlands and lake edge ecosystems.
- Big Lake North Shore directly accessed from the West Regional Road, featuring bird observation and the natural shorelands of Big Lake and Sturgeon River.

Partners in the development of a nature centre could include the school systems, the province of Alberta, non-government environmental organisations, and major corporations. The plan advocates a further study to assess feasibility, facility needs, cost, partners, and an optimum site.

Non-government organisations have expressed interest in the North Shore option. Since this site is currently under City ownership, this site is a higher priority.

4 IMPLEMENTATION

The timeframe of implementation is highly dependant on external factors such as the staging of the West Regional Road and adjacent urban development. Land acquisition, trail development and amenities will require both civic and external fiscal resources. Funding from senior government has in the past and may, in the future, influence implementation schedule and priorities. The plan enables the City to be ready and to respond as external development and funding opportunities occur.

4.1 PARK PRIORITIES

4.1.1 Global Priorities

General priorities for Red Willow Park include the following:

PRESERVE KEY ENVIRONMENTAL RESOURCES:

Environmentally Sensitive Areas (ESA) such as the shorelands of Big Lake, Sturgeon River Corridor (including the spruce forest in Meadowview Park) needs the protection of the public parks system. Acquisition strategies should include dedication for environmental reserve, dedication for municipal reserve and outright purchase where necessary.

ENSURE PUBLIC ACCESSIBILITY

The trail systems and radial linkages from the river corridor to the community are very important and a high priority. Also important is auto access along certain park frontage roads.

DEVELOP KEY DESTINATION NODES

These should strategically form new anchors to the park system. They should be chosen based on demonstrated market demand.

PROVIDE DEVELOPMENT OPPORTUNITIES FOR COMMUNITY GROUPS

Work together with community and interest groups to meet common objectives is very important. As a result, a number of park sites, projects and funds will be set aside to foster such relationships.

CREATE A PARK PERSONALITY AND IMAGE

The image of a unified Red Willow Urban Park is very important. Passive interpretive signs and markers will convey the personality and storyline of the park. Upgrading some of the older parks in the downtown area will ensure consistency with the new portions of the park.

4.1.2 Initial Priorities

A top immediate priority is to concentrate effort on planning for Big Lake North site which would include a potential nature centre and acquisition of land base in the Meadowview area in order to create a continuous trail development in concert with the development of the West Regional Road and its trail crossing of the Sturgeon River. Ideally, when the crossing is built over the river with a trail, it will complete the loop. It is believed that prededication of land base related to Genstar Development Corp could be accomplished through agreement with the property developer.

High priority is placed on the Big Lake North sector due to its current city-owned status and high potential for a nature centre supported by development partners. Master Planning of this area should be instituted as soon as feasible. A natural areas management plan for the entire western sector should be an early priority as well.

4.2 DEVELOPMENT & OPERATIONAL COSTS

Except for specific facilities, the intent of this park land is to be maintained it in a natural setting with appropriate maintenance techniques. Facilities would only be developed where demonstrated interest by partners is evident. Land acquisition would come predominately from dedications of the subdivision development process, supplemented as needed by acquisition. The rate of acquisition and development can be spread out over a number of years. Therefore, the burden on tax base can be paced with expansion of development in the west and St. Albert.

DEVELOPMENT COSTS

A schedule of development cost, which will be able to assist the City in internal budgeting and costing of projects, is provided in Appendix B, Schedules A & B.

Development costing has been based on the cost experience related to the initial development of Red Willow Park in the early

1990's for items such as trails & signage, and restoration & naturalisation.

OPERATING COSTS

Operating costs have been projected internally by the Parks Department (Public Works) after reviewing the Master Plan. Project annual operating costs are anticipated as follows:

Year 1	$160,000
Year 2	$450,000
Full Build Out	$700,000

The operating costs will vary with the rate of park development. It is assumed that at full build out of the park a satellite maintenance facility and staff will be required. Some growth of the park in the west can occur prior to acquiring the satellite facility. Long term planning of the parks operations should consider a suitable location of the park's satellite facility.

Operating costs for the proposed destination Nature & Heritage Centres have not been included in the above cost estimates. The revenues and expenses of the centres will be dependant on their programs and make-up. Independently produced feasibility studies and business plans would be an integral component to further development of these initiatives.

5 CONCLUSION

Red Willow Park is a community-based conservation and open space initiative. The 2003 West Master Plan Update documents a significant shift in the park vision.

The interface with the Big Lake Natural Area places a greater emphasis on conservation and sustainability of the natural land resource represented in the park. Linkages with a City and regional trail system remain an important objective. Destinations related to ecological and cultural heritage tourism are recommended in the form of a Big Lake Nature Centre and a Elevator/Métis River Lot Heritage Centre.

A set of guiding principles, management guidelines, and the master plan will provide a flexible framework for the implementation and management of the park.

6 GLOSSARY

This Glossary of definitions was developed by St. Albert Public Works and Gibbs & Brown Landscape Architects Ltd. cooperatively for its Parks and Open Space Management Plan to provide a consistent source of terms used by people in the management of natural environments. These terms have been collected from a number of sources. The glossary will be reviewed and amended as necessary.

Many of the terms of (but not all) have been utilised in the master plan update. The glossary has been included in its entirety to promote a common terminology for planning related to Red Willow Park.

Afforestation: The artificial establishment of forest crops by planting or sowing on land that has not previously, or recently, grown trees.

Area Redevelopment Plan: A plan establishing guidelines for future redevelopment of an existing developed area; when adopted by City Council, the plan becomes a bylaw. The guidelines are formulated by considering the sequence of development, land use, transportation, demographics and open space.

Area Structure Plan: A plan establishing guidelines for development and subsequent subdivision of new communities; when adopted by City Council the plan becomes a bylaw. The guidelines are formulated by considering the sequence of development, transportation, population density and land use.

Bank: Under the legal definition, 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 distinct soil. A knowledgeable and observant person should be able to locate this line by looking. The location of the bank isn't affected by occasional periods of drought or flooding. The bed is the land on which the water sits, and the shore is that part of the bed, which is exposed when water levels aren't at their normal fullest level.

Bed and Shore: For the purpose of the parks and open space master plan, the bed and shore of a body of water shall be the 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.

Biodiversity: is the variability among living organisms from all sources including inter alia, terrestrial, marine, other aquatic ecosystems, and ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.

Biomonitoring: is the intermittent (regular or irregular) or continuous surveillance carried out to determine one of more of the following purposes:

1. Detecting ecosystem change.
2. Assessing the effectiveness of policy or legislation.
3. Regulatory (performance or audit functions), e.g. performance monitoring of objectives of forest management plans.

A number of traits characterise effective biodiversity monitoring. These include:

1. Clear linkage between mandate and indicator.
2. Repeated periodic sampling.
3. Standardised sampling techniques.
4. Clear, unambiguous units for flora, habitat, or landscape features.
5. Geographically referenced sampling to an administrative or ecological zone.
6. Maintenance of long-term databases.
7. Analysis of long-term trends in data.
8. Public access to data, and analysis.
9. Widespread geographical coverage.

Bioremediation: Simply, the use of biological techniques to clean up pollution. More specifically, the use of specialized, naturally occurring microorganisms with a unique biological characteristics, appetites, and metabolisms as a form of waste cleanup.

Canopy: The top layer of vegetation in a forest, in particular that which controls light levels in the understory.

Conservation: A mandate for the parks department which implies the controlled, wise use of the natural environment or the saving of an area for future use.

Corridor/Connection: The land or water area which enables wildlife (Plants, Birds, Mammals, Insects, Reptiles etc) to move freely between natural environments.

Dedicated Parkland: City-owned land set aside by City Council for parks and recreational purposes.

Disturbed Area: An area that has resulted from the use of all terrain vehicles, excavation and fill, snow dumping, agriculture and gravel extraction. It may also result from the negative effects of recreational use. Generally these areas are rich in introduced plant species or void of vegetation.

Diversity: The variety of species, vegetation communities, habitats or landform in a given area.

Dominant Species: The most prolific species in a vegetational strata that by size, number, or coverage, impacts the resources of other associated species.

Ecology: The study of relationships between living things, with each other and with their environments.

Ecoregion: An area characterized by a distinctive regional climate and other factors as expressed by vegetation.

Ecotone: The transition area between two vegetation communities.

Ecosite: An area with a unique combination of vegetation, landform, soil and other environmental components.

Ecosystem: A community of organisms and their physical environment.

Edge Communities: The vegetation of one patch that blends with the other to form a transition zone.

Environmental reserve: 664(l) Subject to section 663, a subdivision authority may require the owner of a parcel of land that is the subject of a proposed subdivision to provide part of that parcel of land as environmental reserve if it consists of:

a) A swamp, gully, ravine, coulee or natural drainage course.
b) Land that is subject to flooding or is, in the opinion of the subdivision authority, unstable, or
c) A strip of land, not less than 6 meters in width, abutting the bed and shore of any lake, river, stream or other body of water for the purpose of
    i) preventing pollution, or
    ii) providing public access to and beside the bed and shore.

Environmental Sensitive Area (ESA): An Environmentally Sensitive Area is an undisturbed or relatively undisturbed Natural Area which because of its features, characteristics or ecological

functions, is significant and is highly sensitive to most forms of disturbance (i.e. its values and functions would be significantly altered by natural or human-caused disturbance such as development of surrounding lands or human use of the site).

A site was classified as an ESA if it was equal to or greater than 0.5 hectares, contained relatively undisturbed habitat and met one of the following criteria. These criteria are similar to those used in other recent inventories (O'Leary et al 1993) - City of Edmonton; Eagles (1984) - southern Ontario; Infotech (1989) - County of Sturgeon; Sweetgrass Consultants (1989) - County of Red Deer; Saxena et al (1996) - Grassland and Parkland Natural Regions).

1. Provides habitat for plant and animal species intolerant of human disturbances.
2. Comprises old-growth forest.
3. Comprises a permanent wetland.
4. Functions as a critical link between two or more ESAs.
5. Comprises hazard lands or lands unsuitable for development in their natural state (e.g. floodplains and unstable slopes).
6. Functions as a groundwater recharge or discharge area.
7. Contains an unusual diversity of plant or animal communities due to a variety of geomorphological features and microclimatic effects.
8. Is recognized for its value by the scientific community and is used for research purposes because of its unique qualities. The inclusion of this criterion creates the possibility that an area that is not in limited supply or that does not perform a significant ecological function is considered significant solely on the basis of community appeal, use of interest.

Important modifications to the well accepted, SNA and ESA definitions and criteria used by the other, above-mentioned studies are as follows:

- The exclusion of Historical Resources (palaeontological, archaeological or historic) as a site criterion. This criterion was excluded because Historical Resources are human artifacts not natural features and because historical resources are protected from impact by development under the auspices of the Alberta Historical Resources Act.

- The exclusion of the potential for a site to remain sustainable within a developed context. This criterion was excluded because the potential for sustainability within a developed context is development-specific, dependent on the manner in which development proceeds, and recent experience in other jurisdictions indicates that sustainability within a developed context is difficult to

assess and subject to wide interpretation. Where a site straddles a City boundary, the criteria assessment considered the entire site. The importance of the portion located within the City to the sites current sustainability is noted.

