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**MANAGEMENT ROLES AND RESPONSIBILITIES
FOR WINNIPEG'S RIPARIAN STEWARDSHIP GROUPS**

BY

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**A Practicum
Submitted to the Faculty of Graduate Studies
in Partial Fulfillment of the Requirements
for the Degree of**

MASTER OF NATURAL RESOURCES MANAGEMENT

**Natural Resources Institute
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Winnipeg, Manitoba**

**Marli Flynn (c)
September, 1998**



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**MANAGEMENT ROLES AND RESPONSIBILITIES FOR WINNIPEG'S
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BY

MARLI FLYNN

**A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University
of Manitoba in partial fulfillment of the requirements of the degree**

of

MASTER OF NATURAL RESOURCES MANAGEMENT

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ABSTRACT

The roles and responsibilities of Winnipeg's riparian stewardship groups in the management and stewardship of Winnipeg's waterways were not clearly defined. The objectives of this study were to investigate and document the ad hoc roles and responsibilities of Winnipeg's Riparian Groups, to create a framework showing the interactions between the Groups and other agencies for riparian stewardship in Winnipeg, and to explore future directions for the Groups in Winnipeg.

The research methods used in this practicum were literature review and interviews with a representative of each riparian stewardship group and nine government and non-government organisations. Goals of the Riparian Stewardship Groups studied included naturalisation and reforestation of waterways, preservation and conservation of riverine habitat and public education about environmental issues affecting waterways. The Groups defined their role as "stewards" of the natural habitat, public educators and lobbyists of government for stricter environmental regulations for riparian areas. Goals of the government and non-government agencies for regarding waterway management were preservation and enhancement of riparian environments, public education and facilitation of the riparian stewardship groups. Select government representatives felt the role of citizen based groups was to identify key issues regarding waterways and gather public support and to provide public education and conduct general stewardship initiatives.

In conclusion, the Groups role in management, at present and into the future, was to act as public advocates to lobby government, to clean up riparian areas, to work in partnership with government and other agencies to reach mutual goals and to educate the

public about riparian issues. Future directions for the Groups include the need for some agency to take a lead role and direct and help develop the Groups to their full potential.

A resource guide was created as a result of the research, which is intended to act as a to reference existing and fledgling landcare groups. It outlines common problems encountered and offers suggestions to citizen based organisations on where they could go for help and resources.

ACKNOWLEDGMENTS

I wish to thank all of those people who participated in this study for their guidance, their information and their patience, including my faculty advisor, Dr. Rick Baydack, for all of his help and guidance through the long process of creating this document, my committee members, Andrew Hay, Andrew Cowan , Carol Billet and Dr. Romanowski, for all of their help and comments on this document. I also want to thank Dr. Mary Ellen Tyler, formerly of the University of Manitoba and now at the University of Calgary for all of her assistance on the development of this document.

I want to say a special thank you to my parents, Phyllis and Aubrey, for all their love and encouragement for all of my life. I would like to thank my entire family for their support and especially my brother, Evan, for his help and computer expertise.

Finally, I would like to thank my husband Patrick for all of his love and support.

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DEFINITIONS

These definitions were developed by the author for use in this document and are based on the working definitions used during the interview process.

Active Members: members of a riparian habitat stewardship group that regularly attend meetings and are involved in various sub committees and the planning and execution of activities.

General Members: members of a riparian habitat stewardship group that only attend large public events, such as annual general meetings and community cleanups, and are not involved in the day to day running of the group.

Riparian Area: land area immediately surrounding a waterway (river, creek or stream).

Riparian Habitat Stewardship Group: group of concerned volunteers in a community whom act together to preserve, protect and enhance a riparian habitat area for the use and enjoyment of the community and its children.

Stakeholders: any individual or group affected by, or with a personal interest in, actions taken regarding a riparian area.

Stewardship: voluntary positive actions taken by an individual or group to preserve, conserve and enhance a natural area for the future.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

Within the geographic area that is now the City of Winnipeg, at least 36 streams and coulees once flowed into the Red and Assiniboine Rivers (Graham, 1984). This network comprised a natural drainage system for the region (Figure 1). At present, most of these waterways have been filled in or greatly altered, thereby reducing the number of waterways in the City (Figure 2). The remaining few are stressed by decreased water flows and the impact of dumping raw sewage and garbage into them, such as at Omand's Creek (Gurney, pers. comm., 1995). For example there is a problem in Truro Creek with glycol from the Winnipeg International Airport which drains in to the Creek. The Seine River has problems with low water flow and algae growth, choking the river and killing the aquatic life within. All kinds of garbage, from shopping carts and assorted trash to entire cars can end up in the creeks. During a period of high storm runoff, raw sewage can flow into Omands Creek, leaving a trail of hazardous waste behind. These same types of problems are being experienced across North America and public support for clean water and free flowing rivers is now becoming a potent political force (Byrne and Horn, 1989).

As of July 1995, there were eight ad hoc community groups working on six urban waterways within Winnipeg. They were: Save our Seine, Friend's of Omand's Creek, Friend's of Bruce Park on Truro Creek, Sturgeon Creek Association, Trappiste LaBarriere Greenspace Group, *Bunn's Creek Group, Friend's of St. John's Park and the St. Boniface Riverbank Association. All of these groups share similar goals: to improve their selected water courses through cleanup, tree planting, and community education. Many of the groups are involved in partnerships with various government agencies to improve parks and trail systems (Neilsen, pers. comm.).

The International Coalition for Land and Water Stewardship in the Red River Basin (TIC), a non profit international riparian stewardship organization, in cooperation

<p>*Note: The Bunn's Creek riparian stewardship group was not included in the analysis for this document as they did not make themselves available to complete the questionnaire during the research period.</p>
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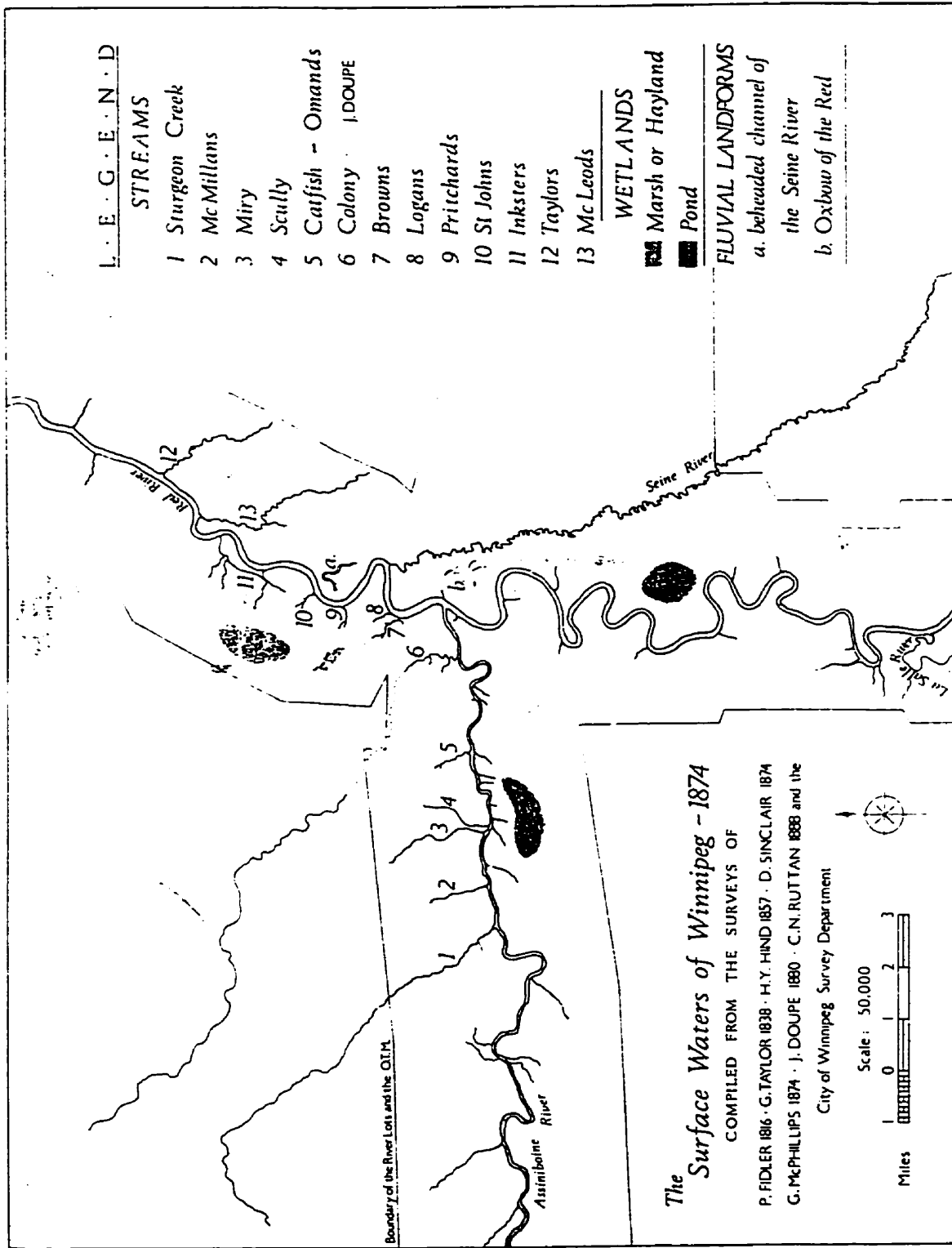


Figure 1: Drainage in the Winnipeg Region Before Alteration (Source: Graham, 1984)

