

THE ASSINIBOINE RIVER CORRIDOR:
GUIDELINES TO THE ACQUISITION OF LAND
AND THE DEVELOPMENT OF FACILITIES FOR
OUTDOOR RECREATION

A Practicum Submitted in Partial Fulfillment
of the Requirements for the Degree
Master of Natural Resource Management

by

James C. MacPherson

May 1976

THE ASSINIBOINE RIVER CORRIDOR:
GUIDELINES TO THE ACQUISITION OF LAND AND
THE DEVELOPMENT OF FACILITIES FOR OUTDOOR RECREATION

by

JAMES C. MACPHERSON

**A dissertation 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 RESOURCE MANAGEMENT

© 1977

**Permission has been granted to the LIBRARY OF THE UNIVER-
SITY OF MANITOBA to lend or sell copies of this dissertation, to
the NATIONAL LIBRARY OF CANADA to microfilm this
dissertation and to lend or sell copies of the film, and UNIVERSITY
MICROFILMS to publish an abstract of this dissertation.**

**The author reserves other publication rights, and neither the
dissertation nor extensive extracts from it may be printed or other-
wise reproduced without the author's written permission.**

ACKNOWLEDGEMENTS

In the course of conducting the research and analysis for this Practicum, I should like to acknowledge individuals whose support, assistance and criticism were vital for the successful completion of this document. Only those individuals whose help was critical will be specifically acknowledged. I am particularly grateful to the myriad of people who granted me interviews that supplied many of the details of this Practicum. Those people include secretaries and reeves of Rural Municipalities, representatives of recreational equipment dealerships, various officials of urban recreation departments, and a host of staff members of the Provincial Departments of Agriculture, Renewable Resources and Transportation Services, and Tourism, Recreation and Cultural Affairs.

More specifically I would like to acknowledge the role of Allan Hodgson, Coordinator, Resources For Tomorrow, Department of Renewable Resources and Transportation Services for securing departmental sponsorship for the Practicum and for consistent support and encouragement. Neil Nixon and Darsan Wang of the Research and Planning Branch of the Department of Tourism, Recreation and Cultural Affairs I thank for their cooperation in making available source data on the use of Provincial recreation lands. Martin Benum, Director of the City of Winnipeg Parks and Protection Division, and his staff I acknowledge for making available information on park policy and use in Winnipeg. I thank Wayne Schick, Regional Parks Planner, Department of Tourism, Recreation and Cultural Affairs, for freewheeling conversations on the idea of recreation, recreation policy and recreation programs. I would also like to thank here the continuing support and substantive criticism offered by my Committee members; Allan Hodgson; Dennis Moffat, Chief of

Planning, Parks Branch, Department of Tourism, Recreation and Cultural Affairs; Leonard Vopnfjord, Urban Planner, Lombard North; and Robert Cairns, Economics Department, University of Manitoba.

I should also like to offer personal thanks to Donna Jones and Edward Lohrenz, Department of Renewable Resources and Transportation Services for the drafting work required for this Practicum. Finally, I give special thanks to Gwen Phillips without whose typing and retyping this Practicum would have been most difficult to produce.

To everyone whom I did and did not specifically acknowledge I am grateful. They bear, however, no responsibility for the interpretation presented in this Practicum: I alone bear that responsibility.

ABSTRACT

In recent years increasing attention has been paid to the Assiniboine River Valley, and other river valleys, in southern Manitoba for their potential to provide for recreational opportunity. The objective of this Practicum is to define a model for acquiring river valley land and for the development of facilities on acquired land. The model is applied to the Assiniboine River Valley. Subsequent to the application of the model, it is possible to define Recreation Nodes, within which recreation lands acquisition should be concentrated. Development of facilities is based upon trends in recreation participation, trends in use of park lands and trends in equipment ownership. The acquisition and development model as applied to the Assiniboine River recommends that Recreation Nodes east of Brandon be acquired first. Acquisition of riverbank lands in Winnipeg should depend upon the value of those lands to meet the recreational needs of Winnipeg's Inner City population.

PREFACE

THE RULES OF THE GAME

In North America, there has always been an aura of illegitimacy attached to leisure. *elitism*

More than anything else that aura has directed the focus of what is and is not legitimate leisure and has directed the scope and nature of recreation planning, programs and activities. It may even be said that that aura of illegitimacy has warped the concept of recreation. *disapproval*

The illegitimacy of recreation arises from a number of cultural values. Perhaps one of the more significant contributors stems from a Calvinistic predisposition to view work as the measurement of human worth. The phrases that "idle hands are the Devil's playground" and that "the Devil finds work for idle hands" are supremely eloquent in their denial of the value of leisure as a component of human development. Leisure is evil. A second source of the illegitimacy of recreation stems from the North American economic environment where, traditionally, the value of activities has been directly correlated to economic growth and to improvements in material well-being. Since recreation has not traditionally been viewed as a producer of wealth, the use of resources for other preferred "productive" uses has reduced the claim of recreation to those same resources. *suspicion*

At least insofar as late twentieth century North American society has accepted the fact of leisure time, the value of leisure time has changed. Since we have leisure, we should use it to our benefit. Although the attitude may be changing, leisure for its own sake is still not legitimate. Something should be done with leisure time. In spite of the Calvinistic attitude towards work and leisure, improvement of individual knowledge has been prized. In this context it is not surprising that a Presbyterian Soct, Andrew Carnegie, bequested to North America hundreds of Carnegie libraries. Self-improvement became a

legitimate use of leisure time. By the same ^{rule} criticism, self-improvement legitimized cultural institutions such as operas, symphony orchestras, ballet, art galleries and museums.

If the pursuit of culture and civilization represents one aspect of legitimate recreational behaviour, a second aspect may be represented by the emphasis attached to organized sports activities. Motivated as much by "keeping the kids off the street" as by any sense of value in participating in physical activity, sports are means of occupying leisure time.

The cultural and sports emphasis of recreation policy - a "Locke and Jock" emphasis - reflect popular attitudes towards recreation. Insofar as government has become involved in the provision of recreation opportunity, opportunity has been and will continue to be provided as part of a policy package encompassing not only recreation but also economic and welfare considerations. The role of government in providing recreation opportunity has been intimately tied to what dominant groups in society expect from government.

Government in North America has traditionally been expected to provide a social and economic environment conducive to individual economic betterment. In this context the role of government in providing for recreation opportunity has been limited: provide for recreation lands that had few "better" alternative uses; provide recreation opportunity that facilitates upward economic and social mobility; and provide opportunity that sought to encourage a degree of social cohesion and discourage anti-social behaviour.

Public investment in the provision of recreation opportunity has been designed to accomplish social objectives, the primary one being education into an elite. As long as recreation programs could be justified in terms of these social objectives, they were regarded as legitimate and worthy of public investment. Other recreational programs of more questionable value to the social objectives of the elites have become identified as less ^{useful} legitimate or illegitimate forms of recreation and not worthy of public investment. For the most part, these recreational outlets have become the domain of private business: movie theatres, carnivals, drag strips, pornography outlets, and countless others.

While education may provide one of the primary motives of public recreation policies, articulate elites with voting power have been able to identify their own recreational desires with what is desirable for society. For the most part, it appears that those recreational desires have simply fleshed out recreational policy without bringing into question public recreational policy itself. For example, it can be argued that the provision of federal, provincial and even city park systems, by attracting primarily those who have the economic means, and the cultural motivation, to use those parks, represents a recreational outlet for the elites. Since the elites, by definition, are perceived by themselves as the best people society can offer, whatever they wish must also be in society's best interests, and hence legitimate.

To no one's surprise, then, elites have captured recreational policy and made recreational policy a tool of their own value systems. This is neither good nor bad; it is a fact of life not attributable to any one specific value system. Yet the elites' interpretation of recreation policy has limited the role of public involvement in recreation and has limited the range of choices available to recreationists. Until very recently, the educational role of recreation has been circumscribed by using education as a means of upward mobility, as a means of attaining status, not as an experience in its own right, not as education for its own sake, not as education for personal gratification. On the other hand, education has seldom been defined in strictly institutional terms. As a result, education as a personal experience has become a legitimate object of recreation policy and the provision of lands with attributes of value to a variety of personal educational goals such as nature appreciation have found sympathetic responses leading to the designation of natural parks, wilderness areas and the like to provide for a variety of personal educational experiences.

Education is a twentieth century sacred cow and leisure time activities that can justify an educational purpose have a much better chance of acquiring social legitimacy than those that do not. Health is another sacred cow and although many recreational activities could

be justified at least in part by an appeal to health, recreation policy does not specifically hold as one of its objectives the improvement of health. Perhaps this is because health has been traditionally defined in an institutional manner: doctors and hospitals ensure health, fun does not. Perhaps this attitude is changing as "Participaction" advertising appears to emphasize the healthful aspects of physical activity. If health becomes an overt objective of recreation policy punching bags may become a legitimate recreational fixture.

Recreation as fun, however, still searches for legitimacy. Traditionally, pleasure could be tolerated as a by-product of recreational programs but pleasure for its own sake was something naughty. The provision of facilities such as Community Centres, swimming pools, tennis courts, baseball diamonds and hockey rinks were designed not so much to give pleasure to participants, but to give participants something to do, to keep them off the street, or to encourage a competitive spirit. If participants were motivated for pleasure, that was fine; but the facilities were constructed in the first place to discourage juvenile delinquency.

Where does all this leave recreation policy? First, recreation policy is designed as part of a package to achieve identified public objectives. Second, public recreation policy, in fact if not in theory, supports only those (legitimate) programs which may serve to achieve public objectives. Third, public recreation policy identifies the desires of its client groups (the elites) with those of society generally. Fourth, public recreation policy has in effect denied support to (illegitimate) recreational activities not approved as being socially desirable.

Let us be aware that social desirability is defined by the elites of the time. It is unlikely that the underlying judgements of recreation policy mentioned above will change dramatically in a short period of time. Nor is it likely or even desirable to divorce recreational policy from government objectives. Nevertheless, it does appear that recreational policy can be more flexible than it currently is and still remain within overall policy guidelines of government. Several clues may provide guidance as to where the flexibility may be found. First, increasing emphasis attached to equity implies that recreation policy may widen the scope of its legitimate interests to include the recreational aspirations of non-client groups. Second,

government involvement in the private business sector suggests that government involvement in the more commercial aspects of recreation may be a legitimate outlet for recreation policy. Third, a healthier awareness that life is too short to spend it all working and that enjoyment, fun, pleasure are components of a desirable "quality of life" may widen the scope of recreational policy to specifically acknowledge pleasure as an objective of recreation.

Recreational policy requires a better sense of balance... there is no particular reason why government can supply arts centres but not movie theatres, swimming pools but not drag strips, zoos but not carnivals, or coin operated view finders but not coin operated pinball machines. This is not to say that recreation policy should immediately start a crash program of providing recreational outlets for all those activities that have previously been regarded as beyond the scope of recreation policy. Far from it. There is still a growing demand for the more traditional forms of recreation. But recreation is more than campgrounds, swimming pools, nature walks, fitness trails and nature exclaves.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS.....	i
ABSTRACT.....	iii
CHAPTER I: Introduction.....	1
Objectives of the Practicum.....	4
Limitations to, and Assumptions in, the Practicum.....	5
CHAPTER II: Recreation and Values.....	8
Health Values.....	11
Educational Values.....	13
Pleasure Values.....	13
Values and Activities.....	14
 Urban and Rural Recreation.....	 18
CHAPTER III: The Assiniboine River: Public Outdoor Recreation Opportunity.....	23
Provision of Public Outdoor Recreation Opportunity.....	23
Province of Manitoba.....	24
Rural Municipalities.....	26
Urban Municipalities.....	31
 Visitors to Public Outdoor Recreation Opportunities.....	 34
CHAPTER IV: The Assiniboine River: Guidelines for the Acquisition of Land and the Development of Facilities for Public Outdoor Recreation.....	45
Introduction.....	45
Land Easements and Land Acquisition.....	47
Objectives of Land Acquisition.....	49
The Recreation Lands Acquisition and Development Model.....	52
Definition of Recreation Nodes.....	57
Criteria for Recreation Lands Acquisition....	98

	Page
Development Facilities.....	124
Urban Acquisition and Development.....	136
CHAPTER V: Conclusions and Recommendations.....	141
Conclusions.....	141
Recommendations.....	143
Areas of Further Research.....	146
APPENDIX I: The Assiniboine River: Use of Public Outdoor Recreation Facilities.....	147
Use of Provincial Outdoor Recreation Opportunities.....	148
Day-Use.....	182
Use of Designated Wildlife Lands.....	185
Use of Other Outdoor Recreation Opportunities.	186
Other Rural Outdoor Recreation Opportunities..	195
APPENDIX II: The Assiniboine River: Users of Public Outdoor Recreation Opportunity.....	203
Visitors to Wildlife Lands.....	211
Trend Projections of Use.....	215
Users of Urban Outdoor Recreation Opportunities (Winnipeg).....	227
Selected Bibliography.....	230

LIST OF TABLES

TABLE		Page
I	Occupation and Propensity to Own Recreational Equipment.....	38
II	Distribution of Recreation Equipment Owners, by Community Committee Area.....	39
III	Accessibility to Recreational Equipment, 1970.....	40
IV	Anticipated Ownership of Recreational Equipment, 1976-1980.....	41
V	Recreation Node Quality Valuations.....	109
VI	Recreation Node Accessibility Valuations.....	111
VII	Check List: Recreation Trends, Social Welfare Considerations, and Alternate Public Recreation Opportunity.....	121
VIII	Summary of Valuations.....	122
IX	Acquisition, Development, and Acquisition and Development Priorities, by Recreation Node.....	144

LIST OF FIGURES

FIGURE		Page
I	Rural Recreation Land Acquisition and Development Model.....	55
II	Vegetative Cover: Scale of Weightings.....	101
III	Landscape Variety: Scale of Weightings.....	102
IV	Drinking Water: Scale of Weightings.....	104
V	Still Water: Scale of Weightings.....	105
VI	Wildlife Presence: Scale of Weightings.....	106
VII	Accessibility from Winnipeg: Scale of Weightings.....	110

LIST OF MAPS

	Page
Assiniboine River: Location of Recreation Nodes.....	56
St. Francois-Xavier Node.....	62
Norquay Beach Node.....	65
Portage la Prairie Node.....	69
Treesbank Node.....	73
Waggle Springs Node.....	76
Brandon Node.....	80
Woodworth-Sifton Node.....	84
Miniota Node.....	87
Fort Ellice Node.....	90
Millwood Node.....	93
Shell River Node.....	97

CHAPTER I

INTRODUCTION

INTRODUCTION

The first Provincial provision for outdoor recreation in Manitoba was made in the 1920's. Between then and 1966, when the Parks Branch was absorbed by the Manitoba Department of Tourism and Recreation, a variety of lands had been designated as park and recreation land. Since 1966, the Parks Branch has continuously developed a variety of recreational opportunities. Until 1969, however, much of southwestern Manitoba had been inadequately served by recreation land. To overcome this shortage, Provincial Parks were established in the Spruce Woods area (1969) and around the Shellmouth Reservoir (1972).

In southwestern Manitoba, that part of the Province west of the Red River and south of Riding Mountain National Park, the Assiniboine River provides focus for archaeological, historic, ecological, and topographic features that may possess unique recreational opportunities. In rural southwestern Manitoba, generally, river valleys provide areas of geologic, topographic, vegetative, historic and scenic variety that serve to interrupt a landscape that is pre-eminently devoted to arable agriculture. Major valleys - those of the Assiniboine, Pembina, Souris, Birdtail, Minnedosa and Shell Rivers - dominate local physical landscapes. Because the soils and slopes of valley sides are often not appropriate for arable agriculture and in some cases even for grazing, valleys have often been left in their native environment. The limited potential of much river valley land for agriculture, and the presence of topographic, vegetative and scenic variety suggest that river valleys generally may provide greater opportunities than in the past for various types of outdoor recreation.

Spruce Woods and Asissippi Provincial Parks are designated recreation lands that have incorporated unique Assiniboine Valley features into the parks system. The Assiniboine Valley also provides the sites for the Norquay Beach and Grand Valley Provincial Recreation Areas.

A new Provincial Park will be established at Beaudry, on the Assiniboine River immediately west of Winnipeg. The Assiniboine River also provides focus for a variety of privately owned recreation firms. The River itself is used summer and winter to varying degrees by linear-oriented recreational activities - canoeing and snowmobiling primarily. The Assiniboine Valley is used by picnickers, hikers, horseback riders, cross-country and downhill skiers, snowmobilers, and big game and upland game hunters.

For much of its length in Manitoba, the Assiniboine River lies within about fifteen miles of paved Provincial Trunk Highways. The River is crossed frequently by Trunk Highways and Provincial Roads. Municipal road systems penetrate the Assiniboine River Valley to reach Valley farms, but municipal roads infrequently provide access to the Assiniboine River itself.

While approximately 23% of Winnipeg outdoor recreationists travel westward of the city,¹ increasing use of existing provincially designated recreation areas suggest that additional lands be designated and facilities be developed to accommodate the increasing numbers of recreationists. The Assiniboine River and the lands adjacent to it have been considered generally as suitable for the provision of increased recreation opportunity.

Since 1972, certain lands adjacent to the Assiniboine River have been acquired by the Province. The mechanism for acquisition has been the Land Utilization Board, an inter-departmental Board, administered under the Department of Renewable Resources and Transportation Services. The function of the Board is to coordinate and authorize the purchase of lands for a wide variety of recreational purposes. To date, the Land Utilization Board has authorized the acquisition of 4,732.34 acres of land along and near the Assiniboine River. Of this acreage, 57%, (2,704.42 acs.) of the acquired acreage has been located between the Assiniboine River and the Shilo Military Reserve. Eastward and westward of the Military Reserve, isolated parcels of land, totalling 956 acres have been acquired.²

¹ Manitoba Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch, 1974 Traffic Attendance in Campgrounds, Provincial Parks and Recreation Areas., 1975, p.4.

² Interview with A. Hodgson, Coordinator, Resources For Tomorrow, Manitoba Department of Renewable Resources and Transportation Services.