Flood Fringe: The area depicted as the designated flood fringe in the Flood Information Map-City of St Albert, which forms part of the Canada-Alberta Flood Damage Reduction Agreement. The Flood Fringe is generally those areas of land within, but on the edge of the floodplain. It is generally associated with shallow, standing or slowly moving water rather than deep, rapidly flowing water.

Flood Risk Area: All areas of the floodplain that may be subject to some form of inundation of floodwaters. This includes the floodway and flood fringe.

Floodplain: The Floodplain includes all lands adjacent to the river that may be subject to inundation by flooding. These lands include the floodway and the flood fringe areas.

Floodway: The present river channel, plus those portions of adjoining land which are needed to convey a 100 year designated flood without cumulatively increasing the water surface elevation more than a designated height.

Fragmentation: To separate or divide naturally occurring habitats or plant communities.

Fringe Species: Plant material that grows naturally along the edge of mature forests due to the availability of sunlight, exposure to oxygen and proper soil conditions. Included are small trees, shrubs, forbs, grasses and wildflowers.

Green Belt: A strip of land surrounding an urban area. It is intended to separate one urban area from another.

Intermunicipal Development Plan: A plan adopted by two or more municipal councils.

Interpretation: Translation and communication of natural and historical information into meaningful and contemporary messages.

Inventory: A survey of selected natural resources not necessarily including an assessment.

Land Acquisition: Lands to be purchased or leased normally on an opportunity basis and lands that can be acquired through donation, credit reserve or any other manner.

Land Use Bylaw: The bylaw that divides the city into land use districts and establishes procedures for processing and deciding upon development applications. It sets out rules that affect how each parcel of land in the city can be used and developed and includes a zoning map.

Levee (Natural): Bank of sand or silt built by a river during floods, where the Suspended Load is deposited in greatest quantity close to the river. The process of developing natural levees tends to raise riverbanks above of the surrounding flood plains. A break in a natural levee is sometimes called a crevasse.

Levee (Manmade): An embankment generally constructed on or parallel to the banks of a stream, lake or other body of water, for the purpose of protecting the land side from inundation by flood water or to confine the stream flow to its regular channel.

Levee Marsh: The collection of sand, silt and gravel at the out-turned curve of a river, which will cause water to dam on the high side. The tributary that normally flows into the river is then collected and the ensuing flow will create a levee marsh. An example of this rare naturally occurring process in St Albert is directly north of the river across from the current Rodeo Grounds.

Linear Park: A narrow open space extending along riverbanks, escarpments, easements and other rights-of-way. They are often landscaped and usually contain trails and/or pathways.

Lost-edge Forest: A forest that has had the edge community disturbed by development or turf cutting equipment. Lost-edge contributes to unhealthy forests by allowing sun, wind, weed seeds and unwanted human traffic to penetrate the mature forest fragments.

Maintenance: The keeping of parks, buildings, equipment and supplies in accordance with standards for effective operation.

Major Natural Area: A large natural area whose primary role is protection and passive recreation. These parks have moderate to high environmental sensitivity but may contain a variety of park zones.

Management Plan: A planning study and resulting document where the concern is to identify issues and create a management and implementation strategy.

Master Plan: A planning study and resulting document where the concern is to formulate and to clarify long term goals for decision making. The plan identifies issues and concerns, and then translates these into a recommended course of action.

Municipal Development Plan (MDP): A plan adopted by council as a municipal development plan pursuant to the Municipal Government Act.

Municipal Reserve: Land provided as part of a subdivision by the developer without compensation for park and school purposes in accordance with the provisions of the Municipal Government Act, 1994.

Native: Species of animals or plants that have not been introduced by people or their direct activities.

Natural: Ecological processes that are relatively unchanged by humans.

Naturalization: Naturalization is returning an area that has been ecologically disturbed by humans to a habitat supporting native plant species that can live, grow and evolve with minimal intervention.

Natural Area: A parcel of land exhibiting all of the following characteristics.

- An area of open "Green Space" within the city
- Predominately covered with indigenous vegetation such as prairie grassland or river line forest
- Lacking substantial modification by man
- Not active arable or other farmland use
- Contains indigenous fauna

Natural Environment Category: The division of natural Environment Park class into functional categories. These include Sanctuary Status, Major Natural Area, Supporting Natural Area and Other Park Type with Natural Environment.

Open Space: All land and water areas, either publicly owned or offering public accesses that are not covered by structures.

Open Space Classification (PRPP): A system used to designate certain areas for specific types of use. Classification and zoning combined ensure that resources are managed for their preservation. Open space is categorized as follows:

- Destination parks

- Regional parks
- Community parks
- Neighbourhood parks
- Cemeteries
- Roadway boulevards
- Park reserve
- Linear parks

Park: A specific use open space area which is managed to provide opportunities for recreation, education, cultural or aesthetic use. The main types of parks are:

1. **Destination parks** - a park, also referred to a special interest park that offers historical, zoological park, botanical, cultural and education opportunities for the residents of and visitors to the City.
2. **Regional recreational parks** - a park, large and basic to the park system. It offers diverse or special activities to the entire city. These currently include athletic parks and natural environment parks.
3. **Community parks** - a large park having facilities intended for local use. It includes school grounds, community athletic fields and natural environment parks.
4. **Neighbourhood parks** - a small passive park offering spontaneous recreation to the local resident. It can include tot lots and playground.

Park Reserve: An open space area, publicly owned, intended for use as a park.

Preservation: A mandate of the Parks Department which implies efforts to maintain the natural environment in its present condition or to save an area from damage and destruction.

Protection: A management technique used to keep an area from harm. It can include many actions.

Public Access: Access registered public right-of-way or easements through private property.

Reclamation: The efforts to improve disturbed sites condition.

Red Willow Trail: A route that provides designated access by a variety of compatible multiple or single travel modes (excluding automobiles). It is designed for the pursuit of outdoor recreational experience and activities. Pathways may be for bicycles, cross-country skiing, and pedestrian use unless otherwise identified.

Resource Management: A management strategy that identifies the requirements of the resource or a component of the resource and undertakes specific actions to provide those fundamental needs. They may include protection, development, education, encouragement of use, research, monitoring etc.

Restoration- The efforts to restore a disturbed site to near its natural and native condition.

Riparian: These areas are transitional: they exist between the aquatic part (the river or steam) and the surrounding terrestrial (or upland) area. Think of them as "wetter than dry" not "drier than wet". There is considerable variation in riparian areas, where water, soil and vegetation interact.

River Corridor: The band of vegetation along a river that differs from the surrounding environment.

Setback: Required distance between a roadway, right of way, water body or escarpment and either a property line or a development as defined in the land use bylaw.

Significant Natural Area (SNA): A Significant Natural Area is a Natural Area equal to or greater than 0.5 hectares, which, because of its features or characteristics, is significant from an environmental perspective to the community of St. Albert. An SNA can withstand various degrees of human use.

A site was listed as an SNA on the basis of it meeting the minimum size of 0.5 hectares and one or more of the following criteria. These criteria have been adapted from those listed by Pedocan (1990) and represent a slight modification of a more or less standard set of criteria used by numerous other North American municipalities.

1. Known to support vulnerable, threatened or endangered or other special status plant or wildlife species.
2. Contains an unusual or high diversity of plant and/or animal communities.
3. Contains habitat with limited or unique representation within the municipality.
4. Is a viable (not decadent), representative remnant of a once larger habitat or ecosystem that has virtually disappeared from the region, or is in demonstrable decline.
5. Functions as a critical link between two or more SNA in the City or in surrounding jurisdictions or is important to the healthy maintenance of a natural system beyond its boundaries.

6. Presence of distinctive or unique landform(s) (geological or physiographic).
7. Performs a critical hydrological function.
8. Known to be valued (for aesthetics, recreation potential, diversity of urban form, pollution mitigation etc.) by community residents.

Succession Planting: The planting of appropriate site-specific trees in older established forests. This may be done to encourage older lived species (spruce, pine) to become established in deciduous forests. It may also define shrub planting in edge communities.

Sustainable Native Species: Trees, shrubs, grasses and wildflowers that grew in central Alberta before the introduction of Europeans settlers. Lists are available that describe the difference between Native Species and suitable acclimatized species.

Thalweg: (1) The lowest thread along the axial part of a valley or stream channel. (2) subsurface, ground-water stream percolating beneath and in the general direction of a surface stream course or valley. (3) The middle, chief, or deepest part of a navigable channel or waterway.

Urban Forest:

i) native woodlots - anything natural that has been undisturbed.
ii) buffer forest - anything between residential fence line and sidewalk on arterials
iii) street-side forest - plantings that happen between sidewalks and curbs.
iv) restoration forest - forests that are planted with native species or hearty species to replicate native forest

Wetland- Land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic vegetation, and various kinds of biological activity which are adapted to a wet environment.

Wildlife- Native plants and animals living under natural conditions.

Windbreaks/ Shelterbelts- Trees and/or shrubs either planted or naturally occurring the purpose of which is to provide environmental protection to property.

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Appendix A

Community Consultation

APPENDIX A: Community Consultation Process

As part of the master plan update, a community consultation program was undertaken. A stakeholder list was developed by Gibbs & Brown Landscape Architects Ltd., in consultation with the City of St. Albert and other key people. The stakeholder list contains contact information for recreational and environmental groups, land developers, regulators and local politicians.

In the fall of 2002, stakeholder focus groups followed by workshops were held. Stakeholders were sent an invitation and a brief project information package in advance of the event; those who expressed an interested in further involvement in the process, where invited back to participate in the workshops.

In February of 2003, an open house was held at a local high school. Invitations were sent to all directly affected property owners and to those who were previously involved in the consultation process. Advertisements were placed in two local newspapers inviting the general public to the event.

The open house provided the general public an opportunity to learn about the project, and review the data inventory and the updated master plan. Representatives of the City of St. Albert, Albert Community Services, and Gibbs & Brown were in attendance to answer questions. An exit survey was used to obtain written comments from the public.

- Alberta Community Development
- Alberta Native Plant Council
- Alberta Naturalization Network Society
- Afghanistan Memorial
- Anti Bypass Coalition
- Arts & Heritage Foundation
- BLESS
- BMX Association
- Canoe & Kayak Club
- Capital Region Health Authority
- City of St. Albert Staff
- Community Gardens
- Ducks Unlimited Canada
- Fish & Game Association
- Genstar
- Greater St. Albert Catholic Schools
- Host Lions Club
- Kinsmen Club
- Land Stewardship Centre
- Men's Slow-pitch Association
- Métis Regional Council
- Minor Baseball Association
- Musée Heritage Museum
- Natural Areas Advisory Committee
- Profiles Art Gallery
- Qualico/South Riel Landowners
- Riel Park Business Association
- Rugby Club
- Soccer Association
- St. Albert Economic Development Advisory Committee (SAEDAC)
- St. Albert Protestant Schools
- Tennis Club
- Tree Canada Foundation
- Urban Land Corp.

The following is a summary of the results from the consultation process.