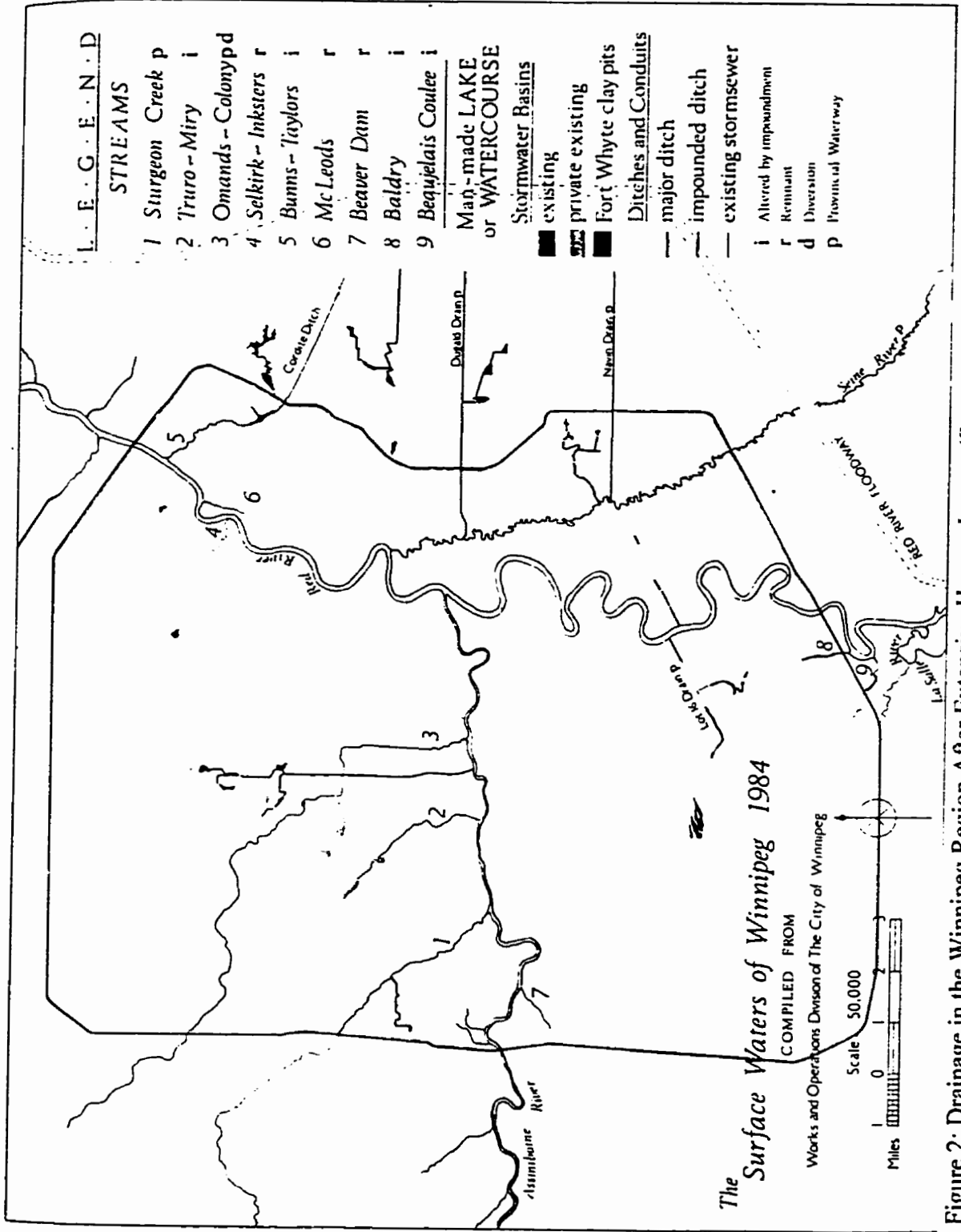


Figure 2: Drainage in the Winnipeg Region After Extensive Human Impact (Source: Graham, 1984)

with Manitoba Environment and City Parks and Recreation, held two workshops in June 1995 with the intent of increasing communication and information sharing between river stewardship groups. As a result of the workshops a need was identified for a comprehensive study to document the activities of the various groups and create a resource base of information about specific subjects of interest to the groups. Little is understood about these types of groups, how they view their role in society and how their organizations operate (Weston, 1989) so this document will attempt to shed more light on the subject.

1.1 Problem Statement

The roles and responsibilities of Winnipeg's riparian stewardship groups in the management and stewardship of Winnipeg's waterways are not clearly defined.

1.2 Statement of Purpose and Objectives

Purpose

The purpose of this project was to document the activities of Winnipeg's riparian habitat stewardship groups and attempt to define their management role and responsibilities.

Objectives

Specific objectives include:

- 1) To provide a descriptive background of the current status of the riparian habitat stewardship groups and their interactions with government and other agencies in Winnipeg.
- 2) To investigate and document the roles and responsibilities of Winnipeg's riparian habitat stewardship groups and related government agencies in the conservation and restoration of Winnipeg's rivers and describe their interactions.
- 3) To create a resource directory for the groups which provides information about the riparian stewardship groups in Winnipeg and provides information about

common problems.

4) To examine the future direction of riparian stewardship in Winnipeg.

1.3 Summary of Methodology

Two research methods were employed in this study. These included a review of the related literature and personal interviews.

The management roles and responsibilities of the groups were defined through personal interviews with board members of the various groups and key informants in government and other agencies. The key participants were defined as people who interacted with the groups on a regular basis and were active in and knowledgeable about their activities. An interview schedule was used to structure the data collection.

Finally, all of the information gathered from the interviews was distilled to create the resource directory for the groups which was designed to help them to improve future programs and meet their organizations goals.

For a more detailed description of the methodology used, see Chapter 2.

1.4 Scope and Delimitations

Seven representatives from the executive of the river groups and eight key government informants were interviewed. The views expressed in the interviews were those of the most active members of the groups and of the government officials delegated by their departments to be representatives. One problem is that executives in the riparian stewardship groups change regularly so the interviews only accessed views of the current executive. A change in executive members could cause a change in the outlook of the group. The focus of the project was gathering information about the groups role in riparian management in Winnipeg.

Chapter Two

Methodology

2.0 Introduction

The purpose of this chapter is to discuss methods used to gather the data for this project. The methods used consisted of an interview schedule for personal interviews and a review of the related literature, from books, articles and web sites.

Currently, there is little or no documentation of the riparian habitat stewardship groups activities in Winnipeg. It was necessary to survey board members from the seven riparian habitat groups to gather information about their activities and future plans. It was also necessary to interview eight representatives of government departments and non-government organizations who were involved with the riparian groups and their activities. Only one or two representatives of each riparian group were surveyed, as they were the people who had the best knowledge of the groups work. The groups were contacted and asked to select a representative to participate in the survey. As well, one representative from each of the government and non-government organizations most actively involved with riparian stewardship group activities was also surveyed. The agencies were contacted and asked to select a representative to participate in the survey.

2.1 The Interview Questionnaire

The goal of the questionnaire was to provide the background information from which the documentation of the groups' roles and responsibilities was created. This study compiled the basic information about the groups to create a permanent record of their achievements and to act as a resource for other groups providing ideas and means to undertaking similar projects.

Before the interviews began, the questionnaire was subjected to the Natural Resources Institute's Ethical Review Process. The ethical review is designed to ensure that the questionnaire conforms to acceptable standards for scientific research and is ethically sound.

The criteria used to select which riparian stewardship groups were to participate in the study are as follows: 1) the groups were composed of local citizens, 2) the groups were a non-profit volunteer organisation, 3) the groups concentrated its efforts in a riparian area or along a waterway, 4) the groups performed environmental activities such as cleanup of garbage and tree planting. The government agencies were selected to participate based on responses by the riparian stewardship groups as to who in other agencies they had contact and interaction with.

Each group was asked to select a representative to participate in the study. The representatives were contacted through personal interview when possible or by telephone when not. A copy of the questionnaire is in Appendix 2.

The questionnaire produced information on the date the groups were formed, their membership, goals for both the short and long term, and interactions with government and non-government organisations.

The respondents were led through a logical series of questions beginning with simple closed questions such as the year of the group's formation and the number of members and progressing to questions related to the role of the groups in riparian management. The interview included both open and closed types of questions to provide maximum flexibility in gathering the information. The open questions were useful in learning as much about the groups and their activities as possible.

The responses to the Questionnaire were coded and results were generated and are presented in Chapter 4. The answers to closed questions were computerised and tables and figures generated. The answers to open questions were manually coded and analysed.

2.2 Creation of a Riparian Habitat Stewardship Framework for Winnipeg

Once all of the information for the case study had been gathered it was analysed and collated to produce a current representation of the interactions between the community riparian stewardship groups, the public at large and various government agencies. The framework showed the linkages where the three components interact as well

as exposed the weak areas where interactions could be improved.

The representation was created by analysing the information gathered in the interviews as well as through personal observation by the author of the current Winnipeg situation. The details were gathered regarding patterns of interaction and co-operation between the various groups and government agencies and the public. It is intended to show the general course of interactions between the riparian stewardship groups, various government agencies and non-government organisations and the general public.

Chapter Three

Riparian Habitat Stewardship and Related Issues

3.0 Introduction

3.1 The History of Winnipeg's Rivers

In order to begin to understand the stewardship situation affecting Winnipeg's waterways, one must first look at the history of Winnipeg's rivers.

The area now covered by the City of Winnipeg was once entirely under water. After the glaciers retreat the area was drained by thirty six rivers, streams and coulees that flowed into the Red and Assiniboine Rivers and provided a natural drainage system for the region (Graham, 1984). The early settlers to the area placed a high value on the numerous streams found here for providing easy access to water and power for mills. There were also numerous small wetlands, such as the oxbow of the Red in St. Boniface, found in the area.

Since that time many changes to the drainage regime of the area have taken place. The first settlements occurred on the well drained levees bordering the Red and Assiniboine Rivers (Graham, 1984). After these lands were occupied the settlers were forced to move into the poorly drained prairie lands which necessitated the construction of the first agricultural drains.

The City of Winnipeg was built in the area of the former wetland. Buildings, roads and parking lots covered the natural vegetation, changing the drainage regime and causing an increase in the rate of flow of storm water across the land. Many of the streams in the area were channelized to act as storm sewers and remove the water from the land at a faster rate (Graham, 1984). Others were deemed unnecessary and were filled in or had their courses diverted (Graham, 1984). The increased rate of erosion led to other problems such as siltation and pollution of the waterways by runoff.

The current situation in Winnipeg is not a sustainable one. Each year more erosion takes place, destabilising banks and destroying vegetation. Water quality also decreases

each year due to polluted runoff from industry, agricultural operations and residential areas (S. Gurney, pers. Comm.). The sustainability of cities is not possible in the long term unless we can find ways to regenerate our urban ecosystems, keep them in good health, and adopt more sustainable lifestyles (Royal Commission on the Future of the Toronto Waterfront, 1992).

3.2 OVERVIEW OF DIFFERENT APPROACHES TO RIPARIAN HABITAT MANAGEMENT

There are different approaches to riparian habitat management used in various areas of the world. This discussion will focus on three organisational approaches, that are actively occurring in Winnipeg, which have both similarities and differences. The choice between differing systems is not always clearly defined and differences between systems may not always be distinct.

3.2.1 The Common Property Approach

The common property approach refers to a management system in which the resource is owned by no one and is a 'free good' (Berkes, 1989). This means that the resource is neither private property or state property but held communally by local residents. Common property regimes are most common in the less developed countries of the Third World. All common property resources have two basic characteristics. Firstly, the control of access to the resource is difficult. Secondly, each user is capable of subtracting from the welfare of other users (Berkes, 1989). In other words, if one person uses part of the resource then there is less available for another user. A classic example of a common property regime is the 'Tragedy of the Commons' model created by Hardin (1968). In this case, a commonly used pasture area was degraded by the users in an attempt to achieve an above average rate of utility to maximise personal benefit. In effect

the resource was destroyed as each individual attempted to get a larger share of the common resource.

In the context of riparian stewardship in Winnipeg, the waterway cannot be considered a true free good as it is owned by the state. However, it does have the other characteristics of common property resources in that exclusion of users is difficult and one user can subtract from the utility of other users. All citizens have the right to use the waterway for various purposes and that use can interfere with others enjoyment of the resource. The resource management situation in Winnipeg could be treated as a common property resource in that the citizens of the community are working together towards a common goal of improving the resource for use by all.