To date, acquisitions authorized by the Land Utilization Board have depended upon voluntary sale. Where landowners near the Assiniboine River have been willing to sell naturally vegetated land, the Board has generally approved its purchase. The Board is, however, concerned that land acquisitions be effected for specific identified functions, that acquisitions be directed to specific purposes and that the development of facilities take place in accordance with specific guidelines. The concerns of the Land Utilization Board provide the justification and objectives of this Practicum.

OBJECTIVES OF THE PRACTICUM

In view of the concerns of the Land Utilization Board, the objectives of this Practicum are:

- 1) to define guidelines for the acquisition of land and the development of facilities for public outdoor recreation opportunity along the Assiniboine River; and
- 2) to develop an acquisition and development model appropriate for the provisions of public recreational opportunities along other river systems in southern Manitoba.

LIMITATIONS TO, AND ASSUMPTIONS IN, THE PRACTICUM

In view of the objectives of this Practicum, it is necessary to point out certain assumptions and research limitations involved in this Practicum. These assumptions and limitations include:

- a) that recreation land acquisition and development programs should offer as wide a range of recreational experiences as possible;
- b) that outlets for recreation are a felt need for all people and that, as such, the provision of recreational opportunity is a means of achieving social objectives;³
- c) that recreation land acquisition and development programs must take place within an economic, social and political framework and that, because of this framework, highly productive agricultural land would only under exceptional circumstances be considered as having a "higher and better use" as recreation land;
- d) that recreation land acquisition and development programs maintain as their first objective the provision of recreational opportunity for Manitobans. As such, this Practicum will not concern itself with the role of recreation lands as a tourist facility attracting out of Province users. By the same token, since Winnipeg contains half the population of Manitoba and is the primary

³ Social objectives will be defined in terms of desires, the general tenor of which have been approved by political policy, that are broadly perceived as beneficial to the people of Manitoba. In the context of outdoor recreation, two social objectives considered in this Practicum relate to improving the accessibility to Provincial outdoor recreation lands by lower income families, and to maintain a quality of recreational experience that complements the health, education and pleasure values attached to outdoor recreation. For further elaboration on these themes see Chapters II and IV below.

source of recreationists in Manitoba, recreation land acquisition and development programs must specifically acknowledge the recreational demands of Winnipeggers.

- e) that recreation land acquisition and development programs along the Assiniboine River will take their place in the context of over-all Provincial recreation policy. No attempt has been made to relate recreation land acquisition and development programs along the Assiniboine River to other Provincial recreation priorities and policies. Rather, this Practicum proposes that, acquisition of land and development of facilities along the Assiniboine River should take place in a particular sequence; and
- f) that recreation land acquisition and development programs have a budget under which programs may be effected. Part of that budget is that of the Land Utilization Board. It is not the purpose of the Practicum to directly appraise the rationale for that budget, or to evaluate generally the effectiveness of recreation budgets in providing specified services.

CHAPTER I I

RECREATION AND VALUES

CHAPTER II

RECREATION AND VALUES

In order to define guidelines for the provision of recreation opportunities, it is necessary to adopt a definition of recreation, to understand the roles of recreation in society, to define recreational value systems, and to define motivations for partaking in recreational activities and experiences.

Definitions of leisure appear to fall within any one of about six conceptual frameworks. As described by Max Kaplan¹ these frameworks or models are appropriate for particular, but not general applications. The models he has named the humanistic, the therapeutic, the quantitative, the institutional, the epistemological, and the sociological. The humanistic model sees leisure as an end in itself. The therapeutic model interprets leisure as a means to an end. The quantitative model emphasises leisure as the time that is left after the necessary life supporting activities are completed. The institutional model of leisure seeks to differentiate it from religious, marital, educational and political and other patterns of behaviour and values. The epistemological conception of leisure relates activity to the assumptive, analytical and aesthetic world views of participants. Finally, the sociological definition of leisure interprets leisure "as a construct with such elements as an antithesis to the work of the participant, a perception of the activity as voluntary or free, a pleasant expectation and recollection, a full range of possibilities from withdrawal sleep or drink to highly creative tasks."²

¹ Max Kaplan, Leisure: Theory and Policy, (New York: John Wiley and Sons, Inc., 1975).

² Ibid., pp. 18-19.

The scope of activity possible under such definitions of leisure is limitless; but each definition has other limitations. The humanistic model approaches leisure from an elitist point of view and is directed towards contemplation, thought and self-appraisal. The therapeutic model approaches leisure as a means of social control and social conformity. The quantitative model assumes that all "free time" is "leisure time". The institutional, epistemological and sociological models fail to acknowledge the overlap between leisure and work, leisure and political activity or leisure and education.³

To help overcome some of the inadequacies of definitions of leisure, Joffre Dumazedier has proposed that leisure be defined

*"...as an activity - apart from the obligations of work, family and society - to which the individual turns at will, for either relaxation, diversion, or broadening his experiences and his spontaneous social participation, the free exercise of his creative capacities."*⁴

Dumazedier has both limited and expanded a definition of leisure. He specifically excludes the possibility of work or family as leisure activity because of the obligations entailed in each. Moreover, he defines recreation more in terms of activity rather than personal experience. On the other hand, Dumazedier has distinguished between free time and leisure time and has defined leisure to include, but go beyond, humanistic and therapeutic leisure activities.

For purposes of this study, Dumazedier's definition of leisure provides a context within which to define and discuss outdoor recreation. Against Dumazedier's definition of leisure, outdoor recreation is but one fragment of the scope of leisure activities. Much leisure is enjoyed within an artificial man-made environment - homes, offices, recreation halls, cultural centres; these forms of leisure are outside the scope of this study. Other leisure activities may approach

³ Recreation models described by Kaplan frequently reflect attitudes towards leisure and the participation in leisure by a specific segment of society, or by a "leisure class". In his examination of the concept of leisure class, Francis Noe points out that the concept of leisure is intimately connected with Weltanschauungen, world views, ideologies and that attitudes towards leisure reflect ideological beliefs, to some considerable extent, in the definitions of what constitutes "reputable leisure". This theme is explored in somewhat more detail in Chapter V. Francis P. Noe, "The Political and Social Ideology of the Leisure Class," Journal of Leisure Research, (Summer, 1973, Vol. 5, No. 3) pp. 49-59.

⁴ Kaplan, Op. Cit. p. 44.

or cross the bounds of social acceptance - the Saturday night drunk at the local beach, or the stealing of a car on a dare; these forms of leisure are outside the scope of this study.

Rather, this study will be concerned with only certain aspects of Dumazedier's definition of leisure, those aspects relative to relaxation, diversion and broadening of experiences in an outdoor environment. For purposes of this study "outdoor recreation" and "recreation" will be used synonymously and both will refer to the voluntary participation in socially acceptable activities offering release from, and to satisfy needs not normally satisfied in, the organized and structured behaviour of business and home.

Behind the many outdoor activities engaged in by recreationists lie a number of values that direct the selection of activities. Values will be defined as "...the goals and rationales that serve as the ideological basis for the selection of leisure actions."⁵ Values of recreation are not uniform across society. Specific recreation forms are valued differently by urban and rural populations. Low income groups value different recreation forms than do middle class groups. Indeed, any one person's valuation of recreation may differ from any other person's. Nevertheless, general recreation value categories can be defined. An appreciation of those values and their impacts upon recreational activities is necessary in order to understand the ends, and the means to those ends of recreation.

Broadly, three values may be attributed to recreation. These are health, education and pleasure values. Insofar as health and education rank as priority concerns by North American society, the health and educational benefits of recreation may be interpreted as providing means to satisfying those concerns. In this context, recreation is a means of achieving social objectives. Certainly the example of recreation as means of reducing stress represents one means of attempting to acquire or maintain a particular level of quality of health. It is noteworthy that "Participaction" programs appeal directly to the concern of participants for their physical health.

⁵ Ibid., p. 314.

Similarly, the value of recreation as an educational medium can be perceived as a means of achieving educational objectives. The use of natural environments by group camping organizations, by educational institutions and by private individuals permit a broadening of personal knowledge, perspective and experience that furthers a number of social objectives.

Finally, the pleasure value of recreation itself may be regarded as a social objective if recreation is perceived as part of the "good life" as perceived by users.

HEALTH VALUES:

Perhaps one of the more significant values of recreation lies in its impact upon mental and physical health. Though an acknowledged value by many⁶ one of the more complete descriptions of the role of recreation in providing for physical and mental wellbeing can be found in S.R. Slavson's Recreation and the Total Personality.⁷ Slavson describes seven broad services that recreational activity can provide the user.

First, recreation activity may provide complementary experiences, the stimulation of under-utilized, fatigued or exhausted aspects of the personality. Second, recreational activity may provide for compensatory experiences to counteract emotional monotony by the provision of varying stimuli. Slavson suggests that the compensatory aspect of recreation may have psychological origins in the manner in which participants meet or fail to meet other people's expectations of them. Third, certain recreational activities provide opportunity for

⁶ Elinor C. Guggenheim, Planning for Parks and Recreation Needs in Urban Areas, (New York: Twayne Publishers Inc., 1969), pp. 26-28, 31. See also Herbert J. Gans, "Outdoor Recreation and Mental Health," in David W. Fischer et.al. Land and Leisure: Concepts and Methods in Outdoor Recreation, (Chicago, Maaraufa Press, 1974), pp. 15-24; B.L. Driver and S. Ross Tacher, "Towards a Behavioral Interpretation of Recreational Engagements, with Implications for Planning", in Fischer, Op. Cit., pp. 91-111; and Ayers Brinser, Recreation: An Analysis of Objectives. ed. by P. Nickel and M. Wallace, (Winnipeg, Natural Resource Institute, University of Manitoba, 1974),

⁷ S.R. Slavson, Recreation and the Total Personality (New York: Associated Press, 1948).

the release of aggression, which may be channelled into games and sports that emphasize rivalry and competition. Fourth, Slavson suggests that some recreational forms provide outlets for participants to engage in "regressive" behaviour, throwing off the restraints of everyday life, and engaging in activities that may be antithetical to adopted lifestyles. Fifth, recreation forms may provide for escape from reality, to relieve feelings of frustration, anxiety and monotony. Sixth, some recreation forms provide opportunities for socializing, for bringing people together, to encourage a sense of belonging and sharing. Finally Slavson recognizes the value of solitude in certain types of recreational activity.⁸

Slavson is essentially concerned with the values of recreation to the health of the urban resident. The rural resident appears to value recreation differently. The openness of the rural landscape is such that solitude is easily experienced. As such, solitude is not a felt need as a recreational experience. By the same token, the interspersion of woodland, prairie and marsh provide the rural citizen with variations in stimuli that the urban resident does not have. As such, the value of natural areas as recreation outlets are felt much less by the farmer than by the urban resident.

The rural resident appears, rather, to value recreation experiences that offer opportunities for socialization. Small town summer fairs and rodeos, auction sales and Saturday evening shopping are important for their opportunities for people to meet people as much as for any business that may be accomplished. By the same token, activities such as hunting, snowmobiling and curling are group activities.

The group orientation of rural participation in recreation appears to carry over to summer activities. The appeal of water oriented recreation - a scarce opportunity for the majority of both rural and urban residents - may be a common value to both groups.

⁸ Ibid. pp. 9-16. Driver, Op. Cit., expands upon the theme of recreation as a means of alleviating stress. Gans, Op. Cit. appears to follow Slavson's ordering of the health benefits of recreation more closely than does Driver. The ordering of health benefits from recreation is not as important as the more general theme that a variety of health benefits accrue from recreational activity.

EDUCATIONAL VALUES:

A second value of recreation lies in its use as an educational tool.⁹ The education rationale in some respects duplicates means to achieve better physical and mental health. Recreation forms that encourage people to meet people are educational as well as beneficial to health. Recreational outlets also provide participants the opportunity to learn various arts and skills, to channel aggression into acceptable activities, to relate to other people with varying backgrounds and values, to learn to adapt to society.

Increasingly, the educational value of outdoor recreational facilities has been recognized. Church groups, Boy Scouts and other organizations explicitly use group-oriented outings as media for education. By the same token, the proliferation of nature trails, the use of interpretive guides, and the development of nature interpretation centers reflects a growing awareness of the role of recreation as education. Where recreation lands serve to protect natural phenomena for public use, some recreational forms serve to interrupt nature, or the environment, to increasing numbers of urban residents whose knowledge of environments other than urban is limited.

PLEASURE VALUE:

A third value attached to recreation is the value of pleasure.¹⁰ Perhaps the single most important motivation acknowledged by participants, pleasure is derived from any of the myriad of activities engaged in by participants. There may be any number of sociological, historical or psychological reasons for the participation in any specific activity. Yet the participation, either active or passive, must be pleasurable and enjoyable in order to maintain an interest in participating in the activity.

⁹ Driver, Op. Cit., Brinser, Op. Cit.

¹⁰ Brinser, Op. Cit., pp. 23-24.

VALUES AND ACTIVITIES:

The three rationales for recreation outlined above can be translated into three broad orientations of outdoor recreational activity. The orientations may be described as "association", "activity and change", and "retreat and rest". Activity centering on "association" are those activities that facilitate the association, regardless of motivation, of people with people. The need for association with people is common to both urban and rural populations. The scope of recreational activities participated in to satisfy the need for association could range from picnicing to a variety of sports activities.

Outdoor recreation focusing on "activity and change" would attract those whose primary recreational interest lies in participating in an activity.¹¹ In this context, the participant in water sports would partake in the activity for the enjoyment and the change in daily lifestyle the activity provides. Association with people may result but is not the primary motivation for involvement. The "activity and change" focus is common to both urban and rural populations. The recreational forms that could satisfy needs for activity and for change could range from group-oriented sports activities to activities such as hiking, riding or skiing which can be enjoyed by the single participant.

Outdoor recreational activities focusing on "retreat and rest" appear to cater to urban rather than to rural populations. "Retreat and rest" activities are oriented to the participation of one, two or three people whose objective it is to escape from pressure situations. The search for peace, quiet and a natural environment leads participants to look for recreational areas that will offer minimal human contact, and maximum solitude.

If the motivations and values attached to outdoor recreation are appreciated, and if it is understood how those values affect the focus of activity by participants, the provision of outdoor recreation space and facilities may be placed in a context of reflecting user needs.

¹¹ Driver, Op. Cit. p. 104.

To help satisfy those needs, outdoor recreation programs must define the space, site, activity and facilities required to satisfy those needs.

The relationship between values, foci of activities and recreation requirements may be diagrammed as shown below.¹²

Values	Foci of Activities	Recreation Requirement
Health and Welfare	Association	Space and Site
Education	Activity & Change	Activity
Pleasure	Retreat and Rest	Facilities

While the health, education and pleasure values of recreation may be held in common by all, the foci of activities reflect the recreational opportunities available, the lifestyle of the participants, and sub-cultural values held by various segments of the population. To supply appropriate recreational outlets, those lifestyles and sub-cultural values must be understood.¹³ In Winnipeg, for example, many forms of outdoor recreation appear very much to be values of middle and upper income groups.¹⁴ It may be posited as an untested hypothesis that for

¹² The approach followed is similar to that of Hendee and Burdge who developed a five order typology based upon interpretations of behavioral make-up. Their five-order typology consisted of cultural hobbies, organized competition, domestic maintenance, social leisure and outdoor activities. While Hendee and Burdge address the specturm of recreational activities and the degree of substitutability between them, the diagram shown relates to outdoor recreation and the process of choice or substitutability of outdoor recreational pursuits. See John C. Hendee and Robert J. Burdge, "The Substitutability Concept: Implications for Recreation Research and Management," Journal of Leisure Research, (Spring, 1974, Vol. 6, No. 3.) p.159.

¹³ Guggenheim, Op. Cit. p. 25.

¹⁴ See Chapter III below, Appendices I and II and their appropriate references.

any of a number of reasons, current recreational opportunities are essentially unused by the poor, the aged and by certain minority groups, because of lack of accessibility or because the opportunities provided are inappropriate to those potential users. If the opportunities are inappropriate, effort must be made to define the recreational needs of those groups and to develop facilities accordingly.¹⁵

The use of Birds Hill Provincial Park may illustrate the point. From the end of June to mid-September, Winnipeg operates a bus service from center Winnipeg to the Park. Scheduled hourly, and more frequently when required, the bus service is designed generally to provide access to the Park for those who have no other means of access. Financed by the City and the Province, the bus service in 1975 carried approximately 11,000 passengers. The majority of users embark in the centre City and the majority use the service on week-end days, weather permitting. Until 1975, passengers disembarked at the perimeter road within the Park and had to walk some distance to arrive at the swimming area. Currently under construction by the Province, a bus terminal near the swimming area will enable passengers of City and Charter buses to disembark near the more popular recreation outlets.¹⁶

Within Winnipeg's core area represented by the Centennial, St. Johns and Lord Selkirk Community Committee Areas lived in 1974, 130,551 people. The 11,000 bus passengers were concentrated in a twelve week period during the summer; approximately 918 passengers used the bus service each week. If it is assumed that 60% of the users were week-end passengers, then approximately 550 passengers used the bus each week-end, or 225 passengers each week-end day. Further, if it is assumed that 70% of the total number of passengers live in the core Community Committee Areas, then only about 158 residents of the core use the bus

¹⁵ See, for example, Brinser's article entitled "The Economics of Retirement" in Brinser, *Op. Cit.*

¹⁶ Interviews with D. Maday, Research Department, City of Winnipeg, and C.E. Laforme, Transit Operations, Winnipeg Transit System, January 29, 1976.

service to Birds Hill each week-end day. In the absence of an analysis of the users and non-users of the bus service, a number of hypothesis can be postulated to explain the low rate of use of the service. It may be postulated that core area residents do not know of the service; or of Birds Hill Provincial Park; that the service is too expensive for users, that users, especially the aged, do not wish or are not able to walk the long distance from disembarkation to intensive use areas; that recreation facilities provided at Birds Hill Provincial Park may not be the type of recreation facilities wanted by the majority of residents in the core area.