1.1 KEY PERSON INTERVIEWS – SUMMARY LIST

DATE	ORGANISATION/REPS	COMMENTS
July 8	St. Albert Community Services ▪ Ted Jenkins ▪ John Younie ▪ Margo Brenneis ▪ Diane Enger	▪ Coordinate responsibilities ▪ Ensuring contact ▪ Part Issues
July 9	Protected Areas (ASD) ▪ Archie Landals	▪ Supports RWP initiative ▪ Support interpretive centre ▪ Update on natural area study
July 15	Canoe & Kayak Club ▪ Rick Hill ▪ Kim Willows ▪ Greg Massic ▪ Cathy Sam	▪ Joint meeting with road team ▪ Loss of lagoon due to alignment ▪ Reviewed needs ▪ Recommended to work with road team as first strategy ▪ RWP location is very important
July 16	Bill Holtby, City Manager	▪ Confirmed process and committee
July 23	Senior Leadership Team	▪ Confirmed process ▪ Wayne Wood to assist with media ▪ Enlarge study area
July 23	Mayor Richard Plain	▪ General Background ▪ Vision of project – RWP will drive future planning initiatives

July 24	Curtis Cundy, Planning Services Director	▪ Update of past and future planning initiatives
July 24	Study Coordination Ad Hoc Committee ▪ West Regional Road ▪ Big Lake Mangement ▪ Strategic Conservation ▪ Big Lake Hydrology	▪ Status ▪ Data sharing
July 30	Public Works ▪ Roger Belley ▪ Kim Rockwell ▪ Derek Richmond	▪ Trail issues ▪ Type of development in west end of park ▪ Naturalisation study
Aug 7	BLESS ▪ Louis Horstman ▪ Bob Lane ▪ Bob Russell ▪ Stuart Loomis	▪ Support park ▪ Oppose road ▪ Will participate ▪ Provide some background
Aug 8	Elka Blodgett	▪ Walking tour ▪ Local knowledge ▪ Restrict development from flood plain ▪ Conserve shorelands ▪ Low key development ▪ Interpretive centre near spruce forest
Aug 26	St. Albert Arts & Heritage Foundation ▪ Carol Watamaniuk Profiles Art Gallery ▪ Heidi Alther Musée Heritage Museum ▪ Alexandra Hatcher Public Works ▪ Roger Belley	▪ Reviewed SAAHF mandate ▪ Elevators & River Lot 24 ▪ Natural heritage part of mandate ▪ Integrate arts and events

Sept 8	ACD Protected Areas ▪ Ian Waugh	▪ Site review of Big Lake ▪ Tips and pointers on education & interpretive facilities ▪ Willing to share info
Sept 9	St. Albert Rugby and Soccer Associations	▪ Mitigate impacts of road ▪ Assured water supply ▪ Use of remnant site
Sept 10	City of Edmonton ▪ Grant Pearsell ▪ Dave Castichuk for Marlene Exner ▪ Garth Clyburn ▪ Marica Clarke	▪ Update of ASP ▪ Land acquisition needs to go to community services at a higher level
Sept 13	Genstar Development Co. ▪ John Dixon ▪ Jim Pinnel ▪ Dave Klipenstein (UMA)	▪ Reviewed planning ▪ RWP process needs to be mindful of entitlements to private landowner
Sept 13	South Riel Landowners ▪ Brent Croucher ▪ Gerry Proder ▪ Ken Proder ▪ Albert Anselmo ▪ Gerry Anselmo	▪ Want to change MDP designation to residential ▪ Want to be consulted ▪ Concerned about infringement of property
Sept 18	Ducks Unlimited ▪ Michael Barr ▪ Greg Norman	▪ Own a parcel of Big Lake north shore ▪ Minimal development of bird watchers access ▪ Want to participate in the BLNA & RWP process

Oct 3	Kinsmen Club ▪ Executive	▪ Want to reorganise site and expand RV park ▪ Prepared to prepare plan
Nov 4	SAEDAC – Tourism Committee	▪ RWP – quality of life ▪ Tourism strategy

1.2 STAKEHOLDER FOCUS GROUPS OCTOBER 8TH & 9TH, 2002

Over the duration of two days, a series of stakeholder focus groups were held in order to engage a cross section of special interest groups, user groups, landowners, business leaders, and environmentalists to develop a strategic plan for Red Willow Park and the Big Lake Natural Area. In all 30 individual survey forms were handed in. It is important to note that while there were many diverse and unique answers they have been lumped into broad categories in order to make statistical analysis possible. Although these categories are arbitrary they are useful for the purpose of reviewing many different responses. Often there are many categories per question, this is so the reader may be able to interpret the categories either as they are shown or lump several similar categories together (i.e. the categories wildlife / natural areas / birdwatching are separate categories but are all related to each other).

1.2.1 Strengths & Assets

The first question of the survey asked respondents what the most important strengths or assets of the river and lakeshore lands within St. Albert (which will become Red Willow Park) were. In all 107 responses were obtained from this question. When all of the answers were generalized into categories the top three answers proved to be **wildlife and waterfowl habitat**, **accessibility to St. Albert**, and **recreation** potential of the area.

Table 1: Strengths or assets of the river and lake shorelands within St. Albert

What are the most important strengths or assets of the river and lake shorelands within St. Albert	Frequency of Response	%

(which will become Red Willow Park)		
Wildlife / Waterfowl Habitat	**16**	**15**
Accessibility to St. Albert	**15**	**14**
Recreation Potential	**14**	**13**
Aesthetics	11	10
Educational / Interpretive / Historical	10	9
Natural Area	9	8
Watershed Functions	6	6
(Eco)Tourism	5	5
Bird / Wildlife Watching	5	5
Biological Diversity	5	5
Large Area	4	4
Economic Development	2	2
Connection potential with other parks/natural areas	2	2
"Out of town" stress relief	1	1
Provincially, Nationally, Globally Significant	1	1
Its There	1	1
Total	**107**	**100**

As can be seen, the top responses to this question were very close. It could also be inferred from the sheer diversity of responses and the total number of responses obtained that those surveyed see a lot of strengths/assets with relation to Red Willow Park.

How categories are determined (using Table 1 as an example)

It is important to remember that these 16 categories are attempting to generalize 107 unique responses. Arbitrary lines have been drawn to create categories such as Wildlife and Waterfowl Habitat and Natural Areas, which are similar to each other but represent a different viewpoint on the part of the respondent. For those particular categories it was decided that a response indicating wildlife as an asset was different from a response indicating natural areas as an asset despite the fact that the two coincide with each other. It was viewed that Natural Areas represented a much broader range of ecosystem functions rather than focusing on just one environmental good such as wildlife/waterfowl.

1.2.2 Red Willow Park

The second question asked respondents what the important roles/goals of Red Willow Park should be, the first part of this five-part question dealt with environmental protection. An impressive 44% of responses indicated that protecting natural areas was important. If we couple protecting the water quality in these natural areas we increase from 44% to 66% of all responses. The third most popular response was protecting the park from vehicles and urban encroachment at 15%.

Table 2: The role/goal of environmental protection for Red Willow Park

What should be the important roles / goals of Red Willow Park?	Frequency of Response	%
Environmental Protection		
Protect the natural areas	**12**	**44**
Protect Water Quality	**6**	**22**
Protect from Vehicles and Urban Encroachment	**4**	**15**
Education	2	7
Protection for Wildlife / Waterfowl	1	4
Proper Management	1	4
Protection from chemical pollution	1	4
Total	**27**	**100**

The second part of this five part question dealt with Heritage Interpretation / Education and its relation to the roles and goals of Red Willow Park. The response to this question can leave no doubt that interpretation/education is important to most every respondent who answered the question. An overwhelming 79% of respondents were in favour of some type of educational historical / archaeological / cultural interpretative facility whether

it be an elaborate centre or a simple viewing platform. The second highest response category, **Ensure Facility Does Not Compromise Site**, indicated that environmental protection took precedence over education when the educational facility negatively impacts the environment.

Table 3: The role/goal of heritage interpretation for Red Willow Park

What should be the important roles / goals of Red Willow Park?	Frequency of Response	%
Heritage Interpretation / Education		
Historical / Archaeological / Cultural Interpretive Facilities	**23**	**79**
Ensure facility location does not compromise site	4	14
Develop interpretive centers at all possible locations	1	3
Interpretive Convention Center	1	3
Total	**29**	**100**

The third segment of question two asked what role/goal trails, open spaces and leisure activities had in Red Willow Park. Again the answer speaks for itself at 64% in favour of expanding the trail system; this number jumps to 76% if the trail system is done in a manner, which reduces the environmental impact on the area. The concept of a trail system that connected to other parks including Edmonton's park system was a popular concept. As well throughout the entire survey it was observed that trails were a very important component of many peoples vision of Red Willow Park and the Big Lake Natural area.

Table 4: The role/goal of trails, open spaces and leisure activities in Red Willow Park

What should be the important roles / goals of Red Willow Park?	Frequency of Response	%
Trails & Open Spaces, Leisure Activities		
Expand Trail System	**16**	**64**
Minimize Environmental Impact	**3**	**12**
Passive Recreation	**3**	**12**
BMX Facility	1	4
Ensure adequate funding to maintain trails	1	4
Appropriate activities for different users	1	4
Total	**25**	**100**

The forth segment of question two asked respondents what role/goals they had for community and economic development in Red Willow Park. The results for this question are a 29%:29% tie for the categories Develop Park & Surrounding Area and Development Consistent with the Park. Alternatively, depending on one's point of view the categories Eco-tourism and Development Consistent with the Park may coincide with each other to increase Development Consistent with the Park's ranking to the top spot. Many respondents believed that with the creation of a great park the spin-offs from increased tourism would benefit businesses. One respondent has a vision of a marriage between business and the park; they believe "the spin-offs from tourism and the support from the business community for upkeep [of the park] should be an important component [in the roles/goals of the Park]". The respondent envisions a concept they call "Partners in the Park" which includes "sponsorship of benches, picnic areas, parks, and lights". Another respondent believes that the creation of a BMX facility business will benefit from BMX events drawing participants and money to area. However, most respondents are much more conservative in their views of businesses role in the park seeing concessions, and park related businesses such as canoe rentals. Eco-tourism is another concept that occurs throughout the entire survey in a good proportion of the respondents. Many respondents believe that the park has the potential to become a "world class destination park".

Table 5: The role/goal of community and economic development

What should be the important roles / goals of Red Willow Park?	Frequency of Response	%
Community & Economic Development		
Develop Park & Surrounding Area	**7**	**29**
Development consistent with the park	**7**	**29**
Eco-tourism	**5**	**21**
As little as possible	4	17
Long term plan needed	1	4
Total	**24**	**100**

The final component of question two asked respondents to describe what they believed should be important roles/goals of the park. This question had only 5 responses out of 30 people with the number one answer at two responses being a Destination Park.

Table 6: Other roles/goals of Red Willow Park

What should be the important roles / goals of Red Willow Park?	Frequency of Response	%
Other		
Destination park for eco-tourism	**2**	40
Outdoor Sporting Activities (marathon, triathlon, etc.)	**1**	20
Linkage to Edmonton's trail system	**1**	20
Retreat location for businesses	**1**	20
Total	**5**	**100**

Respondents were asked whom they believe the park should strive to serve. The overwhelming response was regional residents (which also include adjacent residents and all city residents) in relation to the parks Trail System, Specialised Facilities, and the General Park area. As the table below shows those surveyed see the park as an important place throughout the region and some even envision it as a world-wide tourist draw.