Stewardship could be considered a facet of common property resource management in that the community is managing the resource for the good of all and is motivated to preserve and protect the resource for communal use. Stewardship involves doing what is morally right and best for the community as a whole.

3.2.2 Command and Control

A second approach to riparian management is a government oriented and directed approach. Command and Control is another method of top down resource management. As human populations grow and natural resources are consumed there is increasing pressure to apply top down command and control management methods to natural resources (Holling and Meffe, 1995). Command and control usually results in unforeseen consequences for both natural ecosystems and human welfare in the form of collapsing resources, social and economic strife and a loss of biological diversity (Holling and Meffe, 1995).

In this case the federal government uses a 'top down' approach to management by implementing laws and regulations affecting the resource rather than a 'bottom up' approach involving the community in resource management. However, local people often see river protection and its consequences differently than resource managers and planners

employed by the federal government (Carroll & Hendrix, 1992). Early interactions between local residents and agency personnel have a strong bearing on future relationships as the local residents determine how to respond to the government presence (Carroll & Hendrix, 1992). An example of this approach can be seen in the situation of three rivers in the United States, the Upper Delaware, Rio Grande and the New River Gorge. (Carroll & Hendrix, 1992). This case study shows clearly that the tone of interactions between the community and the government agency is set in the very beginning as the residents react to the presence of the agency. In two cases, the Upper Delaware and the Rio Grande, the agency attempted to implement its management regime while excluding the local residents from the decision making process (Carroll & Hendrix, 1992). In the case of the New River Gorge, the community was actively involved in the planning process which led to much warmer relations between the groups involved (Carroll & Hendrix, 1992). It is vital for the planners to take an active role in involving the community in the decision making process as early as possible and to take the lead in the process (Carroll & Hendrix, 1992).

This is an example of a case of a riparian management approach that is not as clearly defined as common property. Even though the resource management efforts in this case are government driven there is still opportunity for local residents to have input into the situation. Modern resource management is coming to accept and involve communities in resource planning and conservation efforts.

This approach is also applicable to the Winnipeg situation. In Manitoba the resource is owned by the provincial government which is responsible for enacting laws regarding the resource. Communities are becoming more and more involved in the planning regarding many resources and are working towards a more active role in the decision making process.

3.2.3 Integrated River Management Partnerships

The overall goal of an integrated management system is the management and protection of rivers with public involvement as a mandatory part of the decision making

process (Wilson, 1993). This system involves a government directed approach to conservation with public consultation as an important element. This is an excellent beginning to a partnership between the government and community in the management of the resource.

An example of this approach is the Connecticut River Management Program. The goal of the program was to develop a state wide river management program which maximised the public use opportunities while still maintaining the environmental integrity of the resource (Wilson, 1993). The public was heavily involved in the decision making process leading to a partnership between the public and government agencies in the management of the resource.

In the Winnipeg case, it is the goal of several of the riparian groups to achieve a partnership arrangement with the government in the management of the resource. There is progress being made toward that goal with increased public consultation and involvement in the decision making process.

3.2.4 Conclusions

As can be seen by this overview the Winnipeg riparian management situation is a conglomeration of the three management approaches discussed. There are aspects of each approach involved in the Winnipeg situation. It appears that the situation is changing from a government oriented 'top down' approach to management to a more integrated approach with a higher degree of public involvement in the decision making process. However, this process is happening very slowly. The riparian stewardship groups are becoming more politically active (example- Save our Seine) and more aware of the decision making process regarding rivers and how they can effectively influence that process toward their own goals. As the groups become more politically active they will exert an increased influence on the policy makers to improve riparian management. More on this subject will follow in the discussion section.

3.3 COMMUNITY INVOLVEMENT IN STEWARDSHIP

There is a need for increased citizen involvement in all aspects of public life. Specifically, there is a need for citizen participation in the preservation and restoration of the natural environment. The case can be made that in this time of budget and staff reductions in all government departments and the devolution of responsibility for the environment there is a great need for something to fill the void. There is also a call by the public for the government to have more accountability on environmental issues (Gardner, 1991). The most effective way of satisfying all of these concerns is through stakeholder involvement. Citizen's organizations are perceived to have a central role in establishing modes of human-environment interaction that allow for development with environmental conservation and conservation with equity which are central themes in sustainable development (Gardner, 1991).

Partnerships among various levels of government and community groups can facilitate action. For example, a joint project is in the works between the federal, provincial and municipal governments and the private sector to restore fish and wildlife habitat at the mouth of Grindstone Creek in Ontario (Royal Commission for the Future of the Toronto Waterfront, 1992). Partnerships such as this in Winnipeg between the government and the riparian stewardship groups would facilitate rehabilitation of degraded waterways.

All over Canada the perception of the fallibility of governments with respect to environmental protection has resulted in a large number of environmental stewardship groups forming on a variety of causes (Lerner, 1993). Examples include the groups formed in the Winnipeg situation as well as groups in other areas such as Black Creek Project in Ontario and the Task Force to Bring Back the Don and Save the Oak ridges Moraine (STORM) in the greater Toronto area. As well, coalitions of concerned local groups are pooling skills and resources to provide hands on environmental care and to lobby politically for decision makers to act in environmentally responsible ways (Lerner, 1993).

All of the eight currently active riparian stewardship groups were organised within the last 6 years in response to the degradation of the waterways within the city. Most of the small rivers and creeks now have stewardship groups involved with them. Only the Assiniboine River does not have a directly associated stewardship group, but it does have the Assiniboine River Management Advisory Board. As well, The International Coalition for Land and Water Stewardship is involved with all of the waterways in Winnipeg with activities such as workshops for stewardship groups.

The riparian stewardship groups in Winnipeg can be classified as environmental non-government organisations (ENGO's). As defined by Gardner (1991), an environmental non-government organisation is:

...a citizen's interest group whose activities include efforts for environmental conservation. 'Conservation' activities are those that strive to protect or promote the natural integrity of ecosystems or components of ecosystems through the rehabilitation of degraded ecosystems or the prevention of negative impacts on ecosystems. The membership of the group is voluntary; it does not aim to be profit making; it is autonomous; it provides mainly services as opposed to material benefits; and it seeks changes on behalf of its members, wider society, and/or the environment.

The riparian stewardship groups in Winnipeg can therefore be classified as ENGO's based on the criteria in the definition. The groups are generally loosely organised and irregular in their activities: most of their work occurs in the summer. Some of the groups are already incorporated and registered as charitable organisations while others are attempting to obtain those designations.

Other riparian habitat stewardship groups exist around North America. The following are a few examples of the types of activities occurring in riparian stewardship today. All of the following have web sites for easy access to their organisations.

The Fraser Basin Management Program in British Columbia activities include public information and education about river management and have formed partnerships with various government agencies. This led to the development of the Fraser River Action Plan (www.pac.dfo.ca) which is a partnership between Fisheries and Oceans Canada

(DFO) and Environment Canada. Their main objectives are to increase fish and wildlife population, reduce pollution and improve environmental quality and to work in partnership with other governments, industry, First Nations and concerned citizens to manage the basin in a sustainable manner. Another project in the B.C. area is River Works (www.vanagwa.org/Riverworks/) which is a project jointly funded by the Vancouver Aquarium and Environment Canada. Their objectives are: to maintain and increase biodiversity, prepare volunteers to become environmentally active, motivate community stewardship and foster environmental partnerships.

Another group called the Buffalo River Stewardship Foundation (www.webmerchants.com/brsf/) in Arkansas, U.S.A. is dedicated to preserving the river while still respecting land ownership. Its primary mission is to protect water quality in the Buffalo River. It is very involved in conservation easements and creating a riparian corridor as well as producing educational material and films. Recent projects include construction of fencing to keep cattle out of the creek, contribution to stream bank stabilisation programs and an 'Adopt a Highway' cleanup program.

The Alliance for Chesapeake Bay (www.acb-online.org) provides financial assistance to civic and community organisations, schools and volunteer groups for Chesapeake Bay restoration and education. It concentrate on three program areas: Watershed restoration and habitat restoration, education and outreach by producing fact sheets and a monthly newsletter and public policy which brings business, government and citizens together on various issues.

The Meewasin Valley Authority (www.lights.com/meewasin/) serves to protect and develop the South Saskatchewan River Valley and educate people about natural, cultural and heritage resources. This project is a partnership between the City of Saskatoon, the R.M. of Corman Park, the University of Saskatchewan and the Province of Saskatchewan. Some of their successes include a major cleanup of the valley in 1979 which resulted in the creation of Meewasin Valley Trail and beautiful parks. The MVA also designs and delivers educational programs to schools and the public.

The Task Force to Bring Back the Don is a 23 member citizen's group working

(www.competitor.net/electric/groups/Don/) towards bringing back a clean, green and accessible Don River. The Task force is committed to a citizen driven process working in cooperation with government agencies and non government organizations. Its activities include tree planting, wetland restoration, safety and access improvement, public education and community outreach programs and a concerted effort to build support for their efforts with municipal leaders.

Finally , a local organization, Save our Seine River Environment Inc (www.cyberspace.ab.ca/~srsriver/) is heavily involved in riparian stewardship. Their main goals are: promotion of environmental stewardship along the Seine River, improvement of water flow, level and quality, preservation of wildlife and natural habitat and promotion of appreciation of the natural environment along the Seine.

3.4 Riparian Jurisdiction in Winnipeg

Determining jurisdiction on waterways in Canada is very complex because of all the agencies involved. Water is a resource that has a transjurisdictional nature. All levels of government and a variety of agencies have jurisdiction in some way over waterways.

In the Winnipeg situation, the City of Winnipeg Waterways section is responsible for stream bank stabilization and erosion control. The Forestry department is responsible for the riverine forests which grow along the banks. The Parks and Recreation department is responsible for the upkeep of the many riparian parks. Works and Operations is responsible for garbage pick up.

The provincial government also has responsibilities along Winnipeg's waterways. The Manitoba Department of Natural Resources is responsible for managing the wildlife and fisheries in the riparian area. The Water Resources department is responsible for water level regulation, water rights licensing and erosion control. The Manitoba Department of Environment is responsible for water quality monitoring and environmental health issues and has the authority to regulate environmental impacts on the waterways.

The Federal government has some jurisdiction as well on all waterways which are considered navigable (of which most are) and has regulatory control over the fisheries

harvest from rivers.

As can be seen from this brief description of the Winnipeg situation, waterways jurisdiction is very complex. The riparian stewardship groups will need assistance to navigate the bureaucracy when they attempt to initiate projects.