URBAN AND RURAL RECREATION

Many have documented the roles of increased leisure time, increasing disposable income and increased mobility in increasing the demand for recreation.¹⁷ The availability of facilities and time and distance considerations on the part of users preclude participation in some activities and encourage participation in others. The availability of nearby facilities serves to establish a pronounced dichotomy in the manner in which urban and rural residents participate in outdoor recreational activities.

The urban-rural dichotomy in recreation has been applied to Manitoba's population in Trent L. Good's "A Planning Analysis of Outdoor Recreation in the Winnipeg Regions."¹⁸ On the basis of a six order typology where orders were defined on the degree and pattern of communication, Good pointed out that Winnipeg residents participate most heavily in "familial", "small group" and "group" activities.

Familial activities were defined as those in which communications were diagonally or instinctively structured. Decisions are governed by social, psychological and biological needs. Examples of familial activities included picnicing, tenting, trailer camping, boating, cook-outs, restaurants and night clubs.

Small group activities are those in which communications tend to travel over pre-established lines. Decisions are often weighted by tradition and governed by social needs, predetermined rules, and psychological and biological requirements. Examples include team sports, contests, and ceremonies of various types.

¹⁷ Marion Clawson and Jack L. Knetsch, *Economics of Outdoor Recreation*. (Baltimore: John Hopkins Press, 1966,). p. 121.

¹⁸ Trent L. Good. "A Planning Analysis of Outdoor Recreation in the Winnipeg Region". Master's Thesis, University of Manitoba, 1970.

Group activities are those in which communications travel in all directions, but in which each individual is either the recipient or the sender at any one time. Decisions are defined by the policy of the social goals and policies determined by abstract and often economic mechanics. Examples include tours and sightseeing, libraries, radio, television, galleries and museums.¹⁹

Given the large proportion of Manitoba's population living in Winnipeg, a comparison of Good's typology between Winnipeg residents and the Manitoba population provides an insight into the recreational activities of rural Manitobans. Like urban residents, rural Manitobans emphasize familial activities. Small group and group activities, are however, not emphasized. Rather, rural Manitobans appear to favor activities in which decisions are made alone, or with one other person, or with the family.

Rural Manitobans appear to participate particularly heavily in "singular and individual activities". These are activities in which the participant makes all the decisions and is restrained only by the general environmental situation and his own survival. Examples of activities include sunbathing, swimming, fishing, hunting, trapping, riding, skiing, skating and snowmobiling. It is important to note that in the "singular and individual" order of activities, it is decision-making which is singular and individual, not the manner of participation. Fishing is sometimes a solo activity, but not always. Activities such as swimming, hunting and riding and others are normally carried out in the company of others, yet each participant makes his own decisions.

Rural Manitobans also participate more than do urban Manitobans in activities where decisions are made jointly with one other person. Such activities include hiking, canoeing, water skiing, climbing, boxing, dancing, tennis, handball and squash.²⁰

The dichotomy in urban and rural recreation activities reflects at least to some extent, the availability of opportunities. Facilities for "group" and "mass" activities are often not available in smaller communities. In urban areas, on the other hand, opportunities for hunting, fishing, or snowmobiling are not as available as in rural areas.

¹⁹ Ibid., p. 74.

²⁰ Ibid.

A closer examination of Good's typology suggests, however, that while the manner in which decisions are made may be a useful means of classifying recreational activities, that classification must be used cautiously if one wishes to define recreation participation patterns of urban and rural residents. Except in the case of "mass activities" which are almost solely available to and used by urban populations, both rural and urban residents participate to a greater or lesser degree in activities where decisions are made individually, in tandem, in the family, by the small group, and by the group. By organizing activities by the decision making process inherent in the activity, heavy participation in one activity in a single class can weight participation in that class of activities in favour of urban or rural residents. Participation in hockey, a "small group" activity important to rural populations, is weighted in favour of urban residents because of hockey's association with other team sports, and activities such as contests, tournaments and ceremonies which are more typically urban than rural. By the same token "individual" activities such as swimming, hiking, and canoeing are weighted in favour of rural populations because those activities, significant recreational outlets to large numbers of urban residents, are classed with fishing, hunting and snowmobiling, significant recreational outlets for rural populations.

To help differentiate between urban and rural forms of outdoor recreation, it is helpful to be aware of the mythology surrounding urban and rural environments and lifestyles. In North America, the city has traditionally been perceived as something of an aberration, as evil, as undesirable. Rural life on the other hand was regarded as wholesome, uncorrupt, virtuous and the fountain of (Jeffersonian) democracy. Since the beginning of the Nineteenth Century, with the development of the Garden City movement, certain streams of urban thought have sought to incorporate the rural into the urban.²¹ The impersonality of the city, its anomie, its pressures and tensions fed the myth surrounding rural life and encouraged the articulation of demand for green space, open space, and green belts. Subsequently, some urban outdoor recreation

²¹ Guggenheim, *Op. Cit.*, p. 23. Also, Rachel Alterman, "The Intervention of Values in the Planning Process". Master's Thesis, University of Manitoba, 1970.

forms - hiking, canoeing, sightseeing, camping - developed to facilitate escape from the evils of the city.

CHAPTER III

THE ASSINIBOINE RIVER
PUBLIC OUTDOOR RECREATION OPPORTUNITY

CHAPTER III

THE ASSINIBOINE RIVER: PUBLIC OUTDOOR RECREATION OPPORTUNITY

I. PROVISION OF PUBLIC OUTDOOR RECREATION OPPORTUNITY:

In Manitoba, jurisdiction for the provision of outdoor recreational opportunity devolves upon specific Provincial and Municipal departments of government. Broadly, the Provincial interest in outdoor recreation is to provide opportunities that have significance to the Province generally, or to a particular region of the Province. Municipal government, on the other hand, is concerned broadly with the provision of opportunity to local residents to satisfy local needs.

The Provincial administration of outdoor recreation opportunity centers upon the Parks Branch of the Department of Tourism, Recreation and Cultural Affairs. The Parks Branch administers those Crown lands which are specifically designated as Park lands - Provincial Parks, Provincial Recreation Areas, Wayside Parks, etc. The Department of Renewable Resources and Transportation Services, through the Crown Lands Branch and the Land Utilization Board, acquires lands for recreation purposes. The Branch and Board also facilitate the acquisition of lands to be designated as wildlife lands. Once designated, wildlife lands are administered under Wildlife Programs, Extension Services Branch, Department of Renewable Resources and Transportation Services.

Municipal outdoor recreation opportunities are administered under a variety of parks and recreation departments and committees of municipal government. For the most part, urban municipalities have felt it necessary to undertake the provision of outdoor recreation opportunity. Rural municipalities have infrequently undertaken, on their own account, to provide such opportunity. Rather, municipal

government has, in some cases, zoned land for recreational activity and, in other cases, assisted service clubs in providing facilities.

A) PROVINCE OF MANITOBA

PARKS BRANCH, DEPARTMENT OF TOURISM, RECREATION AND CULTURAL AFFAIRS.

Three provincial parks have been developed, or are under development, along the Assiniboine River. Spruce Woods Provincial Park, opened to the public in 1970, was the first park to be established in southwest Manitoba since 1962. The 90.1 square mile park incorporates within it part of the Carberry Desert and an extensive area of undulating vegetated dune sand. Recreational facilities development have been limited to the environs of the Kiche Manitou campground where swimming is available and from which access to the rest of the Park is possible. Trail systems have been developed for hiking, horseback riding, snowmobiling and cross-country skiing enthusiasts.

Asissippi Provincial Park opened to the public in 1972, focuses on the water-oriented recreation possibilities made available with the construction of the Shellmouth Dam and the filling of its reservoir, Lake of the Prairies. Asissippi Provincial Park has a beach, is being developed as a pleasure boating area and will provide a wide range of water-oriented activities otherwise not available in western Manitoba and eastern Saskatchewan. Asissippi Provincial Park is nine square miles in area. Development of outdoor recreation facilities at Asissippi Provincial Park takes place within the context of a major water body whose adjacent lands are all under Crown ownership. As will be pointed out below, a wide variety of land and water based recreational developments are and will be undertaken on these Crown lands but outside the Provincial Park.

Beaudry Provincial Park, not yet opened to the public; is located adjacent to the Assiniboine River immediately west of the Headingly Correctional Institute. Straddling the River, the Park is comprised of a major riverbottom forest designated as an International Biological Program (IBP)¹ site and riverbank along both sides of the

¹ G.H. LaRei and T.A. Babb, Canadian National Directory of IBP Areas, 1968-1974. Edmonton:University of Alberta Printing Services, 1974., p. 11.

River eastward to the Headingly Correctional Institute. Access to the riverbottom forest will be limited, but development plans for the remainder of the park have not been defined.²

Besides the three Provincial Parks, the Parks Branch administers one Provincial Recreation Area (at Norquay Beach), and three Wayside Parks (at Portage la Prairie, Grand Valley and Miniota) along the Assiniboine River.

DEPARTMENT OF RENEWABLE RESOURCES AND TRANSPORTATION SERVICES.

Since 1973, land acquisition for a wide variety of outdoor recreational purposes has been coordinated by the Land Utilization Board of the Department of Renewable Resources and Transportation Services. During the 1973-1974 fiscal year, the Land Utilization Board authorized the acquisition of 1,629.17 acres adjacent to the Assiniboine River Valley by the Resources For Tomorrow and the Alternate Land Use Programs. During 1974-1975, an additional 573.87 acres of land was acquired. Most lands acquired are located between the Assiniboine River and the Camp Shilo Military Reserve. At this time, all acquired lands have had a wildlife reservation placed against the property. It is expected that most acquired lands will eventually be designated as Wildlife Management Areas. Crown lands adjacent to the Lake of the Prairies also have a wildlife designation. Once designated, Wildlife Management Areas will be administered by the Western Region of the Department. To date there are no designated Wildlife Management Areas along the Assiniboine River Valley.

² Interview with Wayne Schick, Regional Planner, Western Region, Department of Tourism, Recreation and Cultural Affairs, September 26, 1975.

B) RURAL MUNICIPALITIES

Westward from the City of Winnipeg, the Assiniboine River traverses through nineteen Rural Municipalities and through or adjacent to the cities of Brandon and Portage la Prairie. Rural Municipalities and cities adjacent to the River perceive varying degrees of usefulness of the Assiniboine River as a recreation area. Where Rural Municipalities have adopted Municipal Planning Schemes, the Assiniboine River and its adjacent lands have acquired some degree of protection from unwanted development. The protection of the River and its shoreline for recreation purposes has been a side-benefit to municipal zoning regulations.

Municipal Zoning Regulations appear to have been motivated by three factors. First, zoning has been adopted by some municipalities to regulate non-farm residential construction as a means of limiting the need to expand municipal services. Second, zoning has been applied to limit new construction in flood plain areas. Third, municipalities must adopt Municipal Planning Schemes before the Province turns over designated reservoir area lands for administration by municipalities.

Not all Rural Municipalities along the Assiniboine River have adopted zoning regulations to control the use of land along the Assiniboine River. Where such regulations are not in effect, regulation of land use along the Assiniboine River could be achieved through easements or through land acquisition.

Municipal zoning, land easements and land acquisition are three means of acquiring public control of land use to permit or encourage recreational activity. Each has its own advantages and disadvantages; each means may be preferred in order to accommodate certain types of recreational activity.

RURAL MUNICIPALITY OF ST. FRANCOIS XAVIER.

Municipal zoning regulations in the Rural Municipality of St. Francois Xavier are governed by Municipal By-law No. 784, dated March 6, 1975.³ In accordance with the By-law, by which means the

³ Municipal Planning Branch, Department of Municipal Affairs, Rural Municipality of St. Francois Xavier: Planning Scheme, 1973.

Municipality accepted the 1973 Planning Scheme, all lands being between Provincial Trunk Highway 26 and the Assiniboine River are zoned "A5" or "Agricultural Limited Development District". Lands within this designation may be used for agricultural purposes not considered to be offensive because of odour, dust and noise. Single family residences are allowed on five acre parcels. Within this designated area, the Municipality may, at its discretion and subject to a Performance Agreement with the Municipality, allow certain "conditional" uses. Conditional uses include the development of parks, playgrounds and recreational centres owned or approved by the Municipality.

Lands lying immediately adjacent to the Assiniboine River are subject to two Municipal policies adopted in By-law No. 784. First, the Water Resources Branch, Manitoba Department of Mines, Resources and Environmental Management, must approve the construction of any proposed structure to be built within 350 feet of the bank along straight portions of the Assiniboine River or within 800 feet of the bank on the outside bends of the river.

Second, a Shoreline Public Reserve along the Assiniboine River and other waterways in the municipality will be provided for by means of dedication when applications for plans of subdivision are submitted to the Municipality.

RURAL MUNICIPALITY OF CARTIER

Zoning regulations within the Rural Municipality of Cartier are defined in its 1966 Planning Scheme as adopted by the Municipality in By-law No. 652, dated April 10, 1967.⁴

In accordance with By-law No. 652, minimum site size on all river lots adjacent to the Assiniboine River is set at one acre. Agricultural uses not offensive to "the public welfare" are permitted on such sites. One-family dwellings are allowed on one-acre sites with a minimum width of 150 feet.

⁴ Municipal Planning Branch, Department of Municipal Affairs, Rural Municipality of Cartier: Planning Scheme, 1966.

RURAL MUNICIPALITY OF PORTAGE LA PRAIRIE

In cooperation with the Municipal Planning Branch, Manitoba Department of Municipal Affairs, the Rural Municipality of Portage la Prairie is developing land use zoning regulations.⁵ The regulations have not yet been adopted by the Municipality.

Should the Municipality adopt the substance of recommendations presented in draft form to the Rural Portage District Advisory Planning Commission, the Municipality will adopt a number of policies relating to land use adjacent to the Assiniboine River and the Portage Reservoir.

Draft recommendations governing land use adjacent to the Portage Reservoir suggest that the recreational activities the Municipality will permit will be limited to a variety of trail systems. Boating and any other activity that could interfere with Portage la Prairie's water supply would not be allowed. It is proposed that picnicking also not be allowed adjacent to the Reservoir. Southeast of the Reservoir, the Portage Sandhills is an area recommended for recreational development.

Flood-prone lands adjacent to the Assiniboine River will be limited to agricultural use only. New residential construction in flood-prone meander loops will be prohibited.

RURAL MUNICIPALITY OF SOUTH CYPRESS

A Planning Scheme developed in 1970 was adopted by the Rural Municipality of South Cypress in By-law No. 1258, dated April 13, 1972.⁶ The purpose of the Scheme is to regulate land use along Provincial Road 258 between Glenboro and Spruce Woods Provincial Park. The block of territory covered by the Planning Scheme is zoned as "A40", where minimum site size is set at forty acres. Within the zoned land, the Municipality may approve "conditional" recreational uses. Such uses include wildlife and forest management areas, hunting and fishing reserves, hunting, fishing and boating clubs, and trailer parks and campsites.

⁵ Interview with W. McMillan, Secretary-Treasurer, Rural Municipality of Portage la Prairie, August 29, 1975.

⁶ Municipal Planning Branch, Department of Municipal Affairs, The Cypress District Planning Scheme, 1971

RURAL MUNICIPALITY OF CORNWALLIS

The Rural Municipality of Cornwallis and the Municipal Planning Branch, Manitoba Department of Municipal Affairs have been developing a Planning Scheme for the Municipality. Initial proposals to zone the Assiniboine River valley as a "Conservation Area" with limitations placed upon non-agricultural development have been protested by all Assiniboine River landowners. As a result, the Conservation Area designation will be withdrawn. In its place, the Assiniboine River Valley will be zoned as "A160" where minimum holdings will be set at 160 acres and will be designated as agricultural.⁷

RURAL MUNICIPALITIES OF SHELLMOUTH, SHELL RIVER AND THE TOWN OF ROBLIN

The Rural Municipalities of Shellmouth and Shell River and the Town of Roblin have established a common planning commission that is responsible to Councils for the planned development of lands adjacent to the Shellmouth Dam and its reservoir, Lake of the Prairies. As a guideline the Planning Commission has followed, and is expected to continue adhering to, the land use recommendations presented in the 1967 Shellmouth Reservoir Study.

The Planning Commission works closely with the Parks Branch, Manitoba Department of Tourism, Recreation and Cultural Affairs which has partial jurisdiction over Crown lands adjacent to the dam and reservoir. All proposed developments must be approved by the Water Resources Branch, Department of Mines, Resources and Environmental Management.

To date, the Planning Commission has been primarily concerned with use of the lands adjacent to Lake of the Prairies. Since lands adjacent to the Lake are Crown owned, the Planning Commission has undertaken not so much a broad-scale land use zoning role but a site-specific land development role. To date, the Planning Commission has not defined land use development guidelines for lands adjacent to the Assiniboine River downstream from the Shellmouth Dam.⁸

⁷ Interview with P.G. Marsden, Reeve, Rural Municipality of Cornwallis, August 11, 1975.

⁸ Interview with W. Boughton, Chairman, Planning Commission, August 21, 1975.

SUMMARY

As a means of regulating land use adjacent to the Assiniboine River, municipal zoning may be advantageously used to provide for recreational use along the river. The extent to which recreation use may be provided for depends upon the purposes of the Municipal Planning Schemes and the type of recreational use desired along a particular stretch of the river. Zoning regulations in the Rural Municipality of St. Francois Xavier provide for the dedication of riverbank property when applications are made for residential subdivisions. Such narrow strips of public land do provide a buffer between the river and urban development areas.

Municipal Planning Schemes and their attendant land use zoning regulations apply to privately owned lands. The use of Crown lands lies beyond the scope of municipal zoning regulations although local planning boards and commissions may take an active role in development programs on Crown lands lying within designated Reservoir areas.

Rural Municipalities with Planning Schemes have generally zoned Assiniboine River Valley lands as agricultural land. On these lands most agricultural pursuits are allowed; most forms of urban land use are prohibited. Generally, lands along the Assiniboine River are not specifically zoned for recreational purposes although some recreational land use forms can, under certain conditions, be located on zoned agricultural lands.