Table 7: Who should the Park serve?

Who should the Park serve (e.g. Adjacent residents, all city residents, regional residents)?	Frequency of Response	%
Note: National includes adjacent, city, regional, provincial and national residents		
Trail System		
Adjacent Residents	0	0
All City Residents	6	24
Regional Residents	17	68
National	2	8
Total	**25**	**100**
Specialised Facilities		
Adjacent Residents	0	0
All City Residents	4	19
Regional Residents	16	76
National	1	5
Total	**21**	**100**
General Park Area		
Adjacent Residents	0	0
All City Residents	5	23
Regional Residents	16	73
National	1	5
Total	**22**	**100**

1.2.3 Initiatives & Priorities

Question three asked respondents to develop a list of initiatives for the Big Lake Shoreland. The answers from this question proved to be very diverse with the categories Preservation of Natural Areas (24%) and Education/Interpretation (24%) being the dominant responses. Following with 6% of the response was the need for environmentally sensitive trails such as boardwalks and soft surfaced trails. Interestingly, one respondent suggested that a "suitably" located world class interpretive / wetland research centre comparable to the Ducks Unlimited marshland facility located near Winnipeg would be a good idea.

Table 8: Initiatives of Big Lake Shorelands

Develop a list of initiatives for Red Willow Park West **Big Lake Shoreland**	Frequency of Response	%
Preservation of Natural Areas	**11**	**24**
Education / Interpretation	**11**	**24**
Environmentally sensitive trails	**6**	**13**
Bird Watching / Viewing Stations	5	11
Settle Ownership Conflicts / Develop fund to purchase lands	3	7
Coordinate with larger Big Lake plan	2	4
Ecological Conservation	2	4
Trash and Toilet Facilities	1	2
Glossary of Technical Terms	1	2
Active Recreation	1	2
Minimize Intrusions	1	2
Acquisition of shorelands included in Red Willow Park	1	2
Total	**45**	**100**

Respondents where then asked for their input on initiatives for the North Sturgeon River Shorelands. The top two answers were almost identical to those of the Big Lake Shorelands with Education/Interpretive Areas and Protection of Environmentally Sensitive Areas being tied at 21%. Recreation (16%) however was the number three response for this area compared to only 2% for the Big Lake Shorelands. One respondent suggested the development of Grain Elevator Park and Métis Heritage Sites to encourage cultural tourism and enhance the educational program. Another respondent stressed the importance of this area to our common heritage saying "archaeological interpretation [is important to] create awareness of the importance of Big Lake and Sturgeon Valley's importance to native peoples over the past 5000 years -- this is our heritage".

Table 9: Initiative for the North Sturgeon River Shorelands

Develop a list of initiatives for Red Willow Park West **North Sturgeon River Shorelands**	Frequency of Response	%
Education / Interpretive	**8**	**21**
Protection of Environmentally Sensitive Areas	**8**	**21**
Recreation	**6**	**16**
Trails	5	13
Picnic Areas	2	5
Finish Grain Elevator Park / Tie in RiverLot 24	2	5
Realignment of Meadowview Drive	1	3
Viewing Platforms	1	3
Trash and Toilet Facilities	1	3
Open shorelands to public use	1	3
Provide link to South Shore	1	3
Acquire Big Spruce Woods and restrict access	1	3
Artistic Conference Center / Statues	1	3
Total	**38**	**100**

Recreation was again in the top three answers for the South Sturgeon shorelands at 14% (second place) with one respondent suggesting the possible development of a winter ice skating rink similar to Ottawa's Canal Ice Rink. Interestingly, one respondent identified two industries who had left “disgraceful messes” that needed to be cleaned up as well as the area between the River and Sportsfield. Habitat Restoration/Cleanup tops the South Sturgeon Shorelands list of initiatives at 17%. Third place is a tie (12% each) between three interrelated categories: **Preserving Natural Areas**, **Trails**, **and Interpretive/Viewing Areas.**

Table 10: Initiatives for the South Sturgeon Shorelands

Develop a list of initiatives for Red Willow Park West **South Sturgeon Shorelands**	Frequency of Response	%
Habitat Restoration / Cleanup	**7**	**17**
Recreation	**6**	**14**
Preserve Natural Areas	**5**	**12**
Trails	**5**	**12**
Interpretive / Viewing Areas	**5**	**12**
Improve Shore Access	2	5
Picnic Areas	2	5
Reduce Grass cutting / Weeds	2	5
Aesthetic Enhancement / Landscaping	1	2
No Capital Intensive Projects	1	2
Parking	1	2
Signage	1	2
No Western Regional Highway	1	2

Coordinate with Big Lake Natural Area Plan	1	2
Artistic Benches/Sculptures	1	2
Stop Encroachment	1	2
Total	**42**	**100**

Respondents were then asked what they thought the top priorities were and why. Preserving/Enhancing Lands emerged as the leader at 26% of the total responses. One respondent mentioned that the "preservation of land from urban/industrial development [was very important because we] can not lose any more land in proximity to the city. Another respondent recommended protecting sensitive vegetation habitats (i.e. Big Spruce Woods) by using fencing buffered beyond the feature and limit trails to one loop with a common entrance and exit point to protect the feature from uncontrolled access and to minimize user impact within the park. Yet another respondent recommended developing an area where humans are not allowed as this would truly preserve the area and the wildlife residing within it. In a three-way tie for second place were the categories **Trails**, **Recreation**, and **Development/Encroachment** each at 10%. Under the trail category one respondent stressed the need to look at different sorts of materials for the trails, different materials may prove better in different areas. The same stakeholder then brought up the importance of making the trail system a sustainable system, "if you do not work in how you will pay for it, it will fail". In regards to recreation some comments where that there is a "big need for recreation"; and that recreational use is important because it is inexpensive and keeps a sense of community. In regards to Development/Recreation, several stakeholders brought up one area of special preservation value within the park, which is the 1:100 year floodplain. One respondent called for the prohibition of non-park development within the 1:100 year floodplain (including adjacent buffer zone). The same stakeholder went on to say that the planned western regional road is an incompatible use and that all major "non-park" developments put Red Willow Park at an unacceptable degree of risk.

Table 11: Top Priorities

What are the Top Priorities	Frequency of Response	%
Preserving / Enhancing Lands	**11**	**26**
Trails	**4**	**10**
Recreation	**4**	**10**
Development / Encroachment	**4**	**10**
Formulating a plan	3	7
Accessibility	3	7
Education	3	7
Redistricting surrounding lands to a more compatible use	2	5
Getting rid of Railway	2	5

Migratory Birds / Waterfowl	2	5
Dealing with landowners	1	2
Eliminate Grass cutting	1	2
Ecological Values	1	2
Signage	1	2
Total	**42**	**100**

1.2.4 Big Lake Natural Area and Shoreland

The next question respondents were asked was to complete the statement "In 20 years, the Big Lake area will be..." This question yielded an abundance of responses which offered insight into how the respondents envisioned the park in the future. These answers have not been categorized and are presented below as they appeared in the individual surveys given to the respondents.

- A focal point to St. Albert (and the whole region)
- A renowned natural area complete with interpretive centers capable of "hosting" students, residents, groups, etc.
- A combination of community vision and natural areas and trails
- A significant regional recreation asset
- Maintained as a waterbody - protected from urban encroachment but accessible to the public
- A combination of varied active & passive recreational activities, natural areas, and trails
- Managed to ensure that the integrity and serenity of the Big Lake area is sustained while urban development continues to grow and ultimately surround it.
- Full of birds/wildlife, provide a special spot away from the noise of the City/development
- Possibly not much different from what it is now however, if climatic circumstances change dramatically changes could be very significant
- A recognised world class environmental, historical and educational resource for the use of all persons
- Maintained as a key wetland important to migratory birds for staging, breeding and migration as it has for centuries before
- A viable natural area minimally impacted by neighboring development
- An educational area - with large interpretive center
- A protected natural asset that balances environmental (wildlife) importance with the needs of people

Question four asked respondents what issues must be addressed in order for the Big Lake Management Plan to be successful. Watershed Management/Riparian Health was the number one issue that respondents identified (26%). One stakeholder called for the halt to legal and illegal ground and surface water withdrawals. Several respondents identified the need to protect water quality and quantity from degradation. Protecting Natural

Areas was the second highest response at 16%. The protection of "real" natural areas was also indicated as an important issue. Education was the third highest reported issue at 11% with respondents identifying the need for a "safe and clean" trail system.

Table 12: Key Management Issues BLNA & Shorelands

Please complete the following statement "For the Big Lake Management Plan to be successful, the following three most important issues must be addressed..."		
ISSUES	**Frequency of Response**	**%**
Watershed / Riparian Functions & Health	**10**	**26**
Protecting Natural Areas	**6**	**16**
Recreation	**4**	**11**
Education	3	8
Trails	3	8
Ongoing stakeholder / government communication	3	8
Pollution	2	5
The Road / Access	2	5
Funding	1	3
Coordination with Big Lake Plan	1	3
Vision & Understanding of wellness and the environment	1	3
Surrounding Incompatible Land Use	1	3
Adjacent Land Acquisition	1	3
Total	**38**	**100**

The next question respondents were asked was what activities they believed should be encouraged in the Big Lake Natural Area. Half of all the responses indicated that viewing/interpretation/education should be encouraged. Education and Interpretation of the area was a reoccurring theme throughout the survey and it is obvious that of the respondents surveyed education is of great importance to them with regards to Big Lake Natural Area (and Red Willow Park). The development of a Trail System and the need for Recreation were the second highest reported issues for the Big Lake Natural Area. Interestingly two respondents suggested that hunting would be a compatible use for the Big Lake Natural Area.

Table 13: Encouraged Activities in Big Lake Natural Area

Recreation, Tourism, and Heritage Appreciation: In your opinion, what are the most important recreation, tourism, or heritage appreciation activities that should be encouraged in the Big Lake Natural Area and Red Willow Park?		
ACTIVITY	**Frequency of Response**	**%**

Viewing / Interpretation / Education	16	50
Trail System	5	16
Recreation	5	16
Hunting	2	6
Archaeological Excavations	2	6
Eco-tourism	1	3
Natural Area Rehabilitation	1	3
Total	**32**	**100**

When respondents where asked what should be restricted in the Big Lake Natural Area snowmobiling/ATV'ing toped the list at 30%. If powerboats are included with Snowmobiles/ATV's this figure increases to 45%. Industrial development represented 20% of all responses. Restricting both commercial and residential development accounts for another 15% of all responses.

Table 14: 2 Restricted Activities in Big Lake Natural Area

Recreation, Tourism, and Heritage Appreciation: In your opinion, what are the most important recreation, tourism, or heritage appreciation activities that should be discouraged in the Big Lake Natural Area and Red Willow Park?		
ACTIVITY	**Frequency of Response**	**%**
Snowmobiling/ATV's	6	30
Industrial Development	4	20
Power Boats	3	15
Commercial Development	2	10
Residential Development	1	5
Intensive Recreation	1	5
Dogs at Large	1	5
Walking Directly on Land	1	5
Hunting	1	5
Total	**20**	**100**

Respondents were asked what activities they believed should be encouraged for Red Willow Park. As with Big Lake Interpretation/Education was important to the respondents tying as the number one response at 26%. Recreation (26%) was shown to be an important activity in Red Willow Park. One respondent believed that recreational opportunities compatible with Red Willow Park's dominant quiet attributes should be encouraged. The development of a trail system was the third greatest response at 17%.