3.5 Environmental Stewardship

Stewardship seems to be an appropriate term to refer to the blend of respect for nature, interest in the environment, concern for the future and conservation in the present (Lerner, 1992) that defines Winnipeg's riparian groups. Stewardship is not a new concept to the world but it can be complex and multifaceted. Its original meaning emerged from the patriarchal and hierarchical biblical times. Webster's dictionary (1990) offers a simple definition of stewardship as " an individuals responsibility to manage his life and property with proper regard for the rights of others". To most people that is all the word implies but it can mean so much more. Bookchin (1990) suggests that the term stewardship implies caring for, maintaining wellbeing, being vigilant, accepting responsibility and understanding the importance of accountability. The World Commission on Environment and Development (WCED) suggests that the current generation has an obligation to care for the earth as we do not own it but rather hold it in trust for future generations (WCED, 1987). Stuart Hilts (1994) suggests that private stewardship programs can be defined as experimental approaches to building a commitment on the part of private landowners to good land stewardship or on the community level as community responsibility for stewardship of land and water resources.

Aboriginal and pastoral traditions include caring for the land as an integral part of their culture (Dr. M. Tyler, Pers. Comm.). In the urban setting, the original means for caring for the land came as a top down approach with government regulation and purchase the only way to protect natural areas. As of late, more and more private landowners are taking responsibility for managing their own backyards. In the rural context this has already happened with agencies such as Ducks Unlimited working with landowners to preserve natural features such as wetlands (Dr. M. Tyler, Pers. Comm.).

The process of recognizing landowners as potential partners in conservation (in the city) is in its infancy but this perspective opens the door to a new age of cooperation between conservation groups and agencies (Hilts, 1994). Land stewardship options provide a positive starting point for working with landowners in a mutually beneficial process towards conservation (Reid and Hilts, 1990). Most of the active members of the Riparian Stewardship groups are landowners on the rivers. Their concern about the issue is heightened because of their close proximity to the resource.

Public stewardship as a practice is fairly new and still developing. In the Winnipeg situation, public riparian stewardship has only been actively pursued since 1990 when the first of the groups formed. Currently, the riparian stewardship groups activities are limited by funding opportunities, group expertise, access to resources and lack of experience. As the groups continue in their activities they will be able to take better advantage of their opportunities and resources available to help them in their efforts in Winnipeg.

3.6 Importance of Non Government Organizations in Stewardship

There are three significant roles that ENGO's can play in the process of stewardship. One is significant because of the concrete results earned from the thousands of hours spent by dedicated volunteers in monitoring, rehabilitating, research, fundraising and other efforts which lead directly to results in environmental conservation (Lerner, 1992). The other significant role that these groups play is in developing "environmental vanguard" (Milbrath, 1984) qualities in their active members which suggests that people become more concerned and aware of what is happening in their immediate environment. People develop these qualities because they have a strong interest in anything where they invest their own time and effort (Lerner, 1992). The third role is the development of concerned stakeholders who will become involved in the issue over the long term. Bryson (1988) defines a stakeholder as any person, group or organization that can place a claim on an organization's attention, resources or output, or is affected by that output. In this case the stakeholders are the riparian stewardship groups and the citizens of Winnipeg and

the government is the planning organization which must consider their opinions.

Involvement of citizens in ENGOs makes it much more likely that such citizens will develop a wide variety of environmental interests (Lerner, 1992). At first the citizen may join a group because of a specific cause, such as cleaning up the stretch of river by their home. As they become more involved in the surrounding issues their knowledge and interests are likely to broaden to include other related issues. This is very important because how a person relates to nature affects how he/she will react to development proposals and how likely they are to exercise care to maintain the environment (Fox, 1990). Most people in North America find it hard to feel protective of nature unless they are obtaining a direct benefit from it. Involvement in stewardship activities makes people identify with and care about nature for its own sake (Dobson, 1990).

As well, many individuals and groups are politicized by their involvement in stewardship activities and as a result become part of an effective environmental lobbying organization. Therefore, the groups are important as a training ground for grassroots environmentalists (Lerner, 1990). These people then demand comprehensive community, regional, watershed and provincial planning for environmental preservation. This process is occurring in Winnipeg. Each group is at a different level of development but those who are most organized and experienced are becoming politically active and lobbying government to consider environmental issues in their decisions regarding riparian areas. Many of them develop additional skills, not only in ecology and environmental monitoring, but in organisational management, fundraising and law and gain personal confidence and self esteem as a result (Lerner, 1992).

For these reasons the riparian stewardship groups in Winnipeg benefit society more than with just their cleanup efforts. Citizens can be motivated to become involved in the politics of their area to influence the government to be more environmentally responsible. Also citizens can take the skills learned in their volunteer efforts and apply them to other aspects of their lives.

Stewardship groups are now enjoying more public support than ever before (Weston, 1989). There are three reasons for this:

- 1) the optimistic view - society is less materialistic and more concerned with others;
- 2) the cynical view - group members are from the wealthy and educated middle class who are either embarrassed by their riches or trying to save their own backyard; or
- 3) environmental groups play a functional role in society and help to identify problems so government can react more quickly.

Indeed, there is no guarantee that the stewardship initiative will be successful. However, stewardship does have some ability to cause substantial change over time and cross political barriers in communities (Hilts, 1994). More importantly, stewardship efforts in Winnipeg are increasing and that will surely lead to a benefit for the City, both in terms of physical tangible benefits and societal benefits.

CHAPTER 4

RESULTS AND DISCUSSION

4.0 Introduction

For this study, representatives of riparian stewardship groups in Winnipeg, as well as representatives of government agencies and non-government organizations which are involved in riparian issues, were interviewed. Seven riparian groups and nine government and non-government agencies were interviewed. Each group or agency was contacted and asked to select a representative to participate in the survey.

4.1 Winnipeg's River Stewardship Groups

Winnipeg's river habitat stewardship groups have undertaken a very important and crucial task - that of preserving and restoring our municipal waterways. Some of the riparian habitat stewardship groups have suggested that the government departments responsible for maintaining the rivers and the green spaces of Winnipeg no longer have the budget or employees to do the job as they did in the past. It is now becoming more of the community's responsibility to care for its own back yard.

Since 1990, eight riparian stewardship groups have formed in Winnipeg. Each formed under slightly different circumstances, but all bear some similarities. All of the groups were formed by an individual or core of individuals who were committed to take action to protect and restore Winnipeg's riparian habitat.

The Save our Seine River Environments Inc. group formed in 1990. Bob Rose, the MLA for the area at that time, heard that people were upset about the condition of the river and suggested forming a residents group. Flyers were distributed about the issue and the first meeting was held in September. The group was formed by a core of active, committed members who took responsibility to get residents involved with the issue.

The Friend's of Bruce Park (Truro Creek) group was formed in response to the continued degradation of the creek within Bruce park. The City built a \$200 000 foot bridge in the park at the same time that there were empty flowerbeds and dying trees.

Residents were angry about the situation and ten people who lived near the creek got together to form the group in the fall of 1991.

The Trappiste LaBarriere Greenspace group began as the Friend's of the La Salle in 1991 and were renamed in 1993. It began with a focus on just the La Salle River in St. Norbert but have expanded to include the corridor of the La Salle. The group is trying to promote interest along the rural length of the La Salle. It had a goal to be a stewardship group involved in the river from Brady Road to the south forks of the La Salle and the Red River and a group that focusses on problems from a management philosophy.

The Friend's of Omand's Creek group began as an offshoot of the Wolseley Resident's Association and was basically a one man effort for several years. In the summer of 1996, the group truly formed and is composed of local residents, members of the Wolseley Resident's Association and members of the Portage Avenue Mennonite Brethren Church, whose property borders the creek.

The Sturgeon Creek Association began in 1989 with an annual cleanup of the creek. Before 1989 the Woodhaven Resident's Association held annual cleanups. The group received funding in 1994 to continue its efforts but is now experiencing difficulties and may dissolve if new leadership is not found.

The Friends of St. John's Park group formed in 1992 in response to the need to get a heritage designation for the park. It is very involved in public education and participation within the park and held its tenth annual Fun Festival in 1996.

The St. Boniface Riverbank Committee formed in 1990 as a splinter group of the St. Boniface Resident's Association in response to a proposed change in the zoning along the Red River in an area intended to be a park. The motion was defeated and the zoning was changed to park in 1991. The residents were forced to tend the area as the City appeared to abandon it, only mowing twice per year. The residents took it upon themselves to create the park by planting trees, weeding and cleaning up garbage.

The riparian habitat stewardship groups in Winnipeg are involved in a number of environmental activities, such as tree planting, garbage cleanup and public education. A study done in Ontario in 1991 showed that two-thirds of respondents felt that it was

"extremely important" that a major cleanup effort be made on the Toronto waterfront (Royal Commission on the Future of the Toronto Waterfront, 1992). This suggests that the public is very aware of the state of our waterways and is concerned about the issue.

Following are some photographs illustrating common activities of the riparian stewardship groups. All of the photos were taken by Roger Geeves of the Wolseley Residents Association at Omand's Creek Park in the summer of 1996.

4.1 Riparian Stewardship Groups Questionnaire Results

All of Winnipeg's riparian stewardship groups have formed since 1990 (Table 1). The groups have general membership ranging from 90 to 270 members and a core of active members ranging from 15 to 25 individuals. It is the active members who are responsible for the successful activities implemented by the groups. However, all of the groups are now facing a serious problem with volunteer burnout. All of the groups expressed apprehension at the fact that the same people had been running the groups for 3 to 7 years and were getting tired and losing interest so the groups were actively looking to recruit fresh people to continue their efforts.

The groups are structurally different from each other. Some groups are more structurally developed and have a board of executives who manage the affairs of the group. Others are headed by one or several dedicated individuals who do everything. This can also be a direct cause of burnout.

Most of the groups were involved in three common activities: cleanup along riverbanks, tree planting and public education. The cleanup and tree planting were usually accomplished by volunteers during special events or else by the Green Team members employed by the groups during the summer. The public education aspect occurred on an ongoing basis through open houses and public meetings, distribution of group literature and newsletters, interactions with local schools and participation in riparian stewardship workshops.

Other group activities include purple loosestrife removal, park safety, park



Figure 3: Community Education Program



Figure 4: Community Greening and Tree Planting Event



Figure 5: Garbage Clean Up by Green Team Staff



Figure 6: Public Safety – Railing on Walking Trail

Table 1: Riparian Stewardship Groups General Statistics

	Bruce Park	Wolseley Residents	Trappiste LaBarriere	Sturgeon Creek	Save Our Seine	St. John's Park	St. Boniface
Year Formed	1991	1994	1991	1994	1990	1992	1990
# Members	90	100-150	130	103	270	25	40
Active	25	20	20	12-15	25	10	12
River/Creek	Truro	Omand's	La Salle	Sturgeon	Seine	Red	Red
Cleanup	X	X	X		X		X
Tree Planting	X	X	X		X	X	X
Public Education	X	X	X	X	X	X	X
Other	X	X	X		X	X	X

reclamation and restoration, banding trees against beaver damage, banding for Dutch Elm disease and general research into riparian issues.