Where river valley lands are zoned as agricultural, land use regulations do not specify land management practices or techniques. No land use regulation controls clearing of bush immediately adjacent to the Assiniboine River. No land use regulation governs the use of riverbank. Except in the case of the Rural Municipality of St. Francois Xavier, no land use regulation provides for public access to and use of the Assiniboine River and its adjacent lands.

Zoning regulations adopted by the Rural Municipality of St. Francois Xavier do provide for public use of riverbank lands where applications are made to subdivide property for residential developments. By means of land dedication, the Municipality has determined that the Assiniboine River adjacent to residential areas will be made available

to the public. In the case of land dedication, public access to and the use of the River and its adjacent land may be achieved with no direct investment by the public.

Other municipalities along the Assiniboine River not subject to considerable suburban pressure do not have provisions for land dedication. In these cases, the provision of present and future recreation lands may be more appropriately acquired through land easements or through land acquisition.

On January 1, 1974, a new Planning Act succeeded the former Municipal Planning Act. All existing Planning Schemes adopted by municipalities under the former Act will be honoured in the new. Of special interest to recreation lands acquisition and development programs, however, is a provision in the Planning Act for the creation of Special Planning Areas. Special Planning Areas are defined as those areas which possess features of a regional or provincial importance such that responsibility for planning and development of the Areas becomes a Provincial jurisdiction. No size limitations have been placed upon Special Planning Areas although municipal cooperation in defining the extent of such areas may provide size limitations. Upon definition, Special Planning Areas enable the Crown to exercise to a larger degree of control over land use in the areas, than is now possible, without acquiring the lands.⁹

c) URBAN MUNICIPALITIES

The Assiniboine River flows through or adjacent to three major urban municipalities - Winnipeg, Portage la Prairie and Brandon.

WINNIPEG

Within the City of Winnipeg, two levels of municipal government are responsible for the provisions of outdoor recreation opportunity. At the local level, each of Winnipeg's Community Committee Areas is

⁹ Interview with J. Friesen, Municipal Planning Branch, Department of Municipal Affairs, January 30, 1976.

responsible for maintaining recreation lands and facilities that cater essentially to local recreation needs. Under this criterion, Community Committee Areas maintain smaller parks, tot lots, and community clubs.

To provide for the recreational requirements of the Winnipeg population generally, the Parks and Protection Division is given the authority to acquire, develop and maintain outdoor recreation lands and facilities. Along the Assiniboine River the Parks and Protection Division is responsible for Westdale, Sturgeon Creek, Assiniboine and Bonnycastle Parks. The Parks and Protection Division also administers a riverbank acquisition fund of \$500,000 annually.¹⁰

In suburban Winnipeg where urban development has not yet taken place along the Assiniboine River, the City of Winnipeg has adopted zoning and land dedication by-laws which seek to ensure that public access to the Assiniboine River is possible at least at certain points. Where lands bordering the Assiniboine River are eligible for sub-division development, 10% of the sub-division development area must be "dedicated" to parkland. Where the sub-division is located adjacent to the Assiniboine River, the land dedicated is to be adjacent to the River.¹¹

PORTAGE LA PRAIRIE

The Assiniboine River forms part of the southern boundary of the City of Portage la Prairie. The City has not to date sought to develop public recreation opportunity on lands adjacent to the Assiniboine River. An oxbow of the Assiniboine River, Crescent Lake, is completely within the City boundaries and is the focus of attention for the promotion of recreational opportunity by the City. The outer shoreline of the lake is publicly owned but the shoreline area is too narrow to accommodate recreational use.¹² Within the oxbow, the City has

¹⁰ Interview with D.L. Vopnfjord, Planning Department, City of Winnipeg, May 20, 1975.

¹¹ Interview with J. Reese, Planning Department, City of Winnipeg, May 20, 1975.

¹² Interview with Wayne Luchik, Recreation Director, City of Portage la Prairie, July 15, 1975.

developed Island Park as an intensive day-use area. The City has committed itself to buying privately owned land within the oxbow, as land comes up for sale, to accommodate increasing use of Island Park.¹³

BRANDON

Most of the flood plain of the Assiniboine River in the City of Brandon is owned by the City. As the few privately owned parcels of land come up for sale, the City is planning on buying the land. The entire flood plain is zoned as recreation land. Facilities development is being undertaken by the West-Bran Work Activity Project. The City's Parks and Recreation Department assumes the responsibility for maintaining facilities as they are developed.¹⁴

¹³ Interview with Victor Brown, Director, Parks and Recreation Department, City of Brandon, August 10, 1975.

¹⁴ Appendix I.

II. VISITORS TO PUBLIC OUTDOOR RECREATION OPPORTUNITIES

One aspect of the rationale for providing for increased investment in outdoor recreation opportunity is an acknowledgement that recreational use may be increasing at such a rate that a shortage develops in the supply of recreational opportunity and/or existing recreational opportunity is used to such an extent that the recreational experience deteriorates. As such, then, a recreational lands acquisition program is partly based upon assumptions of a quality experience. Undefined as the term ultimately is, the quality of a recreational experience is frequently defined in terms of the impact of numbers of people upon the appreciation of the activity.

In order to provide guidance to the possible need for the acquisition of recreation space and the development of facilities, a review of the characteristics of recreation use and recreation users is necessary. Attendance statistics provide the data base by which to gauge the extent of recreational use. To a limited extent, attendance statistics may also provide a guide to the quality of certain recreational experiences.

A detailed and documented analysis of the use of public recreation opportunity along the Assiniboine River can be found in Appendix I of this Practicum. A similar analysis of recreation users can be found in Appendix II. The highlights of the analysis are described below.

First, total vehicle attendance at Provincial recreation areas is increasing and is expected to continue increasing into the near future. Campgrounds adjacent to the Assiniboine River provide approximately 30% of the opportunity used in the Western region of the Department of Tourism, Recreation and Cultural Affairs. During the last few years, the share of the Assiniboine River campgrounds of the Western Region camping market has steadily declined albeit at a slow rate. The use

of campgrounds elsewhere in the Western Region is increasing at a faster rate than the use of those along the Assiniboine River.

In recent years, campground facilities at Norquay Beach Provincial Recreation Area, Spruce Woods and Grand Valley have shown a recent history of increasing use of overflow camping areas. Except for the use of Asissippi Provincial Park, the use of Provincial Recreation Areas along the Assiniboine River by Manitobans is dominated by residents of Winnipeg. Generally, the average length of stay of users of Provincial campgrounds is increasing. Swimming, walking/hiking and picnicing appear to be the major foci of day-use activities.

The use of public outdoor recreation opportunity is dominated by middle and upper-middle income Winnipeggers. The analysis in Appendix II points out that as distance from Winnipeg increases, the average income of participants increases accordingly. The camping experience itself is a middle income phenomenon with the majority of users having family incomes within a range of \$2,000 of the median family income in Winnipeg. The users of Provincial Recreation Areas are concentrated in the 20 to 54 year age brackets.

Other than lands administered by the Department of Tourism, Recreation and Cultural Affairs, lands designated as wildlife lands and administered by the Department of Renewable Resources and Transportation Services are receiving increasing use. As pointed out in Appendix II, such lands are being increasingly used to provide for a variety of educational pursuits. Sponsored by schools and by private organizations, those pursuits range from outdoor field trips in biology and geography to experiences in outdoor survival to appreciation of the natural environment.

Appendix II also points out that the users of public outdoor recreation opportunity in the City of Winnipeg and in the Western Region of the Department of Tourism, Recreation and Cultural Affairs belong to the same socio-economic spectra of Winnipeg society. Most users of larger city parks drive to the parks since they are located in suburban parts of the City. The majority of users of major city parks live within four miles of the parks and the core-area population appears to make little use of the major outdoor recreation areas. The majority of users of large city parks are found in the 20 to 59 year

age brackets. Relatively few users of city parks are older than 65 years. The number of visitors to Assiniboine Park appears not to be increasing. The number of games played at Municipal Golf Courses is increasing slowly although much of that increase is concentrated on western Winnipeg golf courses.¹⁵ Two aspects of the user analysis described in Appendix II however, deserve consideration here. These aspects relate to the ownership of recreational equipment by the poor and to the travel habits of the elderly.

Winnipeg families earning less than \$5,999 accounted for 34.4% of the sample population surveyed. Except as owners of motorcycles, recreational equipment owners earning less than \$5,999 are underrepresented relative to their proportion of Winnipeg's population.¹⁶ An indeterminate number of students and housewives whose lack of income placed them in this income category, would reduce somewhat the number of wage earners represented in the \$0 to \$5,999 income group. Students, however, were revealed by the survey to be significant owners of motorcycles, snowskis and golf clubs.¹⁷ In the \$0 - \$5,999 income bracket, students possess all the canoes, more than 50% of camper trucks, almost half of the fishing equipment, and one-third of the automobiles possessed by those earning less than \$5,999. If students are excused from this low income category, the remaining low income representatives are shown as possessing a very limited supply of outdoor recreation equipment.

While participation in outdoor recreation activities and possession of equipment is more typical of those earning above the average income than below, participation in activities is also restricted to particular age groups. Nearly half are retired people aged 65-69

¹⁵ Appendix I.

¹⁶ Manitoba Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch, The Winnipeg Recreation and Travel Survey, 1972, p. 51.

¹⁷ Ibid., p. 53.

spend all their summers in Winnipeg, and do not travel outside the city. Over sixty percent (62.8%) of those over 70 years of age do not leave the city in summer.¹⁸ During the winter, over 90% of those over 55 years do not leave the city.¹⁹ Generally, approximately 30% of the respondents spend fewer than five days outside Winnipeg during the summer.²⁰

Patterns and trend of recreational equipment ownership provide for purposes of this Practicum, insight into characteristics of recreation participation that have more direct implications upon recreation development than do age occupation and income analysis of users. As a reflection of income, the relationships between occupations and possession of outdoor recreation equipment revealed that "Professional/Technical", "Manager/Official/Proprietor", and "White-collar/Clerical/Sales/Military" people were the most likely to own recreational equipment. Occupations of males over 18 years of age were analyzed and indexed for their propensity to own recreational equipment. The results are shown on the following page.

¹⁸ Ibid., p. 21.

¹⁹ Ibid., p. 22.

²⁰ Ibid., p. 21.

TABLE I OCCUPATION AND PROPENSITY TO OWN RECREATIONAL EQUIPMENT²¹

Occupation	Index of Ownership*	Equipment Owned
Student	0.78	Golf, Motorcycles, Snowskis.
Professional/Technical	1.57	Snowmobiles, watercraft and water skis; all categories of equipment except motorcycles.
Managers/Proprietors	1.52	Golf; all others to a lesser extent.
White-collar/Clerical/ Sales/Military.	1.42	Snowmobiles, cottages, camping equipment.
Blue-collar/Craftsmen/ Foremen	0.95	Snowmobiles, hunting equipment.
Laborer-includes farm	0.80	Hunting equipment, tents and trailers.
Service Workers	1.07	Cottages.
Retired	0.34	Underrepresented in all; cottages important.
Unemployed	0.11	

* As described in the Winnipeg Recreation and Travel Survey, the index of ownership was developed from a computer model relating equipment ownership to occupation. The index of ownership itself describes the propensity of occupation groups to own equipment relative to other occupation groups. For example, professional/technical and manager/proprietor occupation groups are twice as likely to own recreational equipment as students. Equipment owned lists equipment types owned by occupational groups in excess of the proportion of the Winnipeg population comprising that group. For example, managers and proprietors own all types of equipment, but most particularly golf equipment, in excess of the proportion of managers and proprietors to the Winnipeg population.

In spite of the vagueness of some of the descriptions of occupations, it is readily apparent that ownership of recreational equipment is a function of income. The geographic distribution of equipment is outlined in the table following.

²¹ Ibid. p. 54.

TABLE II DISTRIBUTION OF RECREATION EQUIPMENT OWNERS, BY
COMMUNITY COMMITTEE AREA²²

Community Area	Index
Above Average	
Fort Rouge	1.43
St. Vital	1.32
Average	
St. Boniface	1.11
Transcona	1.09
Assiniboine Park	1.08
St. James-Assiniboia	1.00
East Kildonan	.96
Midland	.94
Fort Garry	.88
Below Average	
West Kildonan	.82
Centennial	.80
St. Johns	.73
Lord Selkirk	.73

While the relationship of recreation equipment to income and occupation throws light on the distribution of recreation equipment, the numbers of people who own particular types of equipment is relatively small. Based upon a Winnipeg population of 542,000, the survey estimated the numbers of owners aged 18 and under, of types of recreation equipment.

²² Ibid. p. 56a.

TABLE III ACCESSIBILITY TO RECREATIONAL EQUIPMENT, 1970²³

Equipment	Own	Have Use of	TOTAL
Automobile	166,000	97,000	263,000
Motorcycle	7,400	4,700	12,100
Snowmobile	8,000	22,800	30,800
Motorboat	19,000	45,000	64,000
Sailboat	2,000	4,700	6,700
Canoe	8,500	19,300	27,800
Other Boat	8,300	13,000	21,300
Water Skis	11,400	22,500	33,900
Snow Skis	25,800	7,000	32,800
Hunting Equipment	54,500	10,300	64,800
Fishing Equipment	125,900	62,500	188,400
Golf Clubs	62,900	16,700	79,600
Tent	31,000	72,200	103,200
Tent Trailer	11,900	41,000	52,900
Camper Truck	3,100	6,300	9,400
Cottage	19,000	-	-

A survey of anticipated equipment ownership during the five-year period 1971 to 1976 revealed that ownership of canoes, camper trucks, snowmobiles and motorcycles was expected to increase at an extremely rapid rate. Table IV following, outlines the expected growth rates in the ownership of particular types of recreational equipment from 1971 to 1976. An extrapolation of these growth rates provides an estimate of the numbers of owners of types of recreational equipment in 1980.

Except in the case of automobile ownership, where vehicle registration suggests that the estimate of 211,000 owners in Winnipeg is quite accurate, it is difficult if not impossible to know, at this time, whether the "Estimated Numbers of Owners" in 1976 closely represents the actual owners in 1976. Recent trends in equipment sales suggests that the most rapid areas of growth are in the sales of motorcycles, camper trucks, cross-country skis, and bicycles. Snowmobile ownership, though still increasing is not increasing at the rate indicated in Table IV. Ownership of canoes may be increasing more slowly than indicated.

²³ Ibid., p. 45.

TABLE IV ANTICIPATED OWNERSHIP OF RECREATIONAL EQUIPMENT, 1976-1980²⁴

Equipment	Percentage Increase in Ownership 1971-1976	Annual Rate of Increase	Estimated Numbers of Owners 1976	Estimated Number of Owners 1980
Automobile	27%	5%	211,000	256,472
Motorcycle	231%	27%	24,000	62,433
Snowmobile	367%	36%	37,000	126,778
Motorboat	142%	20%	46,000	95,386
Sailboat	138%	19%	5,000	10,046
Canoe	388%	37%	41,000	144,431
Other Boats	50%	9%	12,000	16,839
Water Skis	176%	23%	31,000	70,955
Snow Skis	114%	16%	55,000	99,583
Hunting Equipment	20%	4%	65,000	76,041
Fishing Equipment	28%	5%	161,000	195,297
Golf Clubs	40%	7%	88,000	115,350
Tent	117%	17%	67,000	125,549
Tent Trailer	120%	17%	26,000	48,710
Camper Truck	380%	37%	15,000	49,842
Cottage	110%	16%	40,000	72,435

Sales in recent years on off-road motorcycles have boomed and are continuing to boom. Off-road motorcycles include both dual purpose (road and off-road) motorcycles and mini-bikes. The increasing numbers of off-road motorcycles -- estimated to number somewhere around 35,000 in Winnipeg²⁵ -- have made it more difficult for users to find suitable sites for both racing and trail riding. One retailer indicated that he felt that organized clubs in Winnipeg will, within the near future, appeal to the Crown to provide appropriate land for use by off-road motorcyclists.²⁶

If the 35,000 estimated off-road motorcycles in Winnipeg is reasonably accurate, indications are that the ownership of motorcycles is expanding more rapidly than the ownership survey in Table IV suggests.

²⁴ Ibid., pp. 62-63.

²⁵ Interview with T. Geddes, Fun N Fast Limited, November 12, 1975.

²⁶ Ibid.

Sales of bicycles, snowshoes and cross-country skis are, apparently, still booming. Sales of cross-country skis are continuing at a high level and one equipment retailer did not expect sales to level off or decline during the next few years. Bicycle sales are also high. Sales of packpacking equipment -- boots, tents, sleeping bags, etc. -- are increasing but at a much slower rate than sales of bicycles, and cross-country skis.²⁷

After a two-year slump (1973-1974), sales of snowmobiles in 1975 are strong and are expected to show substantial improvement. The slump in snowmobile sales during the winters of 1972-1973 and 1973-1974 reflected one primary factor -- poor snow conditions in both years. After the 1971-1972 snowmobile season, the accumulation of large inventories, the inability of many companies to finance those inventories, and the failure of some companies to adhere to Canadian and American legislation to reduce snowmobile noise levels has effected a general reorganization and restructuring of the snowmobile industry. Since 1971, the snowmobile industry has been reduced from 78 manufacturing firms to seven major firms in 1975.²⁸ One official indicated that, given the availability of snow, snowmobile sales should continue to increase during the foreseeable future. One factor in the sales picture has been the recent trend for farmers -- the major snowmobile market -- to receive advance Wheat Board payments in December and January. He also indicated that the sales of used snowmobiles was equally as strong as the sale of new units.²⁹

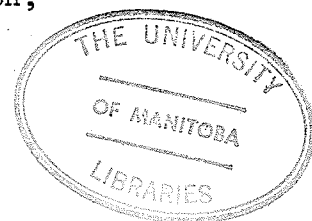
Trailer sales are also continuing to increase, the greatest increase occurring in the sale of self-contained camping units. Larger trailers appear to be preferred over the smaller. Sales have not, apparently, been affected by increasing gasoline and travel costs, but owners are not travelling as far as they used to.³⁰ Motorhomes, camper

²⁷ Interview with L. Wilson, Fresh Air Experience, November 12, 1975.

²⁸ Interview with J. Fields, Brooks Equipment, November 12, 1975.