Table 15: Encouraged Activities for Red Willow Park

Recreation, Tourism, and Heritage Appreciation: In your opinion, what are the most important recreation, tourism, or heritage appreciation activities that should be encouraged in the Big Lake Natural Area and Red Willow Park?		
ACTIVITY	**Frequency of Response**	**%**
Viewing / Interpretation / Education	6	26
Recreation	6	26
Trail System	4	17
Campground / Picnic Area	2	9
Minimize Development Impacts	1	4
Natural Area Rehabilitation	1	4
Artistic Element	1	4
Botanic Garden / Water park	1	4
Archaeological Excavations	1	4
Total	**23**	**100**

The final question asked what activities should be discouraged in Red Willow Park. Commercial development was the number one response. When one sums Commercial, Industrial, and Residential development the number of responses totals 50%. Snowmobiling/ATV's were the second highest response at 28%. Dogs at large captured 11% of all responses with 2 respondents reporting it as important.

Table 16: 4 Discouraged Activities in Red Willow Park

Recreation, Tourism, and Heritage Appreciation: In your opinion, what are the most important recreation, tourism, or heritage appreciation activities that should be discouraged in the Big Lake Natural Area and Red Willow Park?		
ACTIVITY	**Frequency of Response**	**%**
Commercial Development	**6**	**33**
Snowmobiling/ATV's	**5**	**28**
Industrial Development	**2**	**11**
Dogs at Large	**2**	**11**
Residential Development	**1**	**6**
Activity Impacting Shoreline	**1**	**6**
By-Passes	**1**	**6**
Total	**18**	**100**

At the end of each survey respondents were given the opportunity to offer additional comments or suggestions in relation to Red Willow Park or Big Lake Natural Area. Although not many respondents offered additional comments those that did had a lot to say. Some suggestion was to dredge the river, as well as permit winter use of the river including cross-country skiing, ice fishing, and skating. Another stakeholder suggested focusing on maximizing the natural component rather than developing the

area. One comment dealt with the need for ample parking throughout the entire park system. Other comments included:

- The largest over-riding issue jeopardizing the full realization of the natural heritage/natural environment key values and opportunities of this near urban wild land, and for the public to hopefully experience and appreciate this area's uniqueness is the risk of incompatible development occurring within, and adjacent to Red Willow Park and Big Lake Natural Area. In particular, infill of the flood plain (the "flood fringe" zone, as well as the "flood way" itself) for "development", e.g. roads, agriculture (York's Tree Farm development) and recreation (Golf Courses), is the worst singular threat, in terms of physical alteration of the landscape, and to the continued maintenance of the ecological integrity of Red Willow Park West, and the Big Lake Natural Area. Also, future "backshore" developments that will affect the integrity of tributary drainage's to Big Lake (such as Carrot Creek) must be designed so as to protect the waters of Big Lake, both in terms of natural quality and quantity of those waters by means of such subdivision drainage safeguards as "out of stream" storm water retention ponds, and other protective means.
- The River shorelands (north and south within city limits, within the Red Willow Park areas) have been used as road snow dumps, containing toxic salts as well as material adding to siltation of the river. We have to ensure that no such snow dump areas are established anywhere near the flood fringes, or even within the flood plain, again. The land near the dump sites has been sterilized. Ground water is too close to the surface; run off drains into the river/lake. Trees downstream are dying.
- The focus group discussions seem to agree that both the Red Willow Park and Big Lake Natural Area are of major importance to the residents of St. Albert which seems to contradict the results of an untimely survey which finds that given a choice between the expressway and the lake the expressway wins, even though nobody knew where it would be built and what it would cost at the time of the survey. It also contradicts the findings that connecting to Big Lake and Red Willow Park was the least important of all expressway connections / access points. We need access to the east end of the lake – it is the only place where access is even possible.
- Interpretive center along south shore would destroy too much "natural" habitat. It would be better to use agricultural area on north shore because it would have less impact on the environment.

- One respondent who opposed the construction of the Highway gave the following reasons for his disagreement: The Western Regional Highway must be considered a major incompatible non- park development that puts at major risk and jeopardy the potential to develop the western Red Willow Park and adjacent Big Lake Area into a world-class ecotourism destination park standard. Some of the key risks are: 1) Noise - not possible to effectively mitigate this impact. Once a place of quite solitude (as the Western RWP now is!) is interrupted by a noisy land use (6-lane expressway), that cherished quality of solitude and quiet is gone forever, and so is the opportunity for quiet eco-tourism [how many people leaving the Wednesday evening (October 9/2002) focus group at the Kinsmen Korral stopped to listen to the honking of distant geese over Big Lake plainly heard against an absolutely quiet backdrop of phenomenal near urban, undisturbed, natural silence?] If the Western Regional Road is ever built St. Albert will lose forever the inestimable value of this "taken for granted silence" that we enjoy now. Nobody will be able to calculate what the loss of this current quiet solitude will forever mean to St. Albert's ever realizing anything like the full eco-tourism potential of the Western RWP-BLNA opportunity that we have before us today, October 2002! 2) Light Pollution - lighting will be a big risk to wildlife (birds particularly) and cause deterioration to the night time natural appreciation values of the area. A recent report in the Edmonton Journal concerning comparison of "light pollution" in Calgary and Edmonton compared to Western U.S. cities (such as Los Angeles), showed that the Edmonton area was by far the worst light polluter (on a lumens per capita basis) than Calgary, and several times worse than U.S. cities. 3) Runoff/Spills - Risks to adjacent landscapes and water bodies will be high for accidental spills and the toxic effects of salt on roads (recently designated a toxic material by the Canadian Federal Government) from the highway and stockpiled winter snowplough truck debris to storage sites close to the Sturgeon River and Big Lake.

1.3 SAEDAC TOURISM COMMITTEE

On November 4, 2002, representatives from Gibbs & Brown Landscape Architects met with the St. Albert Economic Development Advisory Tourism Committee. The following is a summary of the discussion which ensued.

1.3.1 Strengths & Assets

WHAT ARE THE FIVE MOST IMPORTANT STRENGTHS OR ASSETS OF THE RIVER AND LAKE SHORELANDS WITHIN ST. ALBERT (WHICH WILL BECOME RWP)?

a. Nature conservation and wildlife preservation
b. Recreation and trails
c. Heritage presentation
d. Tourism:
    i. Enhance day visits
    ii. Enhance St. Albert as destination
e. Quality of Life – trails

1.3.2 Red Willow Park

WHAT SHOULD BE THE IMPORTANT ROLES/ GOALS OF RED WILLOW PARK?

a. Environmental Protection
    i. Balance economic development with environmental protection (i.e. promotion versus protection)
b. Heritage Interpretation / Education
    i. Public Good - support quality of life
    ii. Major focal point for heritage interpretation (refer to draft tourism policy)
c. Trails & Open Spaces
    i. Unstructured
    ii. Self-guided signage
    iii. Not over programmed
d. Economic Development
    i. Some revenue return to support operations (e.g. golf course)
    ii. Look at public/private partnerships
e. Other
    i. Presentation of river & St. Albert Road
    ii. Winter Use of river
    iii. Water level need to be managed

WHO SHOULD THE PARK SERVE (E.G. ADJACENT RESIDENTS, ALL CITY RESIDENTS, REGIONAL RESIDENTS)?

a. All city residents are top priority
b. If regional residents…
    i. Some economic return (direct or indirect) and
    ii. Does not impair environment

1.3.3 Initiatives & Priorities

DEVELOP A LIST OF INITIATIVES FOR RED WILLOW PARK WEST

a. Big Lake Shorelands
    i. Events around bird watching
    ii. Interpretive / education centre
        - Link back to Mission Hill and francophone culture
        - Eco-tourism
        - Cultural / historic
        - Adventure – balloon trips
        - Link trails to Edmonton & Trans-Canada Trail
        - Cross promote
b. North Sturgeon River Shorelands
    i. Picnic sites – day use
    ii. Playground related to nature
c. South Sturgeon River Shorelands
    i. RV Park expansion

1.3.4 Big Lake Natural Area & Shorelands

a. Management of water level
b. Fairview College Campus (possibility)
    i. Post secondary
    ii. Research & Development centre for outdoor recreation

1.4 RIEL USER GROUPS

On November 13, 2002, representatives from Gibbs & Brown Landscape Architects Ltd. met with spokespersons from various Riel Park user groups such St Albert Soccer Association, St. Albert Rugby Club, the Kinsmen Club, and the Canoe & Kayak Club. Representatives of St. Albert Community Recreation Services were also present.

1.4.1 Main Concerns

ST. ALBERT SOCCER ASSOCIATION

- Safety
- Encroachment – what is the impact on the main field? Prefer to move practice field to north and leave main field in place. What is height of road versus playing field?
- Noise – asked for sound proofing
- Fencing – need fairly high fencing to stop balls
- Irrigation - Is remnant pond large enough to support irrigation needs? Might put in 60 000 gal holding tank which would supply a weeks worth of water

KINSMEN CLUB

- Expansion of RV Park
- Landfill may have affected existing RV Park location
- External conflicts with trail and rodeo grounds
- Camping on south shore of Riel Pond

CANOE & KAYAK CLUB

- Possibilities at new facility
  - Canoe concession
  - Skate change
  - Public amenities and/or parking
  - Portage to lake

- Boat launch

BMX CLUB

- Better road access

1.4.2 Recommendations of Group

The following is a list of the suggestions made by the representatives of the various Riel user groups.

BRIDGE PARK (REMNANT SITE NORTH OF SOCCER & RUGBY CLUBS)

- Day use
- Show reconfiguration of soccer
- Extend centre row of trees north
- Keep shelter and access for groups such as guides
- Parking for tournament with formalised vehicle barriers
- Bus parking
- Picnic use – group sites
- Staging area/parking lot for access to other areas of Red Willow Park
- Canoe launch

OTHER

- Perimeter trail was a good idea with a possible bisector along Rodeo Drive
- Need to consider possible use of south shore of Riel Pond (i.e. Camping)

1.5 VISION BUILDING WORKSHOPS NOVEMBER 19TH & 20TH, 2002

Over the duration of two days, a series of planning workshops were held in order to ascertain comments on preliminary plans for Red Willow Park related to specific zones of the park. The planning workshops focused in on more detail than the focus groups and dealt with three Geographic areas: Big Lake

Shorelands, North Sturgeon Shorelands, and South Sturgeon Shorelands.

In all 27 individuals attended the sessions. The following is a summary of the results from the two evenings.