All of the groups shared similar long term goals which are summarised below. Many of the groups concentrated their efforts within riparian parks. All of the groups cited protection, preservation and restoration to be among their main goals. Three of the groups expressed the need for water quality testing and monitoring.

Table 2: Summary of Groups Long Term Goals

Group	Long Term Goals
Friend's of Bruce Park	Naturalisation of the park, ensuring survival of mature trees, water flow analysis
Wolseley Residents Association	Reforestation, improvement of aesthetics, naturalisation, improvement of overall park area for public use, water quality analysis
Trappiste LaBarriere Greenspace Group	Stewardship of prairie riverine forests and environment with respect to both human and non-human uses
Sturgeon Creek Association	Protection and preservation of watershed area
Save our Seine River Environments	Preservation, restoration, ensuring public participation and education, water quality testing
St. John's Park	Enhancement of recreational access to park
St. Boniface Riverbank Association	Bank stabilisation, erosion control, additional benches and walkways

When asked about the qualifications of group members to undertake their activities, most of the groups had at least some members who had some biological or ecological background, such as a biology teacher, landscape architect, biologist and prairie horticulturist. The groups also relies upon outside experts from government to assist them in their more technical endeavours.

The groups experienced several problems when initiating riparian management projects (Table 2). These included jurisdictional problems over the river, a lack of committed volunteers and burnout among current active members, problems applying for

grants and other funding, little co-ordination by government and a lack of a cohesive riparian management plan for riparian areas which could be followed, a lack of government resources to aid them in their effort and conflict with nearby landowners over management techniques. Some of the groups did not respond to this question

Table 3 Problems Encountered when Initiating a Riparian Management Project

Problem	Number of Groups Affected
Jurisdictional Problem	X X X X X
Burnout/ Lack of Volunteers	X X X
Difficulty with Funding	X X X
No Co-ordination/Plan	X X X
Lack of Government Resources	X X
Conflict with Landowners	X X

All of the riparian stewardship groups rely heavily on government expertise and resources to help them achieve their goals. The following tables (Tables 3, 4, 5) provide a list of government agencies with whom the groups have interacted. As a general rule, interactions between government and the groups have been co-operative to very co-operative.

The groups cited the Parks department as the agency with which they had the most contact. Each group had contact with a variety of agencies which helped them with specific problems or projects. Some of the agencies provided resources and equipment while others provided expertise to the groups.

**Table 4 City of Winnipeg Agencies Interacting with
Riparian Stewardship Groups**

Municipal Agency	Number of Groups Interacting
Parks and Recreation Department	X X X X X X
Forestry Department	X X X X X
City Councillors	X X X
Water and Waste Department	X X
Harbourmaster	X X
Waterways Section	X X
Take Pride Winnipeg	X
Works and Operations Department	X

In the provincial context almost all of the groups had interactions with the Sustainable Development Co-ordination Unit to apply for funding. However, not all groups were successful in receiving a grant. Those who did not expressed the need for training on how to fill out grant applications. Another agency that many groups had involvement with was the Manitoba Department of Environment which provided equipment and expertise to the groups to undertake water quality testing. They were also a sponsor of the annual Rivers and Creeks Workshops held in various location around the city. Before 1996, the groups were able to use their Green Team staff to conduct water quality monitoring but in the summer of 1996 the Green Team office changed its policy and discontinued the use of Green Team staff for monitoring purposes.

**Table 5 Manitoba Government Agencies Interacting with
Riparian Stewardship Groups**

Provincial Agency	Number of Groups Interacting
Sustainable Development Co-ordination Unit	X X X X X X
MB Environment	X X X X X
MB Urban Affairs	X X X X X
Ministers Offices	X X X
MB Department of Natural Resources/Fisheries	X X

The groups had relatively little interaction with the Federal government likely because their concerns were seen as local issues to be handled by local agencies. However, some groups expressed that their MP's offices were very helpful in providing resources and expertise.

In addition to all the government agencies with which the groups interacted, there were a number of non-government organisations (Table 6) which also provided resources, volunteers, training and funding.

**Table 6 Federal Government Agencies Interacting with
Riparian Stewardship Groups**

Federal Agency	Number of groups Interacting
Members of Parliament	X X X X
Parks Canada	X
Fisheries and Oceans	X
Youth Canada	X
Employment Canada	X
Transport Canada	X

Examples of these interaction included political lobbying, technical advise and support, and assistance for employing students for summer projects.

**Table 7 Non Government Agencies Interacting with
Riparian Stewardship Groups**

Non Government Agency	Number of groups Interacting
The International Coalition	X X X X X
University of Manitoba	X X X
Local Businesses	X X X
Schools	X X X
Boy Scouts	X X
Community Organisations	X X
Manitoba Hydro	X
Shell Environmental Fund	X
International Institute for Sustainable Development (IISD)	X
Coalition to Save the Elms	X

Most of the groups have interacted with the International Coalition during riparian stewardship workshops. The Groups see education as the most important factor in their success. Without public education of the issues there will be no public support for their efforts and therefore no volunteers, funding or political will to produce change. Some of the groups were actively involved in educational programs with their local schools and found that those interactions were very positive, both for the groups and for the students. The groups also reported seeking information and resources from other agencies which are involved in riparian areas and from local community groups and the Boy Scouts.

It is clear from this research and from the literature that community organisations have a definite and important place in the management of riparian areas. Each of the groups had a different response, summarised below, about what they see as their management role but all had a common thread: stewardship of the riparian area and partnerships with government and other organisations to make things happen. The groups felt that it was their responsibility to act as watchdogs to ensure that the government regulations against pollution were being enforced, that government carried out monitoring on the water quality in the waterways and that the riparian areas were reforested and cleaned up. They felt that the best way to accomplish this was to be involved, try to involve other residents in the issues and to cooperate with government agencies to achieve their goals.

The groups generally appear to see governments role in the management of Winnipeg's rivers to be one of lending expertise, providing funding and creating partnerships with community groups. Some of the groups expressed the desire that government facilitate their management of riparian areas by providing support and resources but leaving much of the work to the groups.

Riparian Groups Management Roles

- model for better management and co-operative stewardship of riparian areas

- stewards, working towards preservation, conservation and restoration, seeking to educate the public and promote public action and encourage partnerships between the public and various government agencies

- reforestation, reclamation and naturalisation, work with the public and government to form partnerships, water quality assessment and monitoring

- comanagement, partnerships with government to create programs

- cleanup and public education

- neighbourhoods and residents should be advocates for their areas

However, the groups agree that at the present time the government has too little resources and funding and is not able to provide the support they need to do the kind of job they want to. Also, the groups expressed that all levels of government currently lack initiative in riparian management and do not have a structured plan for the management of riparian areas. They feel that the government's current initiative is ineffective to very ineffective.

The groups feel that they would benefit from additional training on specific topics relating to their efforts and from additional manpower to perform their activities. The training could come from government experts, the two local universities, non government organisations such as The International Coalition, and other experts who would be willing to donate their time to a worthy cause.

The groups feel that they should have a larger influence on planning decisions involving riparian issues in the City because they are representatives of the public interest and as such serve to put pressure on decision makers and lobby for community enhancing decisions.

The future plans of the groups include continuing efforts to rehabilitate the degraded ecosystems along the waterways, expanding the scope of public education initiatives to include more schools and other community groups, expand their connections with government agencies, become a stronger voice for public opinion in planning decisions and publish a series of books, articles and pamphlets to help educate the public about their activities and initiatives and expand their public profile.

4.3 Government and Non Government Questionnaire Results

Representatives of nine government agencies and non government organisations were asked to complete the interview questionnaire. Their responses help to illustrate the current state of relations between the riparian stewardship groups and the government, as well as to provide information about the agencies' view about the role of the riparian groups in the decision making process regarding Winnipeg's waterways..

Due to the diverse nature of the respondents backgrounds, a variety of answers

were provided about the agencies goal for riparian stewardship. Their responses are summarised below.

Table 8: Agency Goals for Riparian Stewardship

Agency	Goals for Riparian Stewardship
City of Winnipeg, Planning Department	Preserve, conserve and enhance riparian habitat
Harbourmaster	Public education and enforcement of safety regulations
City Naturalist	Protect and enhance the natural landscape
The International Coalition	Develop a communications network between organisations and the groups to facilitate partnerships and promote sustainable use of river habitats
MB Environment	Undertake activities to protect water quality
City of Winnipeg Works and Ops.	Lend support to groups during cleanup efforts
DNR Water Resources	Maintain riparian zoned and erosion control
City Forester	Deal with riparian forest issues, Dutch Elm disease control, removal of dead trees along waterways
Property and Development	Regulate construction along rivers for bank stability and hydraulics, use nature sensitive solutions to unstable banks

All of the agencies interviewed have interacted with at least some of Winnipeg's riparian stewardship groups and characterise their interactions as mainly to very co-operative.

In keeping with the diverse goals for riparian stewardship the agencies had very different ideas about their roles in stewardship of Winnipeg's waterways. All felt their role was largely to educate the public about riparian stewardship issues and facilitate and support the riparian groups in their activities by providing expertise and resources when necessary and by being an advocate for the groups within the government bureaucracy.

The respondents generally felt that the groups role is to identify the issues at the grass roots level and gather public support through their intense commitment to the issue, to provide the vision and drive to make tangible progress, to educate the public about proper riparian management and to provide the resources to clean up the rivers and

restore habitat.

The respondents felt that the riparian stewardship groups are mainly effective in their efforts. In order to become more effective the groups require more resources and better communication with the government. The respondents suggested that additional training for the groups could be very beneficial and increase their effectiveness and the success of their endeavours. They felt that the training should be provided by experts within the government and non-government organisations through workshops and one on one experiences. One respondent expressed concern that if government provided all of the training for the groups then it might be perceived that the government had too much influence on the groups and that they were no longer independent entities.

The respondents felt that the groups should have a lobbying role in the planning and decision making process as related to riparian areas. The groups should have some influence on the process as they are treated as representatives of the public interest. However, in reality the groups are only representative of that portion of the public which chooses to become involved and voice their opinion on the issue. Other sections of the public who remain silent represented by default.

4.4 Discussion of the Riparian Situation in Winnipeg

In order to begin to understand the challenges facing Winnipeg's Riparian Stewardship Groups, the framework for managing waterways in Winnipeg should first be discussed.

From a resource management point of view the most important issues relating to Winnipeg's waterways are:

- Water quality
- Water quantity
- Monitoring
- Bank erosion and stabilisation
- Flood prediction and protection
- Fish and wildlife habitat

- Developmental rights

These issues were identified through research and discussion with the Winnipeg riparian stewardship groups and government agencies.

A resource manager is most concerned with managing resources for the sustainable benefit of both the wildlife and the humans who use the resource. A natural resource manager views the resource as an integrated network of issues that need to be addressed in a cohesive manner so that the entire system will benefit.