²⁹ Ibid.

³⁰ Interview with J. Sawtus, Recreational Vehicle Association, November 11, 1975.



trucks and other self-contained camping units are selling well and the expectation is to see increasing sales of self-contained camping units during the next five years.³¹

Sales of water sports equipment are increasing but more slowly than the sales of other outdoor recreational equipment. Sales of water skis are increasing, but at a slow rate. Sales of motorboats and out-board motors are steady. One retailer of water sports equipment felt that the market for water sports equipment, though affected by inflation and experiencing a slight depression in 1974, is relatively stable. He did note, however, that farmers are becoming significantly more important as buyers of motorboats and other water sports equipment. During the past two to three years, sales of small cruisers have increased noticeably, a response to inflation according to one spokesman.³²

Sales of canoes during the past four years appear to be erratic and it is difficult to form an impression of canoe sales. Firms that sell a large number of canoes appear to be experiencing continued growth; firms that sell fewer canoes and stock canoes as part of a recreational equipment inventory appear to have experienced a decline in canoe sales.³³ Possibly, those firms that specialize in canoes are capturing the canoe market from less specialized firms. Spokesmen from both the specialized and general retail outlets suggest, however, that canoes are faddish and that the long-term future market for canoes may be limited. Nevertheless, in the near future, canoe sales may be expected to increase but at a slower rate than in the past few years.

³¹ Ibid.

³² Interview with R. Jorstad, Riverside Marina Ltd., November 11, 1975.

³³ Ibid., Geddes, Op. Cit.

CHAPTER IV

THE ASSINIBOINE RIVER:
GUIDELINES FOR THE ACQUISITION OF LAND
AND THE DEVELOPMENT OF FACILITIES
FOR PUBLIC OUTDOOR RECREATION

CHAPTER IV

THE ASSINIBOINE RIVER: GUIDELINES FOR THE ACQUISITION OF LAND AND THE DEVELOPMENT OF FACILITIES FOR PUBLIC OUTDOOR RECREATION

INTRODUCTION:

Chapters II and III above, provide theoretical and practical bases for increasing the supply of outdoor recreation opportunity along the Assiniboine River. The significance of outdoor recreation as a means of satisfying users' health, education and pleasure values and as opportunity to provide for association with people, activity and change, and rest and retreat, is outlined in Chapter II. The argument is made that an understanding of the value motivations of recreationists is necessary in order to provide for a range of recreational opportunities. Chapter II also describes the involvement of various levels of government in providing recreation land along the Assiniboine River. All of the impetus for providing public recreation opportunity has been undertaken by Provincial and Urban governments. Rural Municipal governments for the most part have not undertaken to provide for recreational opportunity although rural planning commissions have acknowledged the suitability of recreational development in certain cases. The new Municipal Planning Act permits all existing Planning Schemes to remain operative. The Act also provides for the designation of special planning areas which may be a tool for greater Provincial control of recreation areas without resorting to extensive land acquisition programs.

The use and characteristics of users of Provincial Recreation lands is outlined in Chapter III and explored in greater detail in

Appendices I and II. The use of recreational lands along the Assiniboine River is increasing but at a lower rate than is general throughout the Western Region of the Department of Tourism, Recreation and Cultural Affairs. Analysis of use statistics indicate that there is need for more campground facilities and that the use of Crown lands for a variety of educational purposes is increasing dramatically. For terms of activities, the greatest growth trends appear to be taking place in trail-oriented activities. Such activities provide opportunity for a variety of health, educational and pleasure values. If any large-scale trend in recreation use is discernible, it might be that there is rapidly increasing use of recreational lands that have little or only moderate development.

Analysis of users indicates that users of both urban and Provincial parks tend to fall within the same age, occupation and income classes. Incomes of users increase sharply as the distance from Winnipeg increases. Equipment ownership tends to be concentrated in the middle and upper-middle income brackets. Because of this concentration, and, correspondingly, because the vast majority of users of urban and provincial park systems come from the middle income groups, the development of recreational opportunity has tended to reflect a pronounced middle-class value system. To help overcome this bias and provide a range of recreational opportunity to lower income groups, recreational policy must acknowledge and act upon the recreational preferences of those groups.

The values of recreation and analyses of the use and of the users of outdoor recreation opportunity should both provide guidelines to a recreational lands acquisition and facilities development program.

A) LAND EASEMENTS AND LAND ACQUISITION

To date, the Province of Manitoba has no land easement program to provide land and opportunities for recreation.

Land easements present means of land use control without acquiring title to the property. As a short-term tool, land easements could provide the means of establishing land control over a large expanse of land at a low unit cost. If, for example, the purpose of land easements is to protect wildlife habitat from clearing for the immediate future, 66,667 acres of land could be brought under control each year, for ninety-nine years with a \$1,000,000 budget, with land valued at \$150/acre and a return on investment of 10%. By contrast, a land acquisition program operating under similar budget and cost constraints could acquire only 6,667 acres of land. As a short-term measure, and as a means of achieving a short-term objective, land easements may offer an effective means of establishing land use control over a considerable amount of land.

As a short-term tool, land easements could provide a mechanism by which lands could be reserved for possible recreation use in the present and in the future. As such, easements could be presented as temporary means of reserving lands for acquisition when the need was identified and when budgets would allow. Land easements could thus be used to preserve wildlife habitat, ecological sites, possible intensive use recreation areas, access to water and other sites which offer attributes deemed desirable for recreational activities.

As a long-term means of land use control, land acquisition may be more desirable than easements. Using the example above, 66,667 acres of land may be eased the first year of the program. Assuming that the entire million dollar budget was spent on easement payments, that inflation is nil, and that there are no administrative costs, 66,667 acres of land will be under easement at any one time. Easement contracts would have to be renewed if the benefits were to continue.

Land acquisition, at the end of ninety-nine years, would have assumed control of 660,000 acres of land and the entire acreage would have been owned outright. At ninety-nine years, salvage under the easement program would have been zero; under the land acquisition program salvage would be the entire 660,000 acres of land.¹

While it is clear that in the long-term, acquisition provides guaranteed ownership to property, it is worthwhile to define clearly how important long-term ownership is to the provisions of recreational opportunity. Long-term ownership may be critical where considerable investment will be made in facilities to accommodate heavy use. On the other hand, where investment in facilities is expected to be minimal and where the need for undeveloped space may be the most important factor, easements may provide a useful tool in the provision of recreation opportunity. In this context, scenic easements and rights-of-way to provide access may together ensure public access to scenic areas that otherwise would not be acquired. For purposes of this Practicum, scenic easements and rights-of-way may be very useful in providing land links between Recreation Nodes. Easements can thus be used to develop extensive use recreation corridors along the Assiniboine River.

Since it would be within Recreation Nodes that most recreational facilities would be developed, the use of easements in Recreation Nodes must be treated more carefully. But even in Recreation Nodes, extensive use areas might be acquired through easements. Finally, since more land can be brought under public control through easements than through outright acquisition, under the same budget limitations, easements offer the opportunity of rapidly increasing the availability of public recreation land. In view of the increasing use of recreation lands, this is in itself no mean consideration.

¹ Herb Schellenberg, Robert Oetting and Ray Schmidt, "A Recommended Program for Management of Privately Owned Land Resources in Manitoba", Resource Projects, Manitoba Department of Mines, Resources and Environmental Management, M.S., July 1974, pp. B4-B5. For further information on the possible use of easements in Manitoba, see Ken Medd, "An Investigation of Easements," Planning and Priorities Committee of Cabinet, Manitoba, M.S., September 1975.

B) OBJECTIVES OF LAND ACQUISITION

As a first step in defining which lands along the Assiniboine River should be acquired for recreational purposes, a definition of the objectives of land acquisition should be undertaken. The objectives of a recreational lands acquisition program should be based upon certain values. These values include:

- 1) that outdoor recreational activity fulfills needs for pleasure.
- 2) that outdoor recreational activity fulfills educational needs. In this case, pleasure is a secondary benefit. The primary motive in the educational orientation is to seek a better understanding of man's relationship to the natural environment.
- 3) that outdoor recreational activity fulfills certain health needs. Again, pleasure is a secondary benefit. The primary motives in the health orientation may be diverse, ranging from a change in structured routine to an attempt to seek escape from urban stress.
- 4) that the pleasure, education and health benefits of outdoor recreational opportunity be made more readily accessible to more Manitobans.
- 5) that lands acquired by the Crown for recreational purposes be accessible to groups whose use of that land will be compatible with the primary objective of acquiring the land.

The values of outdoor recreation may be translated into objectives for recreation land acquisition. The objectives of land acquisition should:

1. provide for pleasure values by -
 - a) acquiring lands that offer opportunity for the development of a variety of outdoor recreation activities.
 - b) acquiring lands that permit expansion of over-used facilities in order to maintain a level of quality of experience.
2. provide for educational values by -

acquiring lands that offer a variety of natural environments through which one may experience the natural world, and to permit the participant to learn to live with others, in a group situation, and to live with oneself in an isolated environment.
3. provide for health values by -

acquiring lands that offer the opportunity of developing facilities that offer relief from urban stress, a change in routine, opportunities for association with people at intensely developed sites or opportunities for solitude, rest and reflection.
4. provide for greater equity in the distribution of outdoor recreation opportunity by -
 - a) acquiring lands offering outdoor recreation opportunity at sites closer to the residence of possible users, and
 - b) by acquiring lands for the development of outdoor recreation facilities that may reflect more accurately the needs of the young, the poor and the aged, who do not participate extensively in current outdoor recreational activities.
5. provide for greater complementary use of Crown lands acquired for recreation purposes by -

utilizing lands designated as Wildlife Management Areas for compatible forms of recreation that may help satisfy the health and education values of outdoor recreation.

There is a degree of overlap between recreation values and between the various objectives of acquiring lands for recreation. To distinguish, for example, between the health and education values is a decision on the part

of the participant. By the same token, lands acquired to satisfy health values may satisfy certain, but not all, educational values. Similarly facilities may satisfy more than one primary value. Furthermore, the development of facilities may take place at a particular site without necessarily impinging upon the use of other nearby recreation lands for other values. Criteria for site location, design, and standards of construction may facilitate or discourage, the use of a particular parcel of acquired land to satisfy any or all values.

C) THE RECREATION LANDS ACQUISITION AND DEVELOPMENT MODEL.

The acquisition and development of recreation lands along the Assiniboine River are based upon two broad criteria. These criteria are that a need for recreation land should be felt, and second, that lands acquired for outdoor recreation should be of a quality conducive to the enjoyment of recreational experiences. The two criteria may be regarded as two streams of concern that merge in the definition of recommendations. As such, each criterion is considered separately until such time as the two criteria must relate to each other.

The first step in the development of the acquisition and development model is to define the study area. For purposes of this Practicum, the Study Area was defined as the Assiniboine River and its adjacent lands. "Adjacent lands" are defined in terms of possible appropriateness for outdoor recreation. As a result "adjacent lands" east of Portage la Prairie comprised essentially a narrow strip of uncultivated farmland adjacent to the Assiniboine River. West of Portage la Prairie, "adjacent lands" was defined arbitrarily as uncultivated land lying within approximately five miles of the Assiniboine River.

Upon definition of the study area, Canada Land Inventory capability data for outdoor recreation, agriculture, ungulates and waterfowl were overlain to delineate general areas of high capability recreation and wildlife lands. With these areas delineated, information on soil type, crop insurance risk ratings, known areas of white-tailed deer concentrations, and groundwater supply served to define more precisely those high capability recreation and wildlife lands. Larger blocks of land that possessed qualities suitable for arable cultivation were excluded from the recreation and wildlife areas. The locations of special features -- International Biological Program (IBP) sites and archaeological and historic sites -- were superimposed upon the delineated resource-based recreation and wildlife areas. Both IBP sites

and historic sites, because of their interest to scientific study are deemed worthy of inclusion in the acquisition model because the sites are important in their own right.

Resource Data and special features together were interpreted in order to define boundaries of areas called Recreation Nodes. Recreation Nodes are defined, then, as "areas with a high capability for recreation and/or wildlife, a relatively low capability to support arable agriculture, and that may possess special or unique features".

Twelve Recreation Nodes were thus delineated from the western boundaries of Winnipeg to the Manitoba-Saskatchewan border. Each of the twelve Recreation Nodes was evaluated in terms of equality of the environment and accessibility from Winnipeg against an eleven point scale ranging from 10 (the lowest valuation rating) to 0 (the highest valuation rating). Each Recreation Node was also evaluated, by a checklist system, from the perspective of the ability of each Node to satisfy the land requirements implied in certain recreation participation trends, certain social welfare considerations, and the current availability of public outdoor recreation opportunity in the vicinity of the Recreation Node. A checklist system was adopted because of the difficulty of rating essentially yes-no options on a weighting scale.

When the checklist system is negated to correspond to the 10-0 weighting scale, it is possible to define, simply from a land acquisition point of view, the order or sequence by which outdoor recreation lands should be acquired. More specific acquisition recommendations must await the input of the recreation participation stream.

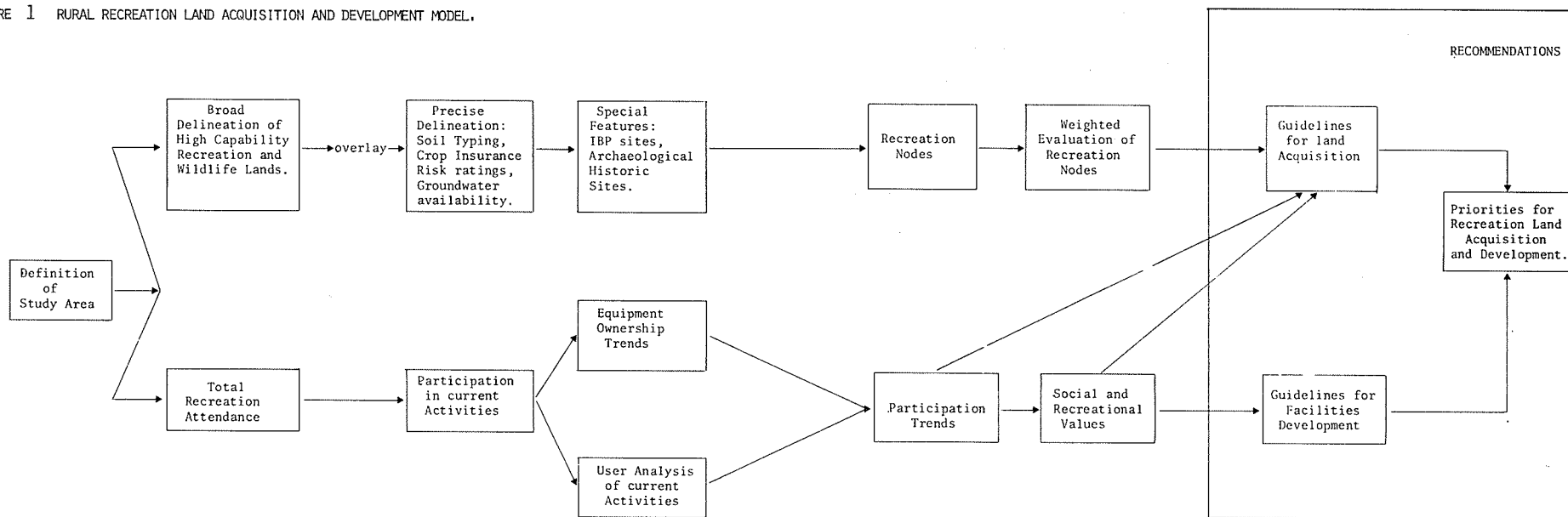
The second stream of the land acquisition and development model is to identify the use made of the Assiniboine River and its adjacent lands. From use and user information, it is possible to identify outdoor recreation participation patterns. Participation is further analysed to appraise participation trends, equipment ownership, and characteristics of users. Equipment ownership and user analysis provide insight into particular trends in certain outdoor recreational activities. Participation trends, revealing patterns of use of recreational opportunities, carry implications for land acquisition programs and serve as one input into the weighted valuation of Recreation Nodes.

Given participation trends, social and recreational values attached to outdoor recreation provide the criteria by which guidelines may be developed to govern the construction of outdoor recreational facilities. Social and recreational values related to the provision of facilities also carry implications for land acquisition, and those values serve as inputs into the weighted evaluation of Recreation Nodes.

Each stream -- the land acquisition stream, and the facilities development stream -- ultimately provides a set of guidelines for land acquisition and a set of guidelines for facilities development. Both sets of guidelines are then merged under the assumption that the acquisition of land and the development of facilities should occur first where there is the greatest possible range of possible recreational activities and benefits. Under this assumption, priorities for the acquisition of land and the development of facilities can be amalgamated.

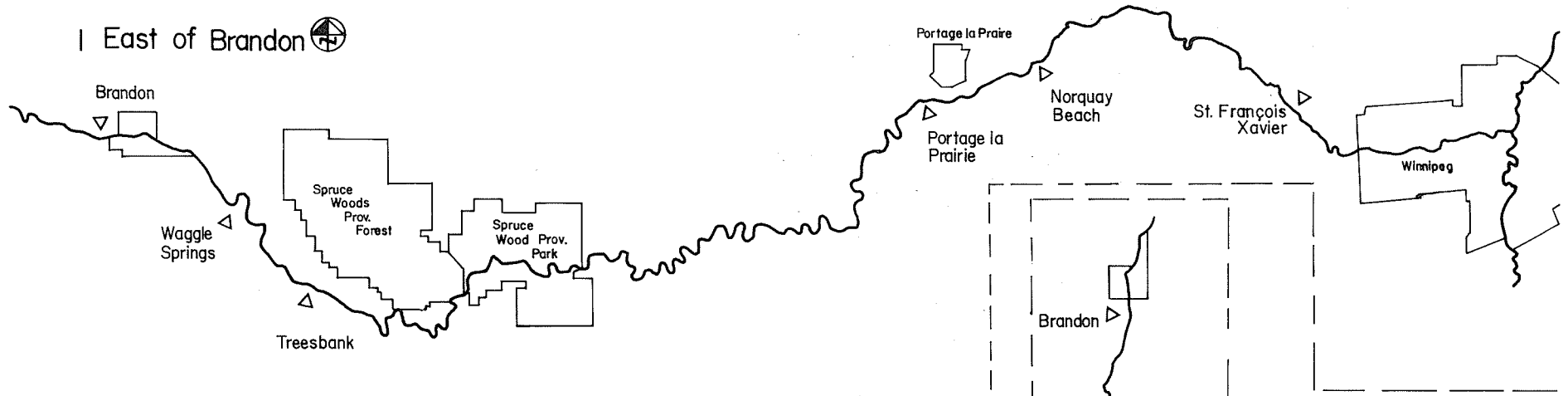
A Flow Chart of the Model is outlined on the following pages.