1.5.1 Vision for Park

Individual groups gathered together to discuss their vision for the park and then presented it to the group as a whole. The following is a summary of the ideas that developed from the discussion:

- The existing guidelines should be adopted for Red Willow Park;
- The new park boundary should include the environmental sensitive areas and/or the 1:100 flood fringe – which ever is the greatest;
- Maintain integrity of Big Lake Shorelands and other natural areas;
- Park and road groups must work together to mitigate and minimise impact of road i.e. mitigation of roadway;
- Storm water management should be integrated into the Park and potential natural solutions be explored as much as possible;
- Trails around the Lake area;
- Wildlife Park – allow the natural vegetation to continue;
- Granular Trail – provides assistance to birds;
- Opportunity to educate public about the value of the birds and other unique natural resources;
- Balance with planning and developing to help reach desired goals for the community;
- Knit together the diverse landscapes/features within the boundaries of Red Willow Park;
- Reclamation & reforestation areas particular Sturgeon River – priorities need to be set in regards to resources;
- Back shore linkages – access to trail system, in case of emergency services point of view.
- Improve River water quality;
- Regional Cooperation to help preserve Big Lake;
- Buffer zone between the park and development;
- Minimise the accelerated ecology that has been created – need to preserve the natural progression process.

Some of the groups developed priorities for the Park. Some felt it was important to maintain and rehabilitate the riparian integrity of Red Willow Park. The other important priority was to see that significant natural areas were conserved. All development within the park should complement the previous priorities

1.5.2 Red Willow Park – Big Lake

IMPORTANT ISSUES RELEVENT TO AREA

Some participants identified the tree nursery and snow dump as an issue to be addressed as they felt that the trees were compatible to the goals of the park but that the snow dump was not.

An interpretive centre was the predominate issue of discussion. The majority of participants felt that it was a good idea that needs to be further explored. The following as issues that were identified in regards to the Interpretive Centre:

- Options with distinct possibility are south big lake by City limits, and on the northeast shores of Big Lake.
- Good potential for research area/centre;
- Need to ask what is the purpose of centre and who is the intended audience;
- Least amount of impact; and
- In an area that may already be disturbed.

The relocation of the Canoe and Kayak club was also discussed.

- Proposal for club location is supported by the club if properly developed
- A borrow pit is needed to help build the road for height
- Recreation and competitive
- Potential to provide year round possibilities and partnerships in addition to canoe/kayak club (e.g. winter skating/cross country skiing)
- Depth needs to be 10-20 feet deep.
- Opportunity to contour landscape around this facility.

1.5.3 Red Willow Park – Riel

IMPORTANT ISSUES RELEVENT TO AREA

Riel Pond was a high concern for the area. A need was identified to assess and test the condition of the lagoon bed for future consideration, as there was concern of disturbing the lagoon bed. The majority of the respondents wanted to see the area restored to a wetland state similar to that of the adjacent land or allow nature to restore itself – a balance between stormwater management and natural restoration.

Damaged and disturbed areas need to be reclaimed. Additional trees should be placed around the Kinsmen area and a canopy

cover be established. An important issue was the restoration of land encroached upon by industrial development.

Activities that should be permitted and developed in the area are a passive picnicking area, tent camping area, and expansion of the R.V. Park. Development should combine three increasing recreational trends – walking, gardening, and bird watching. Maintain and develop the community garden which is a natural area interspersed within an industrial setting. It was also felt that parking options for the area should be reviewed.

1.5.4 Red Willow Park – Meadowview

IMPORTANT ISSUES RELEVENT TO AREA

General Comments:

- What traffic do you want in the area.
- Trails to viewing areas/platforms.
- Canoe launch off Métis Settlement (i.e. Voyageur concept)
- Natural access vs. large launch area.
- Opportunity for use along the river as to how it was used in its Native times (i.e. Interpretation Historical…preserve the area as well!)
- Connect to the Master Plan that AHF has for the area.
- Levy marsh - spilled over banks and water trapped in behind.
- Boardwalk –Natural trails along the Levy.
- Interpretation/historical nodes for Education of a river wetland.

River Lot 24/Historic Site:

- Métis Heritage site assisted by partnership with Meadowview Ball Diamonds.
- Heritage Site
- Governed by two levels of Government
  - Provincial
  - City
- River Lot 24 is developed towards Métis Interpretative site (1860's – earliest) and a portion resides in Red Willow Park.
- Archaeological site.
- In between land for Agricultural Evolution Historical site.
- Requires resources
- Elevator site short term focus
- River Lot 24 and Agriculture.
- Historical site are more long-range.

North Shore of Sturgeon:

- Allow roses and hazel nut to grow back...Good management of forest than water.
- White Spruce Forest – How do we preserve/control access yet be able to draw attention/study/appreciation to that region (concerned re: water around it) Trail may be better with management control around the forest)?
- Additional development with newer trend to smaller lots and less turf area around the lots means more run off/storm water will need a place to go. How does this get managed in the best fashion without damage to Red Willow Park or River System?
- Retain the spruce forest as is without a storm water system around it.

1.6 NATURE CENTRE DISCUSSION

On January 20, 2003 a session was held to discuss a nature centre for Red Willow Park and the Big Lake Natural Area. The purpose of the session was to receive input into the Red Willow Park planning process from stakeholders. The session addressed a number of issues such as:

- Needs assessment
- Type of facility
- Location suitability
- Potential partners
- Implementation strategies

Information on interpretive centres and options was presented at the session. Expertise from the provincial government was available.

The results of the session are divided into two sections: results based on the group discussions that ensued and results from the individual surveys.

1.6.1 Group Discussion Results

1. FUNCTIONS

Key functions of the nature centre identified by groups are as follows:

- Secure, safe & weather proofed site with roof that allows educators the greatest flexibility – to go out explore, comeback, warm-up and go out again.

- Looking at the scope/impact of the development to the natural area.
- Outdoor classrooms
- Satellite excursion sites that meet educational/interpretive needs
- Opportunity for groups to use meeting room space for retreats and sessions.
- Pods/access nodes that introduce the experiences/unique features of the area (Métis, cultural, etc.)
- Art exposure/experiences
- Washroom/food service
- Build with integration of those using it will help to continue its use.
- The capacity to have hands on opportunities (let kids get in there).
- The idea of weekday education use to the transfer at weekend & summer use (Waskasoo Park in Red Deer is a good example of this transition).
- Self-guided experiences through the area in controlled fashion.
- Diversity may be needed for sustainability point-of-view – need to look at intent and best needs being met.
- A lot of examples have interpretive personnel – not necessarily a lot of administrative staff.
- Water quality sites that demonstrate how the wetland can address this – could add to the interpretive aspects of the centre(s).
- Economic benefits of ecology can far outweigh other types of economic development/benefits.
- Combo of experiences – Physical Education, Language Arts, Science, Math...this may be outdoor education or elementary students.

2. LOCATION

Factors that would influence location of nature centre that were identified by groups are as follows:

- Regional need / focus – not just St. Albert
- Education programs would definitely draw from a broader region.
- Educating the importance of the area is a key determinant for where the facility (facilities) should be.
- Basic education, protocol, appreciation, and understanding of what it is to respect this area/ecological awareness.
- Accessible to families as well – this is public space to be appreciated.
- Educational components for key areas within the parkway corridor.

- Has all kinds of resources that provide for more than local focus – it regional or even national resource.
- The wildlife corridors must be protected in the area.

3. POTENTIAL PARTNERS / ORGANISATIONS

- City of Edmonton – link to region.
- Partners, Regionally (IVA, Special Places for Big Lake, etc.).
- Think bigger – creates regional focus for centre/area.
- What levels of government need to be involved to develop/understand what benefit this area globally?
- Connect with those who have expertise/contributions to make regarding education, experiences, development, etc. In relation to these areas providing benefits globally.
- FEESA (Environmental education society) – potential resident teacher partner – Jim Martin.
- Ducks Unlimited – very interested in wetland education for urban populations.

4. SITE EXAMPLES

- Need to conduct observations to the recommended options to assess them at varying times in the year, times of day, and the experience that a site may provide.
- Look at preservation upfront as part of the development to the area that will educate and ensure the understanding of disturbance rather than keeping people out.
- Research the impacts ahead of time and determine how you want to educate/use the intended area.

1.6.2 Individual Survey Results

1. NEEDS

What needs are evident in the school system, community and surrounding region that could be served by a nature centre?

- Education of importance of wetlands to society
- Obvious need for nearby eco-education centre for school programming but also an opportunity to think BIG – Big Lake IBA, international focus, regional partnered initiative.
- Education – school system and community. Regional and national eco/education and tourism.
- Need for more education program centres. The Arts & Heritage Foundation puts 40 000 children through its programs per annum. The Nature Centre would expand the areas of learning offering programs tied in with the

education curriculum more well rounded arts, heritage, environment.
- Study of Wetlands, forests, tree types.
- Easy access/safety/chance to get down and dirty into mud/water.
- Draw on the resources of the community. A facility is only as good as the personnel who market and implement/plan the program. A committee of staff is very important. Teachers could help with planning.

Should a nature centre be a community priority? Why?

- Yes! St. Albert could provide a unique regional leadership for a major centre.
- Yes, because it affects tourism, education, entertainment, etc...
- Benefits: education & economic.
- This would need to be determined by City Council. There is a desperate need for a decent sized museum in St. Albert.
- Yes! From a school's point of view, facilities near by and well run are helpful in developing and delivering curriculum. It would be wise to check out surrounding existing sites and check out what they don't meet in curriculum and then fill that void.
- Yes, with understanding comes protection.
- Yes. [1)] Need seems evident. [2)] Diversity of ecosystems and historical resources, values of Big Lake as an internationally-designated resource. Together these suggest that there is an opportunity on which we should move soon/expediently.
- Yes. Education has done an excellent job for preserving river valley for recreation and education. Big Lake is a wonderful place. The centre will be a part of a larger picture.

2. FUNCTION

What functions should be included in the nature centre? Rank the ones you think should be included. Explain your choices:

	1st	2nd	3rd	4th	5th
Learning Centre	6	2			
Interpretation	1	5			
Tourism Gateway / Info Centre			4	1	
Clearing House /			1	1	2

Research Centre					
Partner Organisations	1			2	3

- Regional Partnership leadership role for St. Albert is more important followed by the need for regional/local eco-educational nature centre.
- Educational component is very important and a great tie-in to heritage sites.
- The Learning Centre should be off-site. As one area is sensitive, a large facility (to me) would not be wise (it goes against the idea). Therefore, the learning centre (on site) seems too big. Interpretation is the key and should be low impact! If needed, the learning type centre could be located within the city (closer to City hall, Little White School House, etc).
- It is important to teach young children to respect the environment so we are raising future generations who care about natural history. On the other hand, if this is correctly built with a bigger vision in mind, it can be a tremendous boost to eco-tourism.
- The learning centre provides a place for people to learn in groups to study specific topics. Interpretive trails to walk and self learn. There is a need for a control centre (Tourism Gateway/Info Centre).
- It is difficult to separate interpretation from learning centre, so both could be #1. Tourism Gateway could assist in paying for centre through revenue generation opportunities. Research area is a potential once the area is more known.
- Learning Centre as defined during presentations is first priority. Partner organisations are second priority (to explore and enable shared costs and shared experiences). Interpretation, Tourism Gateway/Info Centre, Clearing House/Research Centre options are ancillary as part of a system or network.

3. LOCATION

a) What site is best suited to a nature centre and why?

b) What, if any, limitations would have to be overcome at the site and facility?