Through observation of the Winnipeg situation it can be seen that Winnipeg's Riparian Stewardship Groups have so far not taken an overall approach to dealing with the problem but due to their circumstances, such as a lack of manpower, expertise and funding, focus on only a few select issues.

This is where the technical expert, the natural resources manager, comes in to the picture. He or she is able to take an objective look at the entire problem and prioritise which issues are the most urgent. Also, the natural resource manager views the resource from a different perspective than the average citizen. Most people see the resource as important or necessary only if they have some direct contact or receive a direct benefit from it. For example, a creek would only be important if it runs through 'my back yard' and the property owner derives aesthetic or recreational benefit from it. Ideally the natural resource manager values the resource as intrinsically important as it is part of a local and global ecosystem which must be preserved for the future benefit of the planet. In reality, the natural resource manager, as an employee of some organisation, has a much more narrow and short sighted agenda.

This leads to the question - Is there really a problem with Winnipeg's riparian areas and if so do the riparian stewardship groups understand the issues to a degree that would enable them to provide part of the solution?

There are several types of resource management occurring in the Winnipeg situation which affect the riparian habitat stewardship activities of the groups. There is management by authority, which is an obligatory institutional activity and is performed by

government agencies such as the Department of Natural Resources. Stewardship, however, can be defined as voluntary resource management. For example, rural people attempt to steward their land because it is essential to their livelihood. However, in some situations it is necessary to forgo stewardship in the face of financial necessity. For example, the farmer who removes the shelterbelt around his field to increase the arable land. This solution is temporary and results in the degradation of the field and eventual monetary loss. Urban stewardship is a voluntary activity which has no mandate or authority and is not based on the ownership or control of resources. (Dr. M. Tyler, pers. comm.)

The development of urban stewardship is a result of the 'new age' of urban environmentalism and is mainly a social phenomenon, as opposed to an economic or institutional one. It is based on a revival of spiritual stewardship which was well known in aboriginal and pre-industrial societies. Stewardship in the urban context is coming to be seen as a moral and ethical obligation and 'the right thing to do' (Dr. M. Tyler, Pers. Comm.).

The current riparian management regime in Winnipeg is in the process of change. The earliest stage of management was a common property system used by the First Nations people who inhabited the area before European settlement. They exhibited a classic case of common property management in that each person had the ability to access the rivers for sustenance as needed. After European settlement, the government took over the management of the riparian areas. It used a command and control approach by legislating how the rivers could be used and by whom. This system was not beneficial to the riparian habitat because it led to the destruction of riparian areas in the name of progress. Many streams were diverted or filled in to promote an artificial drainage system that was thought to benefit the City of Winnipeg. As we now know, this new drainage regime was detrimental to the riparian areas in terms of loss of habitat and erosion and it affected the over land drainage pattern which allowed for flooding to a greater degree. Most recently, the government oriented 'top down' approach to management has begun to give way to a more integrated system of management which takes public opinion and

wishes into account in the decision making process. This system involves a government directed approach to conservation and preservation, as they employ the experts, combined with public consultation as an important element. This change has only recently begun in the Winnipeg situation but is more developed in other areas of North America. It is therefore essential that the Groups have access to resources and funding to continue to develop so they can have an important role in deciding what is to be done to preserve Winnipeg's waterways.

4.5 Winnipeg's Riparian Stewardship Groups as ENGO'S

What is an Environmental Non Government Organisation (ENGO) and what are its characteristics? Basically, it is a group of citizens who band together to work on environmental conservation and preservation. Gardner (1991) discusses the definition of an ENGO. She says to be an ENGO a group must have: voluntary membership, be non profit, autonomous, provide services, and seek change on behalf of its members, society and the environment. Winnipeg's riparian stewardship groups qualify as ENGO'S based on this definition. They all have voluntary membership and are not for profit organisations. In fact some have received charitable status. They are autonomous. While they work in concert with various government agencies they are not ruled by government policy. They have their own ideas and ideals which they remain faithful to and they change in response to their members needs and interests. They all provide services in varying degrees from simple signs in the riparian areas identifying their goals to public education programs and newsletter to the creation of interpretative trails through the riparian area. Finally, the requirement to seek change. All of the groups are active in trying to change the way the public perceives the riparian environment and the way government manages it. They do this by visiting schools and shopping malls with displays outlining their activities in hopes of educating the public at large and maybe recruiting new members to the cause. Within government, many groups are actively in contact with not only the front line workers responsible for implementing the environmental policy but also the decision makers, attempting to influence them to a more environmentally sound policy.

4.6 Riparian Stewardship Groups Around North America

There are numerous riparian stewardship groups around North America as discussed in the literature review.. The internet has many websites about these groups that are easy to find and use. Some of the groups which are involved in similar situations to Winnipeg have already been mentioned in this document.

How do riparian stewardship groups in other areas compare to the Winnipeg situation? Each group has its own mandate and goals but all are joined by a common thread – concern for the condition of their water resources. Groups range along the continuum of development from newly formed groups just feeling their way along to well established groups with funding from various sources. This parallels the Winnipeg situation. In Winnipeg there is a range of groups from those led by a single individual who is trying to do it all such as in the Omand's Creek case to an organised group with a large membership and board of directors to share the responsibility, such as the Save our Seine group.

One excellent example of integrated management partnerships is the Fraser River Action Plan. It is a joint venture of DFO and Environment Canada whose main objective is to work in partnership with stakeholder groups such as First Nations and concerned citizens to manage the basin in a sustainable manner. This would seem to be the ideal situation. The group has funding and expertise from the government agencies and is very open to co-operation with the public. It also concentrate on a basin wide management plan which is a goal shared by the Trappiste La Barriere group who want to manage the La Salle on a watershed basis. Another project in B.C. is the River Works! Program jointly funded by Environment Canada and the Vancouver Aquarium. This group has many characteristics of an ENGO in that it prepares volunteers and educates them to be environmentally active and it tries to foster partnerships to reach environmental goals, however it is partly run by government.

The Task Force to Bring Back the Don is a group very similar to those in Winnipeg. It was developed by a core of concerned citizens who concentrate on tree

planting, wetland restoration and public education and try to build political support for their cause. This group represents a variety of interests in the Winnipeg situation who are doing some, if not all, of the same things. It can be very difficult for a group to get started and often is dependant on the strong will of only one or two key people to keep the momentum going. Until a group is more established and can apply for funding from various agencies and attract volunteers there is a high risk of volunteer burnout. This is often the case in the Winnipeg situation where the core of active members becomes exhausted by the responsibility of continuing the groups activities with little outside aid. There is a large risk that without help these members will be unable to continue and will give up their activities leading to the demise of the group. So far this has not happened in Winnipeg, but sometimes the group leadership will change and a once active member will fade to the background.

4 . 7 Illustrative Framework of Current Interactions of Stakeholder Groups

This study is a pilot test case for Winnipeg community riparian stewardship. It focuses on the activities of Winnipeg's riparian stewardship groups and their interactions with government agencies, non-government organisations and the public. The data and ideas gathered from this study have been used to create an illustrative diagram of current interactions of stakeholder groups for Winnipeg.

The Illustrative Framework of Current Interactions of Stakeholder Groups for Winnipeg (Figure 3) shows the interactions between the stakeholder groups in Winnipeg concerned with riparian issues. A detailed description of the diagram appears below.

The four stakeholder groups in Winnipeg are the government, non government organisations, the general public and the riparian stewardship groups. The government, in this case meaning all of the agencies and departments who are involved in riparian issues, has a policy for riparian management. Within the government there are the bureaucrats who develop the policy and the front line employees who are responsible for implementing it. Those employees are experts on the situation and so are able to influence the policy

development within the bureaucracy. The general public has concerns about the riparian environment. This may include those who have a direct stake in the outcome of the decision making process, such as those who live on the waterways, and academics, consultants and other experts who have a personal and professional interest. The riparian stewardship groups are concerned citizens who take it upon themselves to be active in the decision making process relating to riparian issues. The public pressures government through public meeting and the media to act with respect to riparian management and by voting for officials whose policies reflect their interests. The public also affects the riparian stewardship groups through its support, funding by donations and membership fees and by volunteering its time for group activities. Citizens may join the group to show their support and become active in stewardship activities as they become more environmentally aware. The government is influenced by the public to act with respect to the riparian environment and does so through its policies, its staff, and by supporting and providing resources and funding to the riparian stewardship groups. For example, employees of the Parks and Recreation department may hold seminars for the groups to provide information to help their efforts. The City of Winnipeg Forestry department routinely donates trees and equipment to be used at the community plantings held by the groups. The Green Team, run by the department of Urban Affairs, is crucial to the riparian groups summer activities, providing manpower and expertise to complete

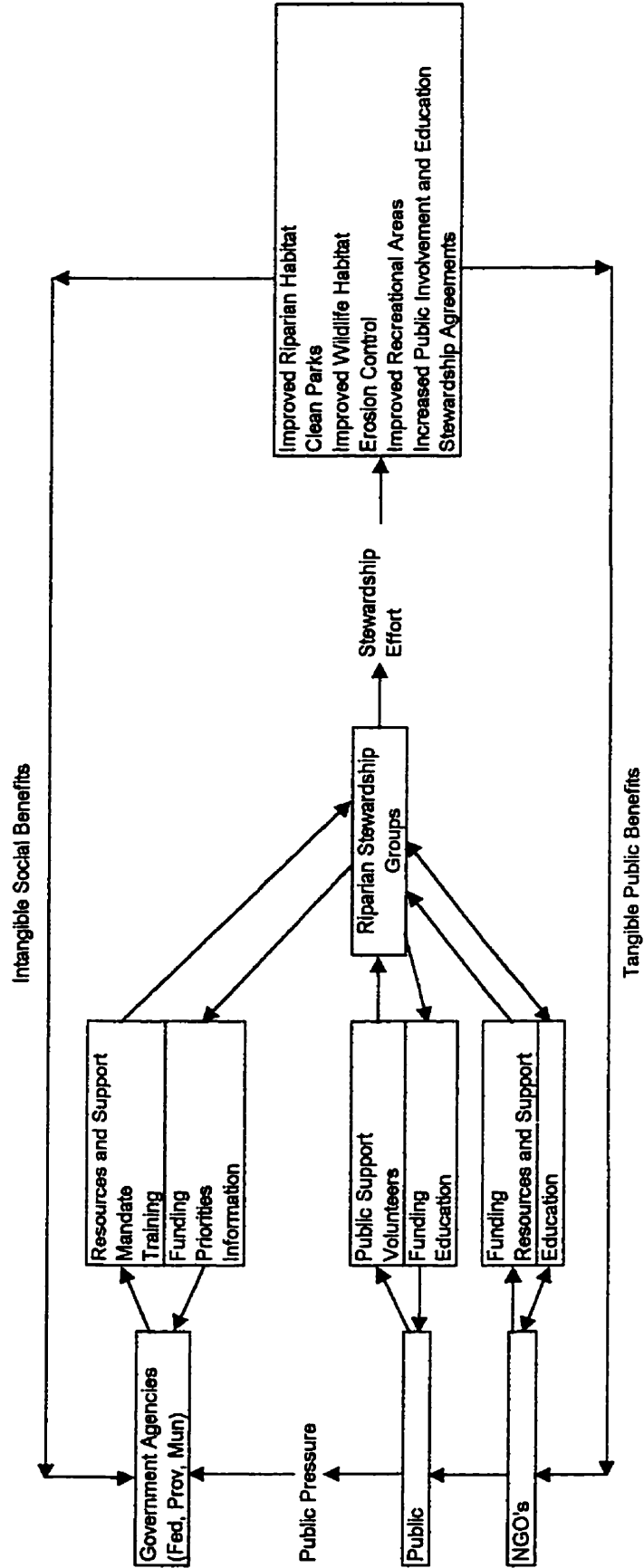


Figure 7: Illustrative Framework of Current Interactions in Winnipeg

various projects, such as cleanup and public education. The NGO'S support the riparian stewardship groups through funding and resource and support. They may also provide training to the groups to better their skills. An example of this is The International Coalition who sponsors riparian stewardship workshops every summer with a variety of speakers on different topics of interest to the groups. The groups are able to access the information needed and gain valuable contacts in various organisations and between groups. The groups in turn take the support offered by the government and the public and through their stewardship efforts make a difference to the riparian environment in Winnipeg. The end result is tangible benefits to the public in terms of improvement of riparian habitat, erosion control and improvement of recreational opportunities in the park. Other intangible benefits to society also result, in terms of increased citizen awareness of the political machine and improved ability to lobby for their concerns.