FIGURE 1 RURAL RECREATION LAND ACQUISITION AND DEVELOPMENT MODEL.

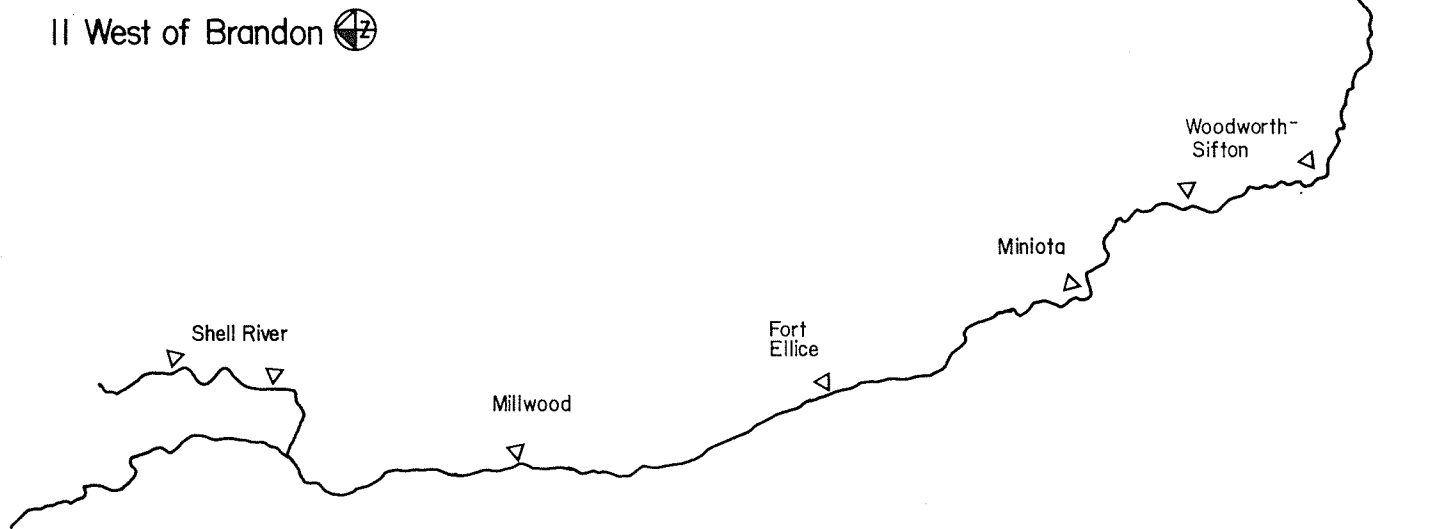


Assiniboine River: Location of Recreation Nodes

I East of Brandon



II West of Brandon



1. DEFINITION OF RECREATION NODES

Recreation Nodes are areas of land and/or water with a high potential for outdoor recreation. It is within, rather than outside of, each node that any rural recreation land acquisition and development should occur along a river valley.

In order to define the physical extent of recreation nodes, Canada Land Inventory resource capability information for agriculture, outdoor recreation, and wildlife (waterfowl and ungulates) were superimposed upon 1:250,000 scale base maps of the Assiniboine River and its adjacent lands. For each resource capability, the topmost three classes of capability ratings were used to define those areas along the Assiniboine River where capability was highest for that resource. In this manner, Class 1, 2 and 3 agriculture, ungulate and waterfowl lands were defined. Since there is no Class I outdoor recreation land in Manitoba, the topmost three classes for the outdoor recreation capability included the Class 2, 3 and 4 recreation lands.

Canada Land Inventory capability data provided the broad outlines of lands that were of high capability for outdoor recreation and/or wildlife. To define more precise boundaries of these lands, soil typing, crop insurance risk ratings and groundwater availability data were superimposed upon the delineated recreation and wildlife lands. Finally, significant cultural and ecological features were mapped. On the basis of the capability information, other resource information and the presence of unique sites, twelve Recreation Nodes can be defined. These Recreation Nodes are listed and briefly described below:

- The Saint Francois Xavier Node
- The Norquay Beach Node
- The Portage la Prairie Node
- The Treesbank Node
- The Waggle Springs Node
- The Brandon Node

The Woodworth-Sifton Node

The Miniota Node

The Fort Ellice Node

The Millwood Node

The Shellmouth Reservoir Node

The Shell River Node

ST. FRANCOIS XAVIER NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

Class 3 and 4 with suitable sites for hiking, nature study, aesthetic appreciation; viewing of upland wildlife, access to water with significant capability for canoe tripping; organized camping; and for the appreciation of cultural landscape patterns.²

(2) WILDLIFE CAPABILITY

Along the Assiniboine River, lands within the St. Francois Xavier Node are given a Class 3 capability rating for White-tailed deer.³

(3) PRESENT LAND USE

A mixed use area with agricultural, rural residential, urban, and recreational land uses. The Node is under increasing development as a residential area.⁴

(4) NATURAL VEGETATION

Where lands within the St. Francois Xavier Node are naturally vegetated, that vegetation is comprised primarily of hardwood riverbottom forest. Important tree species include bur oak (*Quercus macrocarpa*), green ash (*Fraxinus acnnsylvanica*), American elm (*Ulmus americana*), poplar species (*Populus* spp.), birch species (*Betula* spp.) and the Manitoba maple. Cottonwood (*Populus deltoides*) is also common.⁵

² Canada Land Inventory, Recreation Capability, Winnipeg Mapsheet.

³ Canada Land Inventory, Ungulate Capability, Winnipeg Mapsheet.

⁴ As interpreted from 1970 LIPT air photography, and personal inspection.

⁵ E.F. Bossenmaier and C.G. Vogel. Wildlife and Wildlife Habitat in the Winnipeg Region. Resources Planning, Manitoba Department of Mines, Resources and Environmental Management, Winnipeg. May, 1974, pp. 8-9; Also, cf., La Roi and Babb, Op. Cit., p. 68.

(5) SOILS

The flood plain of the Assiniboine River is comprised of Riverdale soils. These soils are excellent and very productive of most agricultural crops. Soils of the Oakville Association lie immediately beyond the Riverdale soils. Oakville soils are jurvenile, have no soil profile, have developed on an alluvial flood plain and are very productive agriculturally. Oakville soils have sub-surface drainage problems in wet years. The upland soils are comprised of St. Norbert clays. Also productive, the St. Norbert clays are the wooded association of the Red River Association. The productivity of all soils in the St. Francois Xavier Node is such that agricultural crops are given a low crop insurance risk rating (Classes "C" and "D").⁶

(6) GROUNDWATER

The St. Francois Xavier Node is underlain by a limestone aquifer. Water within this aquifer is salty and for the most part no potable water is available. Immediately adjacent to the River, however, aquifers located on alluvial deposits may provide a potable water supply. The water would, however, be hard (300 ppm) with a high (10 ppm) iron content.⁷

⁶ W.A. Erlich, E.A. Poyser, L.E. Pratt and J.H. Edis, Report of Reconnaissance Soil Survey of Winnipeg and Morris Map Sheet Areas. Manitoba Soil Survey; Soils Report No. 5, 1953, pp. 20-22, 53-54 and map. See also, Manitoba Crop Insurance Corporation, "Province of Manitoba, Crop Insurance Risk Areas," Winnipeg, MS 1975; and Manitoba Department of Agriculture and Conservation, "Productivity Indices and Soil Capability Ratings for Manitoba soils," in Manitoba Agricultural Land Inventory Manual, Soils and Crops Branch, Manitoba Department of Agriculture and Conservation, Winnipeg, June 1965.

⁷ Memorandum from G.H. McKay, Assistant Director of Planning, Water Resources Division, Manitoba Department of Mines, Resources and Environmental Management, September 17, 1975; J.E. Charron, Groundwater Resources of Fannystelle Area, Manitoba, Geological Survey of Canada, Canada Department of Mines and Technical Surveys, Bulletin 98, Ottawa, Queens Printer, 1964, pp. 11-13.

(7) CURRENT RECREATION OPPORTUNITIES

- Two privately owned resorts - Jellystone Park and Sunny Harbour Resort - are available for public use. Both provide picnicing, camping, and swimming opportunities. The St. James Kiwanis Club and the Mennonite Church both offer outdoor experiences to organized groups sponsored by the respective organizations.
- Beaudry Provincial Park is under development by the Parks Branch, Department of Tourism, Recreation and Cultural Affairs, as a natural park.
- The Assiniboine River is used as a snowmobile course and in summer as a canoeing route and for fishing at a number of sites.
- Wildlife include white-tailed deer and a variety of small riverine birds, and mammals such as the river otter, beaver, and raccoon.

(8) ACCESS

Access to the St. Francois Xavier Node is available by water. Road access to the Node is limited to the bridge crossing of the Trans-Canada Highway. Within the St. Francois Xavier Node, all lands adjacent to the Assiniboine River are privately owned.

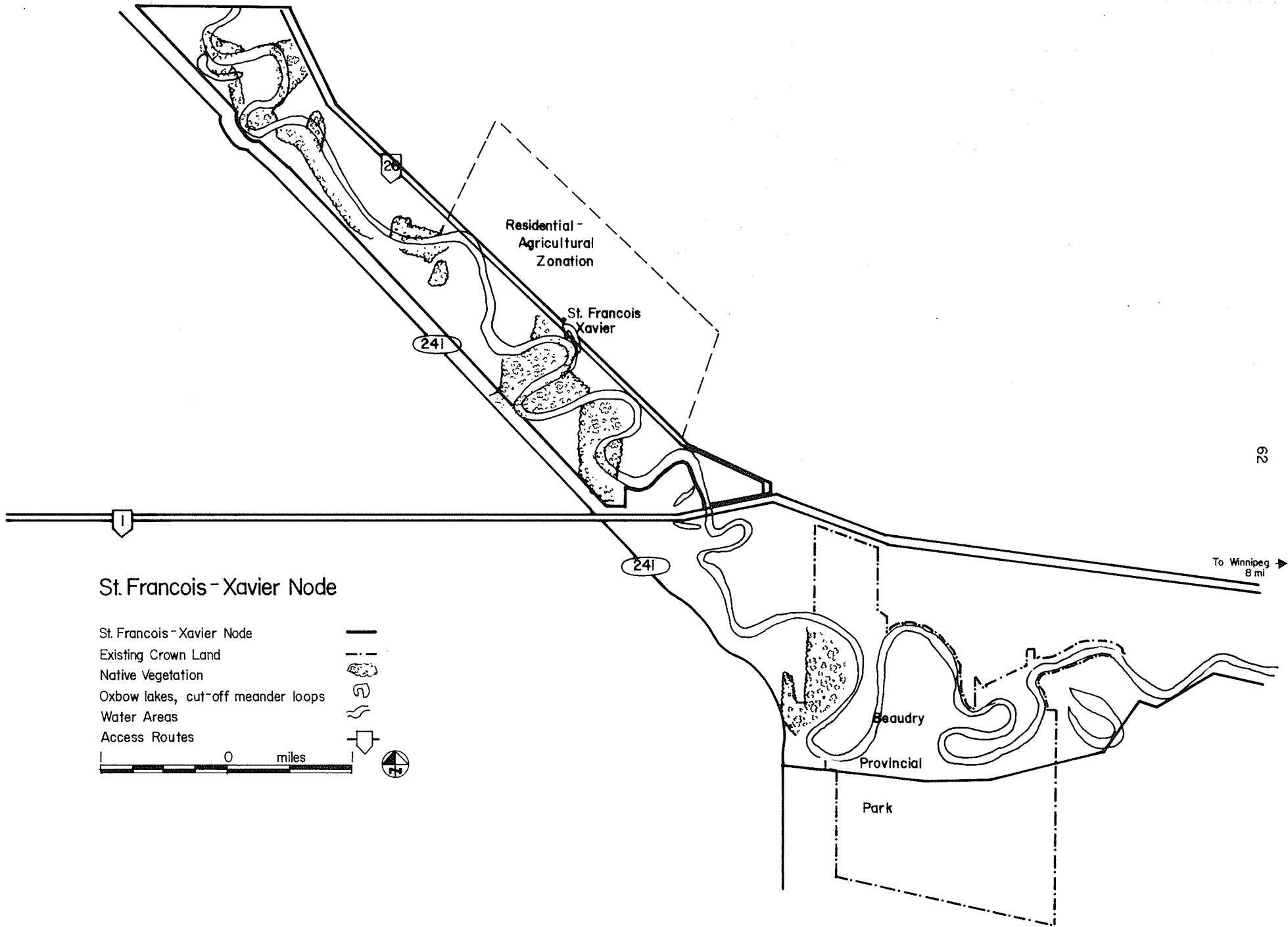
(9) MUNICIPAL ZONING

Land use adjacent to the left bank of the River is governed by the Municipal Planning Scheme of the Rural Municipality of St. Francois Xavier. Land use adjacent to the right bank of the River is governed by the Municipal Planning Scheme of the Rural Municipality of Cartier.⁸

(10) CONSTRAINTS TO DEVELOPMENT

The narrowness of the Node, lack of drinking water, and propensity of flooding suggest that the St. Francois-Xavier Recreation Node may be most suitably developed as a green space with opportunities for low investment, extensive use recreational facilities.

⁸ See above, pp. 26-27 for details of the respective Planning Schemes of the Rural Municipalities of St. Francois-Xavier and Cartier.



NORQUAY BEACH NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

Lands within the Norquay Beach Node are given a recreation capability rating of Class 3 with suitable sites for camping and swimming.⁹

(2) WILDLIFE CAPABILITY

Lands along the Assiniboine River and within the Norquay Beach Node are ranked as Class 3 for white-tailed deer.¹⁰

(3) PRESENT LAND USE

Most of the Node is naturally vegetated. Approximately 30% of land within the Node is cultivated.¹¹

(4) NATURAL VEGETATION

Where the land is naturally vegetated, that vegetation is comprised of willows (*Salix* spp.), poplars (*Populus* spp.), birch (*Betula* spp.) and some hardwood species such as elm (*Ulmus americana*) and green ash (*Fraxinus pennsylvanica*).¹²

(5) SOILS

The Norquay Beach Node is located on the flood plain of the Assiniboine River. Soils are highly productive Riverdale soils. Flooding is a frequent occurrence. In spite of the flood danger, lands within the Norquay Beach Node are ranked with the lowest ("A") crop insurance risk areas.¹³

⁹ Canada Land Inventory, Recreation Capability, Brandon Mapsheet.

¹⁰ Canada Land Inventory, Ungulate Capability, Brandon Mapsheet.

¹¹ LIFT, Op. Cit.; personal observation.

¹² Bossenmaier and Vogel, Op. Cit.,

¹³ W.A. Erlich, E.A. Poyser, and L.E. Pratt, Report of Reconnaissance Soil Survey of Carberry Mapsheet Area, Manitoba Soil Survey, Soils Report No. 7, 1957, p. 69 and map; Also Province of Manitoba, Crop Insurance Risk Areas, Op. Cit., n.p.

(6) GROUNDWATER

Like the groundwater supply at the St. Francois Xavier Node, water derived from the limestone aquifer is unpotable. Water derived from shallow wells on the alluvial deposits may yield potable, but very hard water with a high iron content.¹⁴

(7) CURRENT RECREATION OPPORTUNITIES

The Norquay Beach Node lies adjacent to the Norquay Beach Provincial Recreation Area where tenting, picnicing and swimming opportunities are available.

(8) ACCESS

The Norquay Beach Node may be considered a northward extension of the Norquay Beach Provincial Recreation Area. Access may be accomplished by water or by car from the Trans-Canada highway which abuts the Node to the south.