- A) North vs South. Both have value and compliment one another with different functions: North – "urban", noisy (beside West Regional Road) and readily accessible

by large number of people; south – emphasis on biodiversity and more limited number of people.

B) North – mitigation of impacts from West Regional Road; South – to "use" while protecting the biodiversity of sensitive site!!

- A) The site to the Northeast from an Arts & Heritage Foundation perspective in the sense of a link. More thought needed.

- A) If the "Nature Centre" means the "building" and if it is a big facility/heated/roof etc then it should be away from the actual wetland/marsh area. If the "nature centre" is a smaller (low impact) building then "on site". The island might be alright.

  B) [1)] Excessive infringement on the natural space on site, [2)] Distance to travel, and [3)] Safety in access and use.

- A) [1)] East side of river on old landfill site next to playing fields. [2)] South (old oil well site). Natural area.

  B) [1)] Have to get rid of Western Bypass Plan, [2)] Very few limitations – must be well planned – control access.

- A) I like the idea of a gate-way into the park – which shows the change from urban to wildlife (rural) – hits grade 3 & 5 curriculum in social studies.

  B) Washrooms, enclosed buildings, classrooms, storage rooms for lunches, shower rooms in case of child falling in mud, etc.

- A) On NE at river outlet. Already impacted, best interpretive features related to wetland, lake and riparian systems, closer to where wildlife/waterfowl stage, travel, etc. Keep SE shore forest natural.

  B) Minimize footprint so not too intrusive on interpretive features near power lines.

- A) Site B – south end adjacent to city of Edmonton – this would provide a base in a larger extent of natural area, with greatest variety. Option A and area north of B should be developed as ancillary sites.

  B) This would require careful planning so that the centre itself and its access and parking would not adversely affect the inherent qualities of the area.

- A) Accessibility is important. Students need to be able to get there walking, biking, bussing.

  B) Explore the area different ways – walking, biking, cross-country skiing, snow shoeing, horseback, canoeing – no motorized vehicles

4. PARTNERSHIPS & IMPLEMENTATION

What groups or individuals will promote and/or fund a nature centre?

- St. Albert School System
- St. Albert Business Community
- Province, re: Big Lake Natural Area
- General Public
- Government grants (municipal, provincial, and federal)
- Environmental groups,
- Arts & Heritage Foundation (promotion)
- Ducks Unlimited Canada
- Need more info
- This is very much in keeping with the mandate of the Arts & Heritage Foundation. We have a stewardship agreement with the City of St. Albert in arts, heritage, and natural history.
- All regional communities but with St. Albert in charge.
- City of Edmonton,
- County of Sturgeon
- Morinville
- FEESA

1.7 OPEN HOUSE

On February 20, 2003, a open house was held to present the plan to the public. A draft of the West Master Plan Update was on display for comment. The public had the opportunity to view plans, meet project staff, and provide comment. Also a Big Lake Natural Area information display and staff were available to provide further information and answer questions regarding the natural area.

The results were divided in regards to the representation: individuals, groups, landowners.

1.7.1 Representation

Table 17 Representation at Open House

INFO	GROUPS	INDIVIDUAL	LANDOWNERS

Resident of St. Albert	4	9	1
Participated in prior Red Willow Park focus groups, workshops, or meetings with project staff	4	3	
Staff of the City of St. Albert	0	0	
Use Red Willow Park on a frequent basis	4	8	
Other (please specify)	1	2	x

1.7.2 Comments about Inventory

Do you have any comments about the inventory?

Groups:

- Well presented.
- Seemed to be very complete.

Individuals:

- Good overview prepared by Roger.
- Very complete.
- Why is the land within the 100 year flood line not all Environmentally Sensitive area?
- Use consistent road references. Do not use “arterial” reference; the road classified is “expressway”.
- Show on the map the Alberta approved Genstar proposed in filling into the 1:100 year floodplain of Big Lake North.
- This is very complex and has included many aspects.
- Appreciated the discussion and the guides.
- Need more time to study the information.

1.7.3 Public Support

Do you support the City of St. Albert working cooperatively with other jurisdictions to promote environmental conservation, and habitat and water management of this area?

DEGREE OF SUPPORT	GROUPS	INDIVIDUAL	LANDOWNERS
Strongly Disagree			
Neutral			
		2	1
Strongly Support	4	8	

Additional Comments:

Individuals:

- Support it conditionally on the fact that it refers to Big Lake only and not the adjacent disturbed land.
- Too often projects like this take a backseat so commercial development, forever destroying the ambience of nature.
- Strongly support vision for Red Willow Park but cannot comprehend how to plan a Park with a West Regional Road going right through the Park.
- As multiple municipalities are impacted, it is only prudent to ensure consensus with any planned usage or promotions
- Red Willow West is the doorway/portal (not just window) to Big Lake Natural Area. A Natural Area with potential National and International significance (already IBA – Important Bird Area designation).
- This is critical. Preservation of the area can only happen now. Big Lake Natural Area is really too small.

Groups:

- Get going on it before it's too late..
- Need public involvement – the Red Willow Park Planning Process is a good example of public participation.
- Environmental issues, habitat and water management are very important.

The renewed vision statement, stated on your handout and on the panel, talks about the role of the park, its principles and objectives. Do you support this statement?

DEGREE OF SUPPORT	GROUPS	INDIVIDUAL	LANDOWNERS
Strongly Disagree			
Neutral			
		2	1
Strongly Support	3	8	

Additional Comments:

Individuals:

- Integrated management must occur.
- Hope it translates to action eventually.
- Conserve and protect the existing natural values, is the key watch word.

- The vision contains the goals of stewardship and education along with appropriate use.
- To gather public support. The public has to value and appreciate the park.
- Strongly support vision for Red Willow Park.
- Cannot comprehend the road going through the park.

Groups:

- Believe that the principles and objectives are stated well.

In general terms, do you support the extension of Red Willow Park to the shores of Big Lake, as a city-wide open space initiative of the City of St. Albert.

DEGREE OF SUPPORT	GROUPS	INDIVIDUAL	LANDOWNERS
Strongly Disagree			
Neutral			
		2	1
Strongly Support	3	8	

Additional Comments:

Individuals:

- Development of the park and features in the flood plain and flood fringe areas should consider the impacts of infrequent inundation. Consider: Integration with storm water management facilities.
- Eventually the park could surround Big Lake, similar to how Burnaby Lake has been developed as a park in Vancouver.
- Support the extension of Red Willow Park, if done respectfully.
- Concerned over environmental impact of lots of people too close to natural habitat . If this is better than doing nothing, fine.
- Road and access points?
- Red Willow follows and is represented by the Sturgeon River. The terminus is the lake.
- Red Willow West is the doorway/portal (not just window) to Big Lake Natural Area. A Natural Area with potential National and International significance (already IBA – Important Bird Area designation).
- It's a no-brainer.

Groups:

- Use care to preserve shore area for waterfowl.
- The word "open space" is somewhat misleading.
- People use of the area should be somewhat restricted near the shore itself.
- Strongly support extensions. Strongly oppose the Western Road
- The "window onto Big Lake" will be obscured by an ugly wall.
- It is very important to include this whole area in the plan so that sensitive areas will be protected but the trail system will permit access for citizens to enjoy – educational, recreational, etc.

Do you have any comments or concerns about the ideas presented in the following zones of the park?

COMMUNITY GARDEN & SOUTH STURGEON TRAIL CORRIDOR:

Individuals:

- It is not clear as to what is planned for this area.
- Needs more work.
- Is it an after-thought?
- There is a clear role community garden for the transition between urban and wildlife corridors.
- Fully support as compatible uses.
- Some of the areas could benefit from clean-up by industry.

Groups:

- Garden is compatible with park use.

RIEL RECREATION PARK:

Individuals:

- Good idea! Spruce up the area.
- Wetland rehab is never possible. Best chance is to simulate.
- Keep the Western Road out!
- The off-street parking provided by the Ray Gibbon road option should be part of and paid thru the West Building Road funding.
- Shorelands need real reclamation between industry and shore.

Groups:

- Good use, however, some natural landscaping (trees-shrubs) should be planted between west side of fields and river.
- The group picnic area is in a terrible location right underneath the fall out from the expressway (fumes, exhaust).

SOUTH BIG LAKE/SOUTH RIEL:

Landowners:

- Almost all of the land in this area is privately held.

Individuals:

- Agree strongly. Must acquire protected areas.
- Emphasize retention of natural values/woodlands.
- Extend Riel Drive to meet 137 Avenue and 184 Street so the land can be further developed.
- Looks reasonable.

Groups:

- Glad to see the BLESS platform kept.
- Hate seeing the road.
- The BLESS shelter will be a noisy den.
- Should be considered for walking trails and viewing.

MEADOWVIEW PARK & HISTORIC PARK:

Individuals:

- Looks reasonable.
- Keep as many adult trees intact while building houses around them. Don't just mass destroy and build over.
- Protect the "levee park" feature.

Groups:

- Need adequate space to enlarge historic aspect over years to include old train engine and farming implements.

NORTH BIG LAKE:

Individuals:

- Good opportunity to extend the boundary.
- Locating kayak /canoe in line with Carrot Creek is questionable, specifically if material to be excavated may not be suitable for road construction.

- Have provisions to extend the trials, probably mulch along the North shore to the golf courses.

Groups:

- The scar across the widest section of the Park is a disgrace.

Do you have any comments or concerns about the proposed management guidelines?

Individuals:

- Grand Canyon has bus service to one section of the park, eliminating any private vehicles. Keep parking to minimum.
- Explore and exploit opportunities to use potential park features for SWM
- Support guidelines.
- Need a plan to give a mandate (legislative) to a group of people representing all jurisdictions. Mandate must embed the vision.

Groups:

- For the Road Project, there is a need to ensure public involvement, which doesn't appear to be the case during study. Red Willow Park Process sought out public participation and received many good ideas.
- Very nice.
- How will they be implementing review of human interference?
- The management statements are good but who will do it? Presently the City does not have adequate staff to take on more park management.

Any other comments?

Individuals:

- Keep going and good work!
- Important to continue to focus on the inter-planning of the West Red Willow with BLCNA.
- The success of the BLNA is tied closely to the success of Red Willow. Both require more education and public consensus.
- Doing nothing would be bad, so lets do the best we can.
- Please develop the North side and South side as you want but please develop and maintain the best natural asset. St. Albert has by providing access with the Eastern by-pass.

- The integration of the park with the west boundary road is well done. Having a park adjacent to sports facilities provide diverse public options. Ensure there is adjacent vehicle parking.
- Park could benefit from integration with SWM facilities in adjacent areas.

Groups:

- Why do all the maps refer to the "West Regional Road" when is it an "Expressway" classification? Is that an attempt to minimize the outrage of imposing this on the landscape?