The groups are responsible for cleanup efforts within the City, improvement of riparian ecosystems and wildlife habitat, erosion control along waterways through tree planting and identification of weak areas, and improvement of recreational opportunities provided by the riparian areas to the general public. They also cause more of the public to become involved in the issues by encouraging voluntarism and providing a forum for opinions to be heard.

This model is a general overview of the current situation in Winnipeg, developed through the research process for this document and through observation of the situation. There is a need for improvement of the communications network between all of the interested parties. Some of the riparian stewardship groups are very attuned to this process and are able to use it to the best advantage while others are less sophisticated and cannot interact with the same effectiveness. There is a need for an overall co-ordinator to oversee this process and assist the groups to grow and develop. The co-ordinator should be responsible for improving the communication between the groups and between the groups and other parties. The co-ordinator should be a clearing house of information of interest to the groups and help them to improve their understanding of the problem and its

possible solutions. One suggestion is that the co-ordinator be from an ENGO who is interested in this process but is not directly involved in the situation. Such a person would be neutral and available to help all of the interested parties with any difficulties they may have.

Chapter 5

Summary, Conclusion and Recommendations

"Water related strategies, plans and programs to improve the quality of the environment, encourage community interaction and foster appropriate economic activities cannot be implemented in isolation: they must be undertaken in a regional context which recognises the interdependence of the region and its watershed, as well as the special qualities and characteristics of the waterways themselves" (Royal Commission on the Future of the Toronto Waterfront, 1992).

5.0 Summary

This report forms a pilot case study for riparian habitat stewardship in Winnipeg. It has described the formation and growth of Winnipeg's riparian stewardship groups and their activities and attempted to define their role and responsibilities. It has identified and characterised interactions between the groups and various other agencies. This resulted in the creation of the Illustrative Framework of Current Interactions for Winnipeg and a resource directory for the groups. The resource directory is intended to act as a guide to available information about how to start a riparian stewardship group and access resources. The resource guide will provide those people interested in becoming involved in riparian stewardship with a guide on who to contact with various inquiries related to river stewardship.

5.1 Conclusions

This study came to several conclusions based on the objectives. The first objective was to provide a descriptive background of the current status of riparian stewardship groups in Winnipeg and their interactions with various government and other agencies. All of the groups have formed since 1990 and range from 25 to 270 members. The groups share similar goals to improve the quality of riparian areas in Winnipeg through tree planting, cleanup, water quality monitoring and public education. Their interactions with

government and other agencies is generally positive and includes information and resource sharing and using the expertise of the government employees to conduct their activities.

The second objective was to investigate the role and responsibilities of the groups in riparian management in Winnipeg. This study has attempted to define the role and responsibilities of Winnipeg's riparian stewardship groups.

They are:

- to act as an advocate for the public to lobby government about riparian issues
- to clean up the waterways, plant trees and improve riparian ecosystems
- to work in partnership with various levels of government to achieve mutual goals relating to the conservation and preservation of Winnipeg's riparian areas
- to educate the public about the importance of riparian areas and what can be done to save them

The third objective was to develop an descriptive diagram of the interactions between the stakeholder groups relating to riparian issues in Winnipeg. The Illustrative Framework of Current Interactions for Winnipeg shows the interactions between the stakeholder groups in their stewardship efforts. It shows the relationship between the groups, what the need and provide to each other and how their activities result in successful stewardship initiatives. The framework helps to illustrate the gaps in communication and resources and support that are needed by the groups to function most effectively. In Winnipeg there are a number of very committed, hard working people who are working towards improving Winnipeg's riparian situation. There is a need for an overall co-ordinator, perhaps from an ENGO not directly involved in the situation, to oversee the process and develop lines of communication between the groups and other agencies and aid them in developing resources and support for their efforts.

The third objective was to create a resource guide to aid the riparian stewardship groups in understanding the current Winnipeg situation. Currently, the groups are often working in isolation from each other and do not have good group communication. Improved communication between the groups and a better idea of the resources available to them should now be possible with the resource directory developed by this study.

The final objective was to examine the future directions of stewardship in Winnipeg which will be discussed in section 5.3.

5.2 Recommendations

This study recommends that:

- the municipal and provincial government agencies involved in riparian management produce an overall management strategy with the riparian groups as part of the process for the City of Winnipeg
- the resource directory be published by government and distributed to community organisations and other agencies
- some agency, undertake the responsibility to co-ordinate the efforts of the groups to improve their effectiveness

5.3 Future Directions

Citizen involvement in riparian stewardship in Winnipeg is still in the developmental stages. The riparian stewardship groups have only been involved in the Winnipeg situation since 1990 and are still growing and learning how to conduct their activities to be most beneficial. There is a need for a group or agency, such as The International Coalition, to take a leadership role in the situation and provide co-ordination and guidance to the groups to help them reach their objectives. Each group is at a different level of development and has access to different resources so it is crucial that they work together and support each other. Some groups are experiencing problems with volunteer burnout and a lack of new volunteers so perhaps the lead agency, such as The International Coalition, could attempt to rectify the situation by advertising the

accomplishments of the groups and providing some services so the groups would not have to shoulder the entire burden.

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Internet Resources

Alliance for the Chesapeake Bay – www.aab-online.org

Bring Back the Don – www.competition.net/eletric/groups/201/

The Buffalo River Stewardship Foundation – www.webbencrafts.com/btrsf/

Fraser River Action Plan – www.pac.dfo.ca

Meewasin Valley Authority – www.rights.com/meewasin/

River Works! – www.madagua.org/Riverworks/

SOS River Environmental Inc. – www.cyberspc.nc.ca/sosriver/

Appendix 1
Important Contacts

Winnipeg's Riparian Stewardship Group Contacts

Save our Seine River Environments Inc.
Mr. J. P. Brunet, President 233-0294

Trappiste LaBarriere Greenspace group
Len Van Roon 269-6764

Friend's of Omand's Creek
Roger Geeves, President 775-9101

Friend's of Bruce Park (Truro Creek)
Brenda Reimer-Dorratt, President 837-9968

Sturgeon Creek Association
Boyd Van Aggelen, President 783-7131

Friend's of St. John's Park
Victor Sawelo, President 589-7717

St. Boniface Riverbank Association
Carol James, President 231-1590

Bunn's Creek Group
Al Tresoor, President 668-8763

Government and Non-Government Contacts

The International Coalition for Land and Water
Stewardship in the Red River Basin
982-7250

City of Winnipeg

Works and Operations
Aubrey Hope 986-3588

Harbourmaster
Dennis Antony, Acting Harbour Master 986-7243

Parks and Recreation
Cheryl Heming, City Naturalist 986-2036

Forestry
Mike Allen, City Forester 986-3017

Parks and Recreation, Planning Division
Jim Patterson 986-3840

Properties and Development
Don Kingurski, Waterways Engineer 986-5159

Province of Manitoba

Environment
Sharon Gurney, Water Quality Specialist 945-7114

Water Resources
Richard Bowering, Manager of Surface Water Section 945-6398

Appendix 2
Questionnaires

River Group Interview Schedule

1. Name of Organisation _____
Name of Contact _____
Contact Telephone _____
Date of Interview _____
2. In what year was the group formed?
What is the current size of membership?
How many of those members would you classify as active?
3. In what area of the city does your group concentrate their efforts?
4. What are the main goals of the group in terms of riparian stewardship?
5. What are the main activities that your group is involved in? cleanup, tree planting, public education, other
6. What qualifications or training do members of your group have to undertake these activities?
7. What if any problems has your group encountered when initiating a riparian management project? Jurisdictional confusion, lack of information, conflict from within on project management, lack of funds and/or support etc...
8. Has your group co-operated or interacted with any government or non government agencies? If no skip to question 10
9. Has the group interacted with municipal agencies? Which ones?
How would you characterise these interaction? Very co-operative, mainly co-operative, mixed, mainly adversarial, very adversarial
10. Has the group interacted with provincial agencies? Which ones? How would you characterise these interaction? Very co-operative, mainly co-operative, mixed, mainly adversarial, very adversarial

11. Has the group interacted with federal agencies? Which ones?
How would you characterise these interaction? Very co-operative, mainly co-operative, mixed, mainly adversarial, very adversarial
12. Has the group interacted with non government organisations?
Which ones? How would you characterise the group's interaction with non government organisations? very co-operative, mainly co-operative, mixed, mainly adversarial, very adversarial
13. How would you define your group's role in the management of Winnipeg's riparian areas?
14. How would you define government's role in the management of Winnipeg's riparian areas?
15. Do you think there are areas of overlap between your group's and government's role in management of riparian areas? If so, what are they?
16. Do you think there are areas of deficiency in the management of riparian areas in Winnipeg? If so, what are they?
17. Who do you think should be responsible for those areas of deficiency?
18. What is your perception of the effectiveness of current government stewardship programs? very effective, mainly effective, mixed, mainly ineffective, very ineffective
19. Do you feel your group about have greater influence on the planning and development of riparian areas? Yes, No, Why?
20. What does your group do to involve the general public in these issues?
21. What are your groups future plans, in terms of expanding the scope of your activities?
22. What training do you think would make members of your group more effective in reaching these goals?
23. Who should be responsible for providing the needed training?
24. Any further comments?