(9) MUNICIPAL ZONING

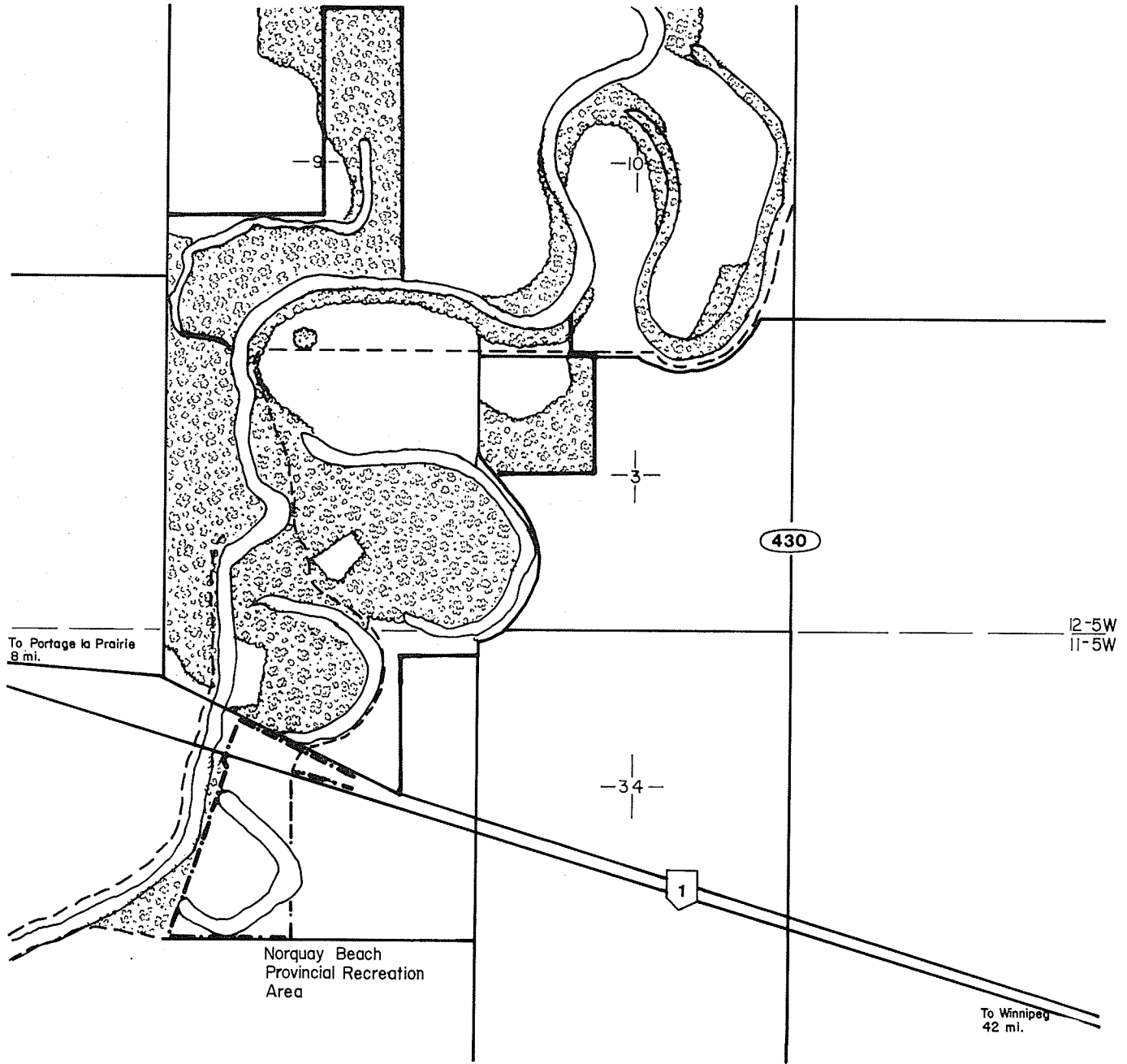
No zoning has yet occurred, but the Rural Municipality of Portage la Prairie is in the process of adapting a Municipal Planning Scheme.¹⁵

(10) CONSTRAINTS TO DEVELOPMENT








The adjacent location of Norquay Beach Provincial Recreation Area and the lack of quality of drinking water and the propensity for flooding of lands within the Norquay Beach Recreation Node suggest that development of facilities in the Node be extensive in nature and serve to increase the opportunities available at Norquay Beach Provincial Recreation Area.

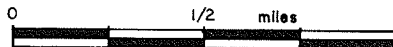
¹⁴ McKay, Op. Cit., also Charron, Op. Cit., pp.11-13.

¹⁵ See above, p.28 for details on the proposed Portage District Planning Scheme.



Norquay Beach Node 

- Existing Crown Land 
- Norquay Beach Node 
- Native Vegetation 
- Oxbow lakes, cut-off meander loops 
- Water Areas 
- Crown owned dyke 
- Access Routes 



PORTAGE LA PRAIRIE NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

Ranked as Class 4, lands adjacent to the Portage la Prairie Reservoir offer opportunities for camping, picnicing, a variety of water oriented activities, an appreciation of a variety of cultural landscape patterns, and an historic site.¹⁶

(2) WILDLIFE CAPABILITY

Lands adjacent to the Portage la Prairie Reservoir are ranked as Class 3 habitat for white-tailed deer.¹⁷

(3) PRESENT LAND USE

Lands immediately below the inlet structure to the Portage Diversion are cultivated; some lands are irrigated. Upstream from the inlet structure, much of the land has not been cultivated but has been grazed. The Portage Sandhills adjacent to the Reservoir, are grazed rather than cultivated.¹⁸

(4) NATURAL VEGETATION

Downstream from the Reservoir, a narrow band of willow, poplar, elm, ash and bur oak provide a buffer between the river and adjacent cultivated lands. Upstream from the Reservoir a broadleaf deciduous forest with pockets of grassland dominate the natural landscape.

(5) SOILS

Adjacent to the Assiniboine River and downstream from the Reservoir, are Riverdale Soils. These soils are highly productive, are frequently irrigated and increasingly being

¹⁶ Canada Land Inventory, Recreation Capability, Brandon Mapsheet.

¹⁷ Canada Land Inventory, Ungulate Capability, Brandon Mapsheet.

¹⁸ LIFT, Op. Cit.; personal observation.

used to grow specialty vegetable crops. These soils have a low crop insurance risk rating ("A"). Upstream from the Reservoir, Almasippi sands and Almasippi loamy sands characterize most soils. Although pockets of the fertile Burnside Association soils are found, the Almasippi sands in particular are low in natural fertility, have a limited reserve of organic matter and have a low water retention capacity. On a scale of 1 (low) to 10 (high) the Riverdale soils rank 10 on a productivity index, while the Almasippi sands and Almasippi loamy sands respectively rank 5 and 6.¹⁹ The Almasippi soils are prone to wind erosion upon clearing, but forages and native hay crops appear to prosper. The shoreline of the Portage Reservoir is comprised of an eroded slopes complex that is of little value to agriculture. The crop insurance risk classification of the Almasippi soils ranges from "G" through "J", where "J" is the highest risk category.²⁰

(6) GROUNDWATER

Groundwater supply is available from shallow sand aquifers. Such aquifers may yield from 5 to 20 gallons of potable water per minute. Test drilling will be necessary to identify groundwater supply sites. Excellent potable water is also available at the seepage lagoon immediately below the Reservoir.²¹

(7) CURRENT RECREATION OPPORTUNITIES

- The Reservoir is being used for a variety of water-oriented activities - boating, water skiing, canoeing, sailing.
- The rough water below the Reservoir is particularly important as a fishing site. Other fishing sites are located along the Assiniboine River for two to three miles downstream from the Reservoir.
- Lands in the Portage Sandhills are used for a variety of trail-oriented activities, in particular, horseback riding, snowmobiling and motorcycling.

¹⁹ "Productivity Indices and Soil Capability..." Op. Cit.; Erlich, Poyser and Pratt, Op. Cit.; pp. 59, 61, 62, 69, 71 and map.

²⁰ "Province of Manitoba, Crop Insurance Risk Areas," Op. Cit.; n.p.

²¹ Op. Cit.

- The City of Portage la Prairie maintains Island Park which is adjacent to the Portage la Prairie Node.
- Fort La Reine cairn and historic site is located immediately below the Reservoir. The Yellow Quill Trail lies adjacent to the western side of the Reservoir.

(8) ACCESS

The Portage la Prairie Node is accessible from the Portage la Prairie by-pass of the Trans-Canada highway, via the Yellow Quill Trail. Provincial Road #240 may provide access to the eastern, downstream end of the Node. A number of municipal roads abut the southern and eastern edges of the Reservoir. Water access is provided by the Assiniboine River itself.

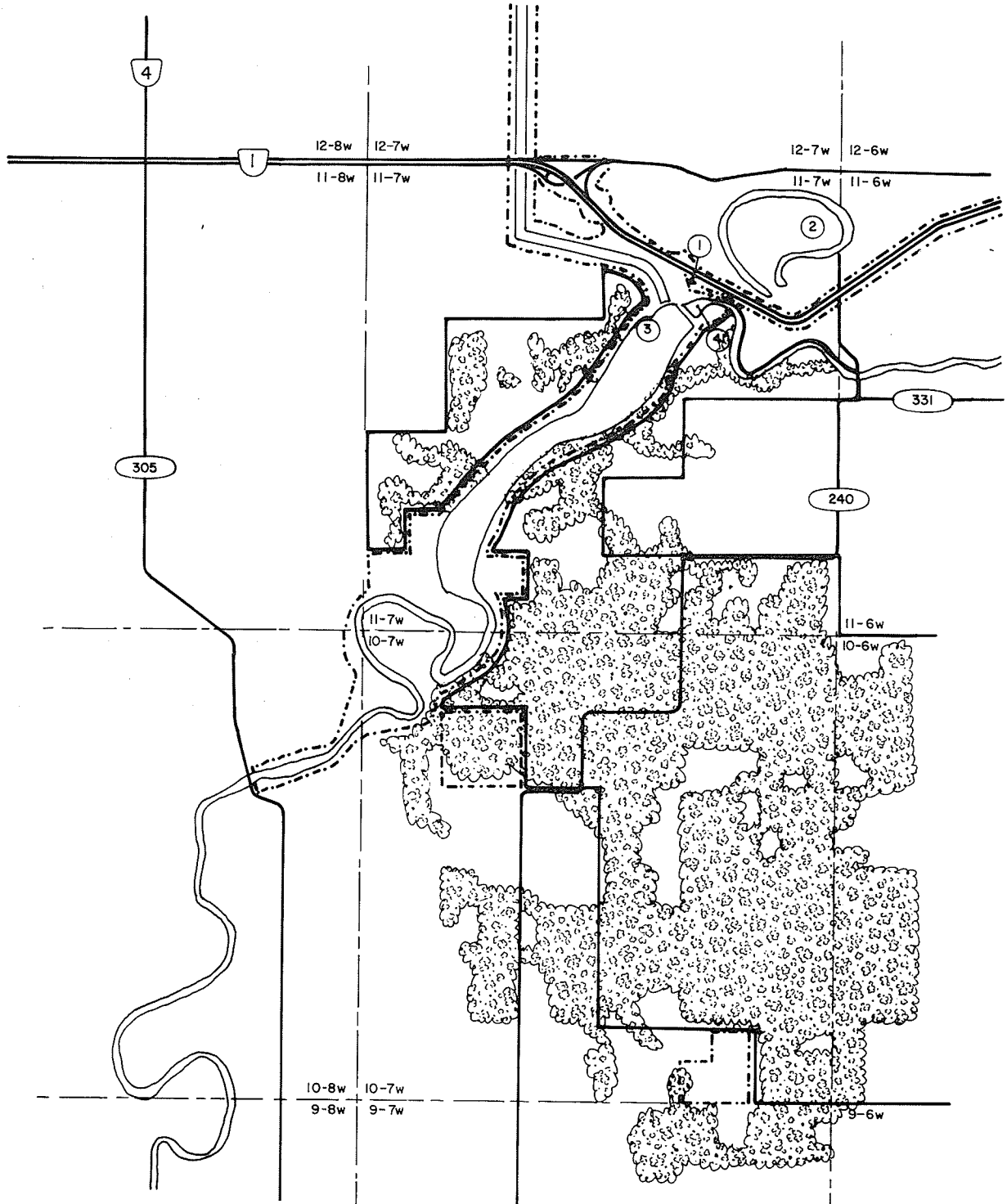
(9) MUNICIPAL ZONING

The proposed Municipal Planning Scheme of the Rural Municipality of Portage la Prairie will zone the lands immediately adjacent to the Reservoir as a "Limited Development Area". Lands in the Portage Sandhills will be zoned to facilitate recreational pursuits.²²

(10) CONSTRAINTS TO DEVELOPMENT.

The Portage la Prairie Node is of sufficient size and diversity that most forms of recreation can be accommodated in the Node. Nevertheless, site conditions within the Node are such that certain recreation forms may have to be limited to certain areas. Groundwater may be in short supply. Sandy Almassippi soils are highly erodible and may be too sensitive to support intensive development.

²² See above, p. 28 for details on the proposed Portage District Planning Scheme.



Portage la Prairie Node

- Portage la Prairie Node
- Existing Crown Land
- Native Tree Cover
- Access Routes
- Fort la Reine 1
- Island Park 2
- Boat Launch Area 3
- Fishing Sites 4



TREESBANK NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

A recreation capability rating of Class 4 has been attached to lands within the Node with opportunities for camping, canoeing, and viewing.²³

(2) WILDLIFE CAPABILITY

Ungulate capability is ranked as Class 3.²⁴

(3) PRESENT LAND USE

The Treesbank Node, comprised of the junction of the Souris River with the Assiniboine River, and adjacent lands, is comprised of a number of meander loops of the Souris River. Flood Plain areas along the Souris River are flood prone and are naturally vegetated. Better drained sites are cultivated for forage crops. The uplands to the south of the Assiniboine River are cultivated. On the left bank of the Assiniboine River, both the valley bottom and the upland is naturally vegetated.²⁵

(4) NATURAL VEGETATION

Natural vegetation in the flood plain of the Souris River is comprised of a deciduous forest where hardwoods such as elm and ash intermingle with the more common poplar and willow species. The south-facing slope of the Assiniboine River is comprised of a mixture of poplar-oak forest and short grass prairie.

(5) SOILS

Soils adjacent to both the Souris and Assiniboine Rivers are immature alluvial, Assiniboine Complex soils. On the left bank of the Souris River, upland soils are productive Glenboro

²³ Canada Land Inventory, Recreation Capability, Brandon Mapsheet.

²⁴ Canada Land Inventory, Ungulate Capability, Brandon Mapsheet.

²⁵ LIFT, Op. Cit.; personal observation.

soils. North of the Assiniboine River Valley, upland Miniota sands predominate. Some of these soils are grazed but have a low livestock carrying capacity. Except for the upland areas on the north side of the Assiniboine River, crop insurance risk classifications range from "B" to "D". The sandy uplands are classed as high risk areas for crop production.²⁶

(6) GROUNDWATER

The frequent springs found along the base of the River Valley attest to the supply of groundwater. From 5 to 1000 gallons of good to excellent water may be pumped each minute. Groundwater is found in the local sand and gravel aquifers. Groundwater is equally abundant throughout the Node.²⁷

(7) CURRENT RECREATION OPPORTUNITIES

- The Souris and Assiniboine Rivers are used for canoeing.
- The Treesbank Ferry is a unique attraction in its own right.
- Historic sites abound this Node. These sites include sites in Sections 14 and 19, adjacent to the Assiniboine River which are thought to be the locations of several fur trade posts built by the Hudson's Bay Company, the Northwest Company and the X-Y Company around the turn of the nineteenth century. Within the Node are the abandoned pioneer townsites of Milford and Sourisford. To the north of the Node lies the Criddle house and outbuildings that have recently been acquired by the Crown. Archaeological sites are identified along this stretch of the Assiniboine, but the major known site is a Paleo-Indian site two miles north of the River in Section 6-9-16W.²⁸

²⁶ Erlich, Poyser and Pratt, Op. Cit.; pp 43, 53, 71 and map; "Province of Manitoba, Crop Insurance Risk Areas," Op. Cit. n.p.

²⁷ McKay, Op. Cit.

²⁸ "Archaeological Sites", file, Resources For Tomorrow, Manitoba Department of Renewable Resources and Transportation Services. n.p.

(8) ACCESS

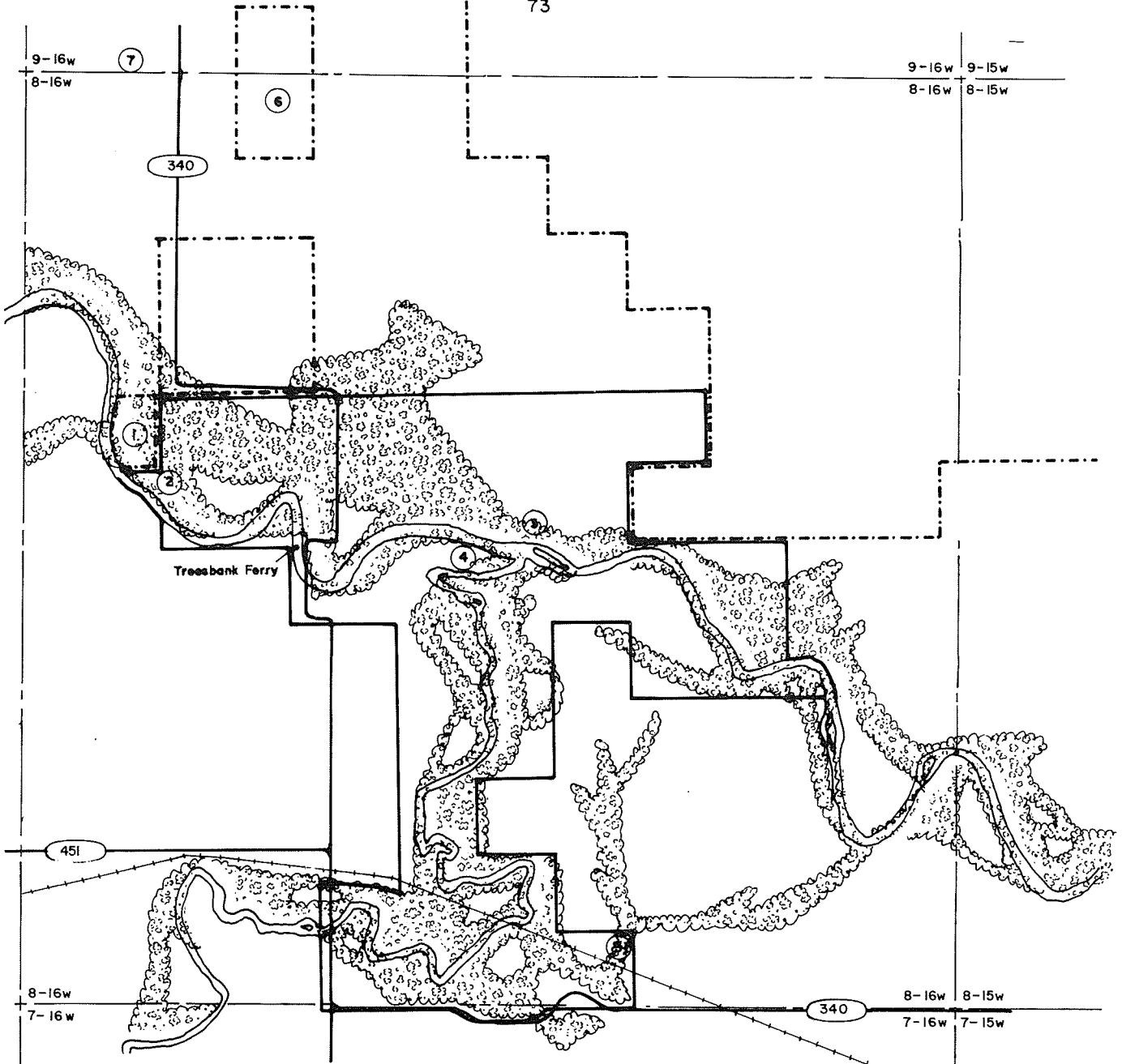
Access to the Node is available by canoe or boat down the Assiniboine River. Land access is limited to the site of the Treesbank Ferry (Provincial Road 340). The bridge crossing of Provincial Road 340 across the Souris River provides access to the Souris River.