Appendix B

Global Development Costs

APPENDIX B

PRELIMINARY COST ESTIMATE

The cost estimate is based on the following assumptions:

- 2003 contractor construction dollars with no inflation allowance;
- Similar cost structure as Urban Park Construction of early 1990's except greater emphasis on ecological restoration and naturalised park settings;
- Before design and construction of each area, a natural area management plan and concept design needs to be under taken;
- Contingencies taxes and fees assume 4% net taxes, consulting fees and contingency of 20%-25%; and
- Budgeting is based on area and linear measurements taken from the master plan (Figure 3.2) times composite prices which are presented in the attached two spreadsheets:
  - Schedule A – Budget Estimate ($2003)
  - Schedule B – Composite Prices ($2003)

Schedule A - Budget Estimate ($2003)
Project Red Willow Park - West Master Plan Update
Date: 3-Jun-03

CODE	WORK UNIT DESCRIPTION ITEM	UNIT	PRICE($)	ESTIMATE QUANT	AMOUNT($)
1.00	**BIG LAKE NORTH SHORELANDS**				
	Canoe & Kayak Club				
1.01	Natural Area Management Plan & Park Design	LS	50,000	1	50,000
1.02	Road Access (Paved) 7.5m wide	sm	48.35	1,287	62,207
1.03	Parking (Gravel)	stall	1,358	40	54,320
1.04	Park Pavillion (50%)	LS	150,000	0.5	75,000
1.05	Natural Park Development (17.91 ha)				
a	Naturalised Grasses (85%) - seed only	ha	10,000	15.22	152,244
b	Grade, Level, & Seed (10%)	ha	68,500	1.52	104,287
c	Reclamation Beds (5%)	ha	560,000	0.90	501,511
d	Park Furnishings & Signage	LS	20,000	1	20,000
1.06	Granular Trails w/ sign & benches	lm	37.00	1,457	53,902
	Subtotal				1,073,472
	Soft Costs, Taxes, & Contingency (35%)			+	375,715
					1,449,188
	Day Use/Interpretive Park				
1.07	Road Access (Paved) 7.5m wide	sm	48.35	1,665	80,516
1.08	Parking (Paved)	stall	2,860	50	143,000
1.09	Interpretive Centre (50% cost share) Interpretive centres can range in price ($1 million - $4 million) depending on scale of centre	LS	2,000,000	1.00	1,000,000
1.10	Natural Park Development (17.38 ha)				
a	Naturalised Grasses (85%) - seed only	ha	10,000	14.77	147,743
b	Grade, Level, & Seed (10%)	ha	68,500	1.74	119,063
c	Reclamation Beds (5%)	ha	560,000	0.87	486,683
d	Park Furnishings & Signage	LS	35,000	1	35,000
1.11	Granular Trails w/ sign & benchs (1.5m)	lm	37.00	2,649	98,004
	Subtotal				2,110,008
	Soft Costs, Taxes, & Contingency (35%)			+	738,503
					2,848,511
	Total for #1				**4,297,699**
2.00	**BIG LAKE SOUTH SHORELANDS**				
2.01	Natural Area Management Plan & Park Design	LS	50,000	1	50,000
2.02	Parking (Gravel)	stall	1,358	20	27,160
2.03	Observatory (c/w wash/classrooms) 75/25 cost share	LS	150,000	0.75	112,500
2.04	Granular Trails w/ sign & benchs	lm	37.00	4,353	161,061
2.05	Multi-purpose Trails w/ sign & benchs (4.5)	lm	150	2,136	320,451
2.06	Buffer Zone (20m)				
a	Naturalised Grasses (75%) - seed only	ha	10,000	2.48	24,835
b	Grade, Level, and Seed (25%)	ha	68,500	0.83	56,707
c	Trees (50 per hectare)	ha	15,000	3.00	45,000
d	Park Furnishings & Signage	LS	50,000	1	50,000
	Subtotal				847,714
	Soft Costs, Taxes, & Contingency (35%)			+	296,700
	Total for #2				**1,144,413**

Schedule A - Budget Estimate ($2003)
Project Red Willow Park - West Master Plan Update
Date: 3-Jun-03

CODE	WORK UNIT DESCRIPTION ITEM	UNIT	PRICE($)	ESTIMATE QUANT	AMOUNT($)
3.00	**RIEL RECREATION AREA**				
3.01	Natural Area Management Plan & Park Design	LS	50,000	1	50,000
3.02	General Beautification	LS	75,000	1	75,000
3.03	Riel Day Use Area				
a	Grade, Level, & Seed	ha	68,500	3.34	228,671
b	Trees (50 per hectare)	ha	15,000	3.34	50,074
c	Picnic equipment (50% cost share)	LS	35,000	0.5	17,500
3.04	Road Access (Paved) 4.5m wide	sm	48.35	2,915	140,921
3.05	Multi-purpose Trails w/ sign & benchs (4.5)	lm	150	1,080	161,929
3.06	Naturalisation (Trail Corridor)	LS	50,000	1	50,000
3.07	Supplementary Parking (50% cost share)	stall	2,860	100	143,000
	Subtotal				917,094
	Soft Costs, Taxes, & Contingency (35%)			+	320,983
	Total for #3				**1,238,077**
4.00	**MEADOWVIEW NATURE PARK**				
4.01	Natural Area Management Plan & Park Design	LS	50,000	1	50,000
4.02	Heritage Park (costing in separate study)				NIC
4.03	Natural Park Development (18.43 ha)				
a	Naturalised Grasses (85%) - seed only	ha	10,000	15.67	156,686
b	Grade, Level, and Seed (10%)	ha	68,500	1.84	126,271
c	Reclamation Beds (5%)	ha	560,000	0.92	516,142
d	Trees (50 per hectare)	ha	15,000	10.00	150,000
e	Park Furnishings & Signage	LS	25,000	1	25,000
4.04	Multi-purpose Trails w/ sign & benchs (4.5)	lm	150	2,474	371,155
4.05	Granular Trails w/ sign & benchs	lm	37	2,756	101,959
4.06	Buffer Zone (20m)				
a	Naturalised Grasses (75%) - seed only	ha	10,000	2.88	28,764
b	Grade, Level, and Seed (25%)	ha	68,500	0.96	65,679
c	Trees, Benchs, & Interpretive Signage	LS	50,000	1.00	50,000
	Subtotal				1,641,656
	Soft Costs, Taxes, & Contingency (35%)			+	574,579
	Total for #4				**2,216,235**
	SUMMARY				
1.00	BIG LAKE NORTH SHORELANDS				4,297,699
2.00	BIG LAKE SOUTH SHORELANDS				1,144,413
3.00	RIEL RECREATION AREA				1,238,077
4.00	MEADOWVIEW NATURE PARK				2,216,235
	TOTAL				**8,896,424**

Schedule B - Composite Unit Prices ($2003)

Project: Red Willow Park - West Master Plan Update

Date: 3-Jun-03

CODE		COMPONENT DESCRIPTIONS ITEM	Qty/CompUnit	Price$)	Component Costs ($)
1.00		**Grade, Level and Seed (sm)**			
1.01		Strip Stockpile	0.2	6.00/cm	1.20/sm
1.02		Regrade	0.3	12.00/cm	3.60/sm
1.03		Topsoil from Stockpile	0.15	7.00/cm	1.05/sm
1.04		Seeding	1	1.00/sm	1.00/sm
		subtotal of 1.00			6.85/sm
					68500.00/ha
2.00		**Park Roads/Parking - Paved**			
2.01		Subgrade prep	1	5.00/sm	5.00/sm
2.02		225 Granular Base	1	18.00/sm	18.00/sm
2.03		75 Asphaltic Cement	1	13.00/sm	13.00/sm
2.04		Curbing(50)/Post/Cable(50)	0.2	50.00/lm	10.00/sm
2.05		SubSurface Drainage	0.023809524	650.00/stall	15.48/sm
2.06		Commercial Crossing	0.001176471	2000.00/ea	2.35/sm
		subtotal of 2.00			63.83/sm
					2680.82/stall
		w/o drainage			48.35/sm
3.00		**Park Roads/Parking - Gravel**			
3.01		Subgrade prep	1	5.00/sm	5.00/sm
3.02		225 Granular Base	1	18.00/sm	18.00/sm
3.04		Wheel Stops(50)/Post/Cable(50	0.2	35.00/lm	7.00/sm
3.06		Commercial Crossing	0.001176471	2000.00/ea	2.35/sm
		subtotal of 2.00			32.35/sm
					1358.82/stall
4.00		**Various Landscape Costs**			
4.01		Sod Upgrade	1	1.50/sm	1.50/sm
4.02		Trees (50/ha) nursery stk	50	300.00/ea	15000.00/ha
4.03		Trees (100/ha) nursery stk	100	300.00/ea	30000.00/ha
4.04		Trees (200/ha) nursery stk	200	300.00/ea	60000.00/ha
4.05		Shrub Beds - Feature Areas	100	72.00/sm	7200.00/ha
4.06		Subdivision Fencing -1/2 share	1	50.00/lm	50.00/lm
4.07		Trails -1.8 Concrete	1	90.00	90.00/lm
4.08		Trails -4.5 Asphalt w/ sign/benc	1	150.00	150.00/lm
4.09		Trails -1.5 Granular w/ sign/ben	1	37.00	37.00/lm
4.10		Park Picnic Tables	1	1500.00	1500.00/ea
4.11		Park Benches	1	100.00	100.00/ea
4.12		Park Receptacles	1	800.00	800.00/ea

Schedule B - Composite Unit Prices ($2003)

Project: Red Willow Park - West Master Plan Update

Date: 3-Jun-03

CODE		COMPONENT DESCRIPTIONS ITEM	Qty/CompUnit	Price$)	Component Costs ($)
		Topsoil and Sod			
		125 Topsoil	0.125	15.00/cm	1.88/sm
		Sod	1	2.50/sm	2.50/sm
					4.38/sm
					43750.00/ha
4.14		**Topsoil and Seed**			
		125 Topsoil	0.125	15.00/cm	1.88/sm
		Seed	1	0.90/sm	0.90/sm
					2.78/sm
					27750.00/ha
4.15		**Soft Landscape w/ Sod & Mod Trees**			
		150 Topsoil	0.15	13.50/cm	2.03/sm
		Sod	1	2.26/sm	2.26/sm
		Trees (100/ha) nursery stk	0.01	225.00/ea	2.25/sm
					6.54/sm
					65350.00/ha
4.16		**Shrub Beds w/ Bsrk Mulch & Fabric**			
		300 Topsoil	0.3	15.00/cm	4.50/sm
		100 Bark Mulch	1	15.00/sm	15.00/sm
		Landscape Fabric	1	2.50/sm	2.50/sm
		Shrubs	1	50.00/ea	50.00/sm
					72.00/sm
					720000.00/ha
4.17		**Reclamation Beds Beds w/ Wood Mulch**			
		300 Topsoil	0.3	15.00/cm	4.50/sm
		50 Bark Mulch	1	7.50/sm	7.50/sm
		4l Continer	1	26.00/ea	26.00/sm
		20l whips	0.2	90.00/ea	18.00/sm
					56.00/sm
					560000.00/ha
5.00		**Various Facility Costs**			
5.01		Playground - med size	1	120000.00/ea	120000.00/ea
5.02		Playground - small size	1	75000.00/ea	75000.00/ea
5.03		Soccer Goals	1	3000.00/ea	3000.00/ea
5.04		Baseball Backstops	1	4500.00/ea	4500.00/ea
5.05		Multipurpose Pad (1125 sm)	1	45000.00/ea	45000.00/ea
5.06		Hockey Rinks(2) w/shack & ligh	1	100000.00/ea	100000.00/ea