Government and Non Government Questionnaire

1. Department/Branch/Section _____
Name of Contact _____
Contact telephone _____
Date of Interview _____
2. What are your agency's main goals in terms of riparian stewardship?
3. What are the main activities that your agency is involved in relating to river stewardship?
4. Has your department co-operated or interacted with any of Winnipeg's riparian stewardship groups? If so, which ones?
5. How would you characterise your interaction with the river groups? very co-operative, mainly co-operative, mixed, mainly adversarial, very adversarial
6. How would you define your role in the management of Winnipeg's rivers?
7. What do you see as the river groups role?
8. Do you think there are areas of overlap between your agency's and the group's activities?
9. Do you think there are areas of deficiency between your agency's and the group's activities?
10. Who should be responsible for the deficiencies?
11. What is your perception on the effectiveness of the river groups? very effective, mainly effective, mixed, mainly ineffective, very ineffective
12. What would make them more effective?
13. Do groups need additional training to make them more effective? Who should provide it?
14. Do you feel that the groups should have more influence in the planning and development of Winnipeg's rivers?
15. What is your agency's view of public involvement in river management?
16. Other comments?

Appendix 3

List of Interview Subjects

	Date
1. Roger Geeves Friend's of Omand's Creek	April 1, 1996
2. Aubrey Hope Works and Operations City of Winnipeg	April 1, 1996
3. Sharon Gurney Water Quality Manitoba Environment	April 2, 1996
4. Andrew Hay The International Coalition for Land and Water Stewardship in the Red River Basin	April 2, 1996
5. Len Van Roon Trappiste LaBarriere Greenspace Group	April 2, 1996
6. Ray Duma Assistant Harbourmaster City of Winnipeg	April 4, 1996
7. Cheryl Neilsen City Naturalist City of Winnipeg	April 4, 1996
8. Rick Bowering Water Resources Manitoba Department of Natural Resources	April 9, 1996
9. Mike Allen City Forester City of Winnipeg	April 9, 1996
10. Don Kingurski Waterways section City of Winnipeg	April 10, 1996

11. **Jim Patterson** April 11, 1996
Planning and Marketing
City of Winnipeg
12. **Tom Hardern** April 16, 1996
Sturgeon Creek Association
13. **Jean Dunmire** April 18, 1996
Save Our Seine River Environments Inc.
14. **Cindy Cohlmeier** By mail
Friend's of Bruce Park
15. **Victor Sawelo** August 20, 1996
Friend's of St. John's Park
16. **Carol James** August 23, 1996
St. Boniface Riverbank Association

Appendix 4

Resource Guide

We are very lucky, here in the City of Winnipeg. We have a wealth of natural habitat right in our back yard. Winnipeg has a large number of small creeks and streams running through it that you may never have heard about. Citizens can derive benefit through a variety of aesthetic and recreation activities. If you are a bird watcher or a fisherman you may already know about the little hidden pockets of wilderness right here in the city.

But if we don't appreciate the natural habitat in the city it will soon be gone. Pollution, erosion, low water flow and quality and vandalism all affect our natural areas.

So what can you do?

You can participate in annual clean up and greening events held by the various riparian stewardship groups active in Winnipeg. Notices of the events are posted around the neighbourhood and in the community newspaper. You may have heard about them on the news. If you attend and are interested you can join the group to promote its activities and lend you time to the worthy cause. If there is no stewardship group in your area you could even start one of your own!

How do you get started?

The best way to become involved in riparian issues and help the situation in Winnipeg is to get informed. Contact local riparian stewardship groups and ask questions. Attend public meeting and events. Read the newsletters published by various groups. They are available in some libraries and from the Eco Network and The International Coalition. Contact a government agency responsible for riparian issues. They may be a valuable resource of information and contacts. The internet is a valuable resource of information on similar groups who are active all around North America. One excellent website is River Network Online (www.teleport.com/~rivernet/) which provides links to a variety of watershed organisations, major environmental organisations, environmental groups, publications on the Web and government agencies. It is based in the U.S. but is still very useful. As you move around in the Web you find more and more sites with links to other sites. The possibilities are endless.

What kinds of activities are possible?

Anything that preserves and conserves a riparian area qualifies as stewardship. It may be cleaning up garbage in a riverine park. Or pulling old junk out of the waterway to help it flow. Planting trees to reduce erosion. Lobbying government for stricter controls and monitoring of what is dumped in the water.

How do I form a new group?

The first step is to develop an action plan and identify the goals you want to

achieve. Get as much help and input as possible from your neighbours and government and non government sources. Recruit volunteers. This may require posting flyers in the area and speaking at community meetings or your local church or synagogue. Develop a set of objectives and goals. Research what has already happened in Winnipeg and how the other groups achieved their goals. You could learn from their past successes and failures.

Where can I get funding for my groups activities?

Funding is a difficult issue facing all of the riparian stewardship groups in Winnipeg. Most groups spend a significant amount of time and energy searching out opportunities and applying for funding from a variety of sources. Be creative . In addition to the traditional sources of funding such as the government investigate private sources, such as businesses along the waterway. Get registered as a charitable organisation and you will be eligible for a lot of different funding sources, including private donations. Research funding opportunity by talking to people who are involves in the issues, such as government employees and other groups.

Now you have some basic information about the workings of a riparian stewardship group. You can achieve any goal you set your mind to.

Remember to continue to learn and grow and adjust your goals as time goes on and you achieve success.

Volunteer burnout is a significant problem for many groups. Don't place too much responsibility on one individual or take too much on to yourself. Learn to delegate authority. When people are given responsibility they will rise to the occasion but if they feel that they are not needed they will soon drift away.

The media is of great importance to your efforts. If you can get them involved with your group and develop a strong relationship, then they will give you publicity and provide you with a forum to share your ideas and activities.

Resources

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Trappiste LaBarriere Greenspace group
Len Van Roon 269-6764

Friend's of Omand's Creek
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Friend's of Bruce Park (Truro Creek)
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Mike Allen, City Forester 986-3017

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Jim Patterson 986-3840

Property and Development
Don Kingurski, Waterways Engineer 986-5159

Province of Manitoba

Environment

Sharon Gurney, Water Quality Specialist 945-7114

Water Resources

Richard Bowering, Manager of Surface Water Section 945-6398

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Bring Back the Don – www.competition.net/electric/groups/don/

The Buffalo River Stewardship Foundation – www.webmerchants.com/brsf/

Fraser River Action Plan – www.pac.dfo.ca

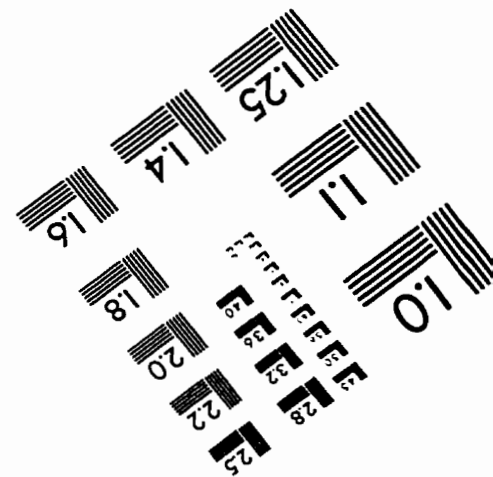
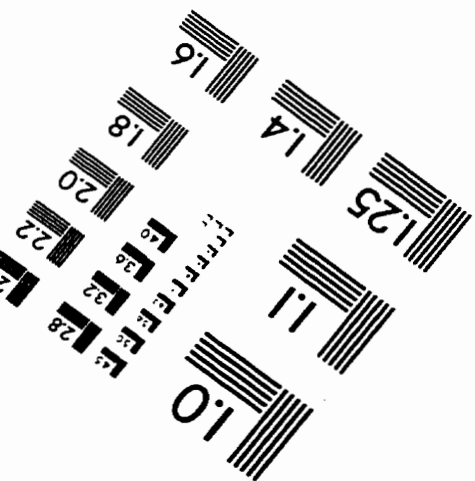
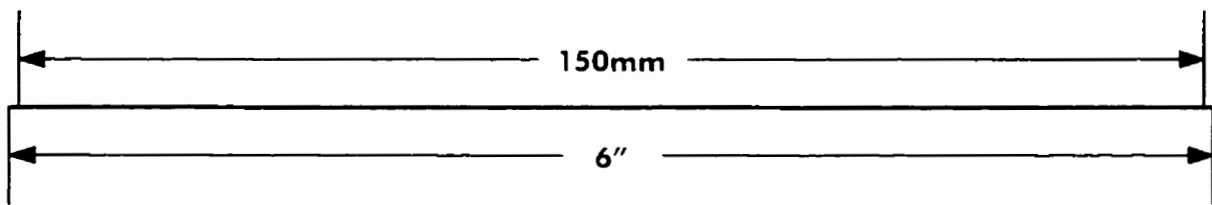
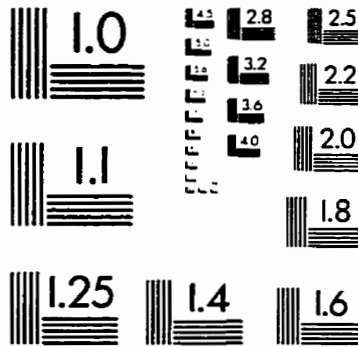
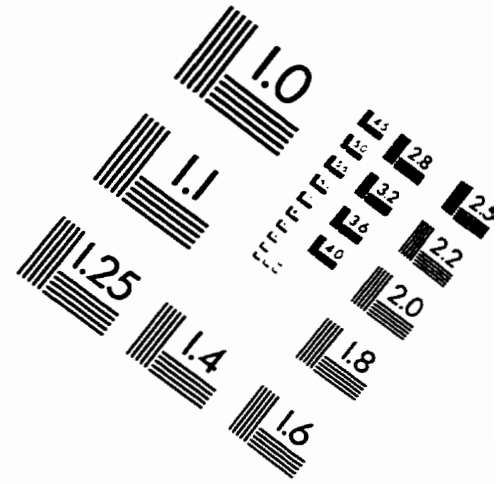
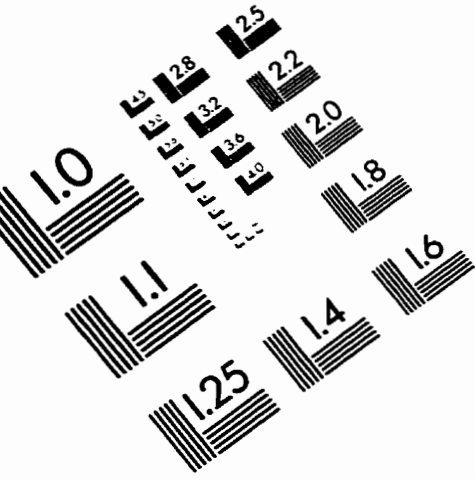
Meewasin Valley Authority – www.lights.com/meewasin/

River Works! – www.wanagua.org/Riverwks/

River Network Online – www.teleport.com/~rivernet/

SOS River Environmental Inc. – www.cyberspc.mb.ca/sosriver/

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