(9) MUNICIPAL ZONING











No land use controls apply to the Node.

(10) CONSTRAINTS TO DEVELOPMENT

A multitude of historic and archaeological sites may preclude many recreational forms until such time as archaeological studies are complete.



Treesbank Node

- Treesbank Node 
- Existing Crown Land 
- Native Tree Cover 
- Fort Sites 
- Souris Mouth Townsite 
- Millford Townsite 
- Criddle Farmstead 
- Paleo-Indian Archeological Site 
- Access Routes 
- Railway 



WAGGLE SPRINGS NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

The Waggle Springs Node is given a Class 4 capability rating with opportunities for camping, canoeing and with presence of historic and archaeological features.²⁹

(2) WILDLIFE CAPABILITY

The Node is given an ungulate capability rating of Classes 2 and 3 for white-tailed deer.³⁰

(3) PRESENT LAND USE

Much of this Node is not cultivated. On the left bank of the Assiniboine River, the Valley bottom is forested and the upland is grazed mixed grass prairie. The valley sides and bottom do not appear to be grazed. The right bank of the Assiniboine River is cultivated.³¹

(4) NATURAL VEGETATION

The valley bottom is comprised of deciduous riverbottom forest whose elements include the cottonwood and other poplar species (*Populus* spp.). Seasonal short-grass meadows are present. The upland area is comprised of mixed-grass prairie.

(5) SOILS

The valley bottom is comprised of Assiniboine Complex soils. Where well drained (the right bank of the river), they are cultivated. The upland area to the valley is dominated by Miniota sands. Upland areas have a high ("J") crop insurance risk classification. The valley floor has a low ("C") risk classification.³²

²⁹ Canada Land Inventory, Recreation Capability, Brandon Mapsheet.

³⁰ Canada Land Inventory, Ungulate Capability, Brandon Mapsheet.

³¹ LIFT, Op. Cit.; personal observation.

³² Erlich, Poyser and Pratt, Op. Cit., pp. 53, 71 and map; "Province of Manitoba, Crop Insurance Risk Areas," Op. Cit., n.p.

(6) GROUNDWATER

Groundwater from sand and gravel aquifers may provide from 5 to 1000 gallons per minute of good quality drinking water. Groundwater is distributed equally across the Node.³³

(7) CURRENT RECREATIONAL OPPORTUNITIES

- A heron rookery comprised of 15-20 pairs of Great Blue Herons nest within the Node. The rookery is an IBP site. Harriers, Prairie Falcons and Great Horned Owls are usually abundant at this site.³⁴
- The steep cliffs of the right bank of the Assiniboine River are well vegetated with fruit-bearing shrubs. The Node is locally important as a source of wild fruit (saskatoons, pincherries, chokecherries).
- Historic sites include a cairn at the original location of Brandon House No. 1, a fur trade post built by the Hudson's Bay Company in the latter part of the eighteenth century. The important "Harris" archaeological sites are located on both sides of the Assiniboine River on the east half of Section 20-9-17W.³⁵

(8) ACCESS

From the north, access to Waggle Springs is difficult if other than walk-in access is wanted. From the south, Municipal Road allowances approach the River a number of instances.

(9) MUNICIPAL ZONING

The land within the Node will likely be zoned as agricultural in accordance with the Municipal Planning Scheme of the Rural Municipality of Cornwallis.³⁶

(10) CONSTRAINTS TO DEVELOPMENT

Unique historic and biological sites in the Node suggest that recreational forms not related to these attributes be secondary to educational recreation forms.

³³ McKay, Op. Cit.

³⁴ La Roi and Babb, Op. Cit., p. 49.










³⁵ "Archaeological Sites," Op. Cit. n.p.

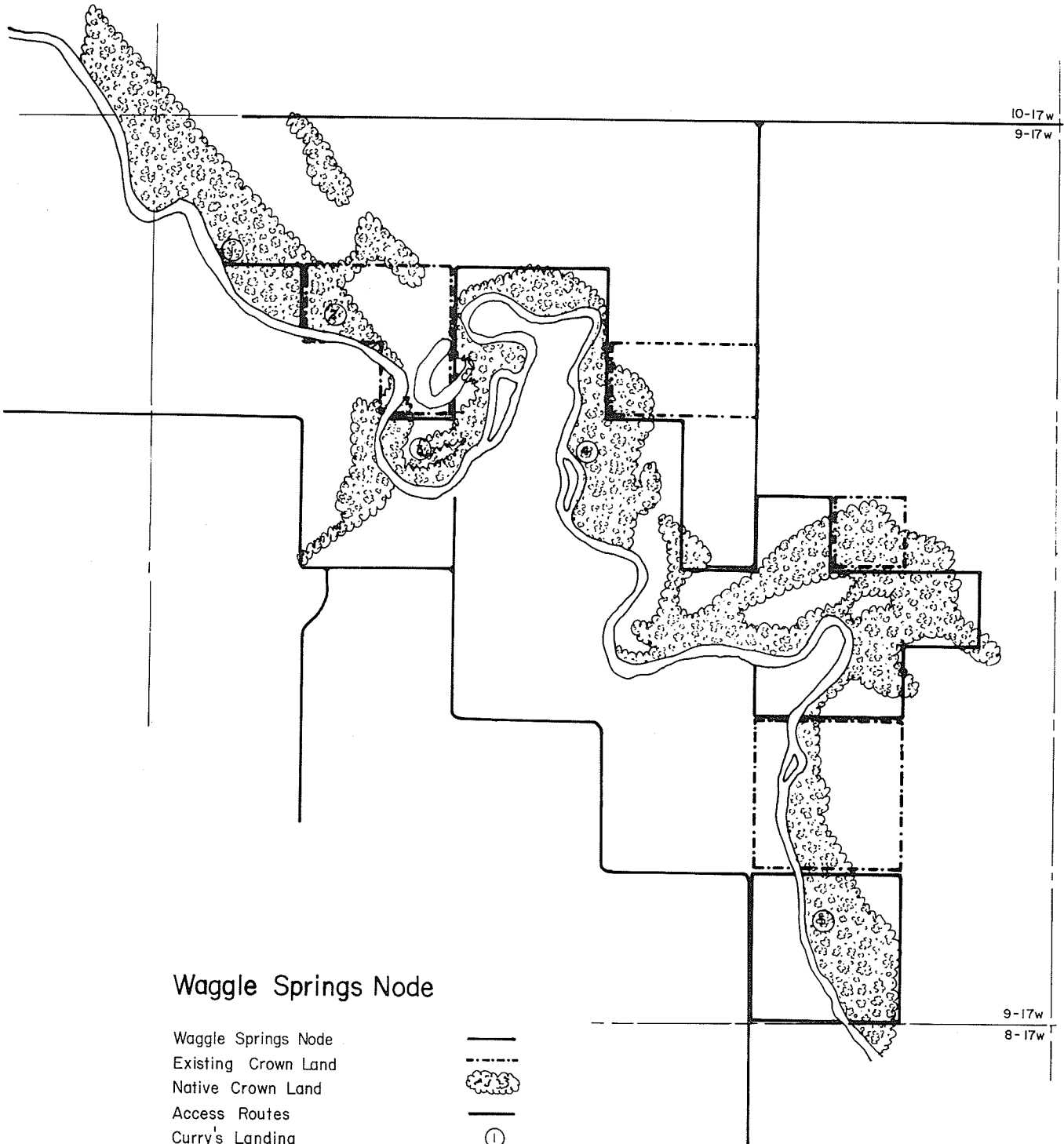
³⁶ See above, p. 29, for details on the proposed Planning Scheme for the Rural Municipality of Cornwallis.

10-17w
9-17w

9-17w
8-17w

Waggle Springs Node

- Waggle Springs Node 
- Existing Crown Land 
- Native Crown Land 
- Access Routes 
- Curry's Landing 
- Brandon House Cairn 
- "Harris" Archeological Site 
- Shilo Heron Rookery - IBP Site 
- Unidentified Fort Site 



BRANDON NODE

ATTRIBUTES:

(1) RECREATION CAPABILITIES

Lands within the Brandon Node have a Class 4 recreation capability classification with suitable sites for camping, access to water for canoeing, and for angling. Topographic variety and the mixture water and land bodies provide opportunities for walking, hiking and nature study.³⁷

(2) WILDLIFE CAPABILITY

Lands within the Brandon Node have a Class 2 and 3 rating for White-tailed deer. Class 2 and 3 wintering areas are found in the western areas of the Node, i.e. west of the junction of the Minnedosa River.³⁸

(3) PRESENT LAND USE

Except for the valley bottom within the City of Brandon, the valley bottom is cultivated. Valley slopes west of Grand Valley are under natural vegetation. East of Grand Valley to the City of Brandon, the gently sloping valley sides are subject to rural residential development. That part of the Brandon Node east of the City of Brandon is used for agriculture; the valley bottom is cultivated, the shallow valley slopes are grazed.³⁹

(4) NATURAL VEGETATION

Adjacent to the Assiniboine River, throughout the Brandon Node, a narrow buffer of willows and aspen separate the agricultural and riverine environments. The natural vegetation of valley slopes varies from site to site. Generally, however, the heavily forested steeper valley slopes in the west give way

³⁷ Canada Land Inventory, Recreation Capability, Brandon Mapsheet.

³⁸ Canada Land Inventory, Ungulate Capability, Brandon Mapsheet.

³⁹ LIFT, Op. Cit., personal observation.

gradually to gentler valley slopes with a mixed grass prairie vegetation in the east. Forested areas are predominantly aspen and oak, the former dominating the north-facing slopes, the latter dominating the drier south-facing slopes.

(5) SOILS

Valley bottom soils belong to the Assiniboine Complex. These soils are immature, without soil profiles and developed on alluvium. Most soils on valley slopes belong to the Eroded Slopes Complex. Upland soils adjacent to the Valley slopes belong to a variety of soil classifications. Generally, upland soils eastward of the junction of the Minnedosa River are marginal soils belonging to the Marringhurst, Association and the Benchlands Complex. Both soil types are gravelly and droughty due to excessive subsurface drainage. West of the junction of the Minnedosa River, fertile Carrol Clay Loams and Carrol Loams intersperse with Marringhurst and Benchlands soils. Valley lands have a low ("B") crop insurance risk classification. Valley sides and upland areas tend to have high ("H", "I" and "J") crop insurance risk ratings.⁴⁰

(6) GROUNDWATER

Groundwater is most available from sand and gravel aquifers in the valley bottom. From 5 to 500 gallons per minute may be pumped from wells in this area. On upland areas north of the Assiniboine River, potable groundwater supplies are not common. East of Kemnay, sand and gravel aquifers on the south side of the Assiniboine River may yield from 5 to 50 gallons of water per minute.⁴¹

⁴⁰ W.A. Erlich, L.E. Pratt, and E.A. Pöyser, Report of Reconnaissance Soil Survey of Rossburn and Virden Mapsheet Areas, Manitoba Soil Survey, Soils Report No. 6, 1956, pp. 52-53, 61, 87, 90-91 and map; "Province of Manitoba, Crop Insurance Risk Areas," Op. Cit., n.p.

⁴¹ McKay, Op. Cit.

(7) CURRENT RECREATIONAL OPPORTUNITIES

- Assiniboine River and Valley lands within the City of Brandon are being developed under the West-Bran Work Activity Project.⁴²
- West of and near the City of Brandon, two public golf courses occupy lands adjacent to the Assiniboine River.
- Grand Valley campground presents camping and tenting opportunities to travellers on the Trans-Canada highway.
- Fishing sites have commonly developed where bridges cross the Assiniboine River and where streams join the Assiniboine River.
- The Glenorchy Ski Hill near the mouth of the Minnedosa River provides public downhill ski opportunities.

(8) ACCESS

Public access to the Assiniboine River in the City of Brandon is available to all. East and west of the City boundaries, privately owned land precludes public access to the River except at bridge crossings.

(9) MUNICIPAL ZONING

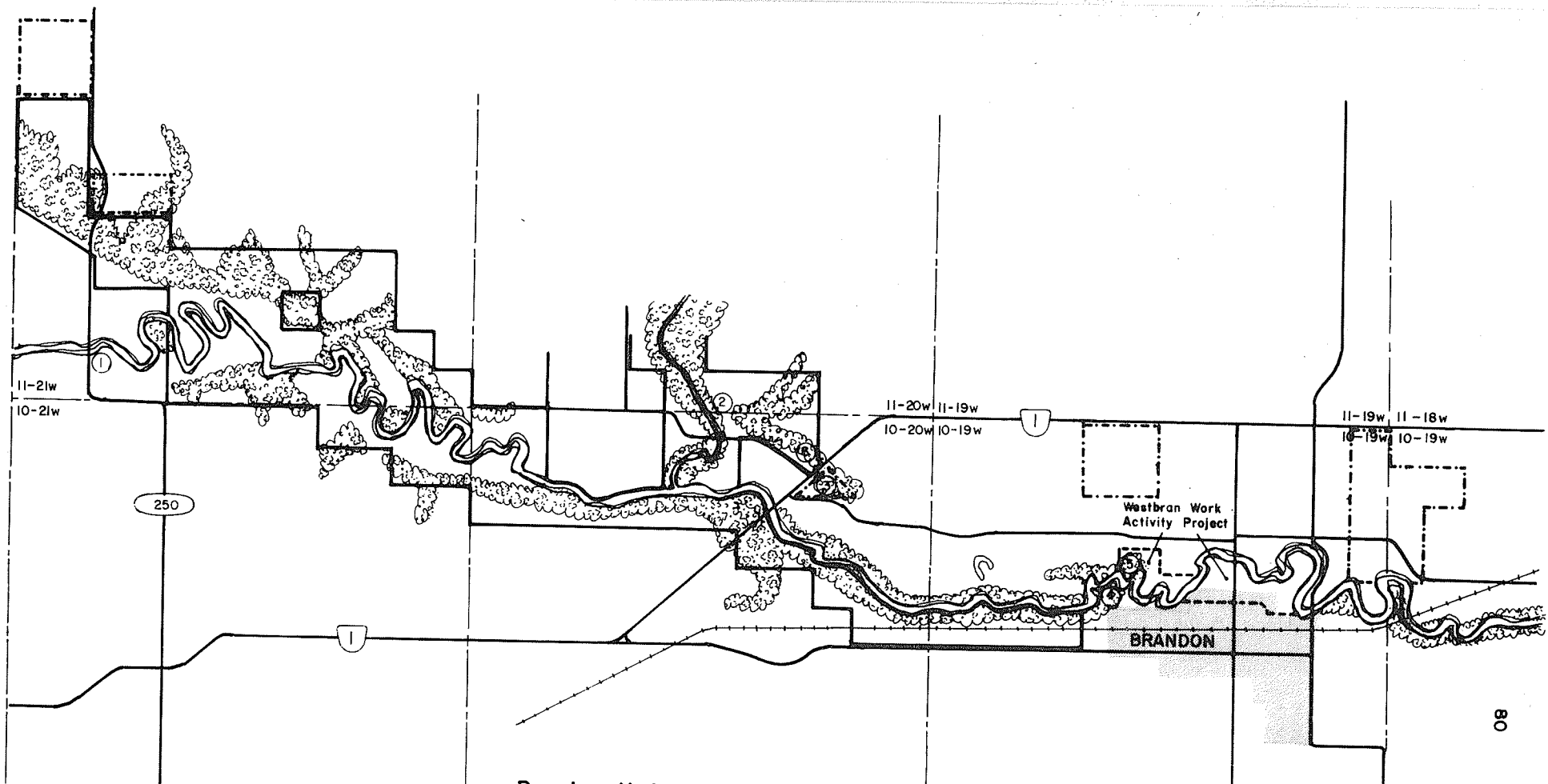
That part of the Node located within the Rural Municipality of Cornwallis will be subject to land use controls.⁴³ That part of the Brandon Node lying within the Municipalities of Whitehead and Daly is not governed by any land use zoning regulations.

(10) CONSTRAINTS TO DEVELOPMENT






Constraints to development at particular sites in the Node include erodible valley slopes, a propensity for flooding along the valley floor and at certain sites, an inadequate groundwater supply. Steep slopes west of the mouth of the Minnedosa River may not be able to support development. The dry south-facing slopes may be considerably more sensitive to development than are north-facing slopes.

⁴² Wark, Op. Cit.; See below, p. 192 for details pertaining to the West-Bran Work Activity Project.

⁴³ See above, p. 29, for details pertaining to the proposed Planning Scheme of the Rural Municipality of Cornwallis.



Brandon Node

- Brandon Node 
- Existing Crown Land 
- Natural Tree Cover 
- Access Routes 
- Railway 

- Fishing Site 
- Glenorchy Ski Club 
- Grand Valley 
- Brandon Golf & Country Club 
- Curran Park 
- Archeological Site: Shott Mound 



WOODWORTH-SIFTON NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

Lands within the Woodworth-Sifton Node are given a Class 4 rating with opportunities for angling, canoeing, hiking, walking and nature study.⁴⁴

(2) WILDLIFE CAPABILITY

Class 2 and 3 white-tailed deer habitat is general throughout the Node. Much of the Node provides significant wintering grounds for deer.⁴⁵

(3) PRESENT LAND USE

Much of the valley bottom is used for agriculture. Flooding in recent years has apparently encouraged some valley farmers to switch from grain production to livestock. Valley slopes are forested with aspen and oak. Upland areas adjacent to the valley are often well-treed with aspen groves. Especially on the south and west sides of the Assiniboine River, cattle grazing is an important upland land use. East of the Node, cultivated agriculture reflects better soils. Valley slopes near Virden are experiencing rural non-farm residential development.⁴⁶

(4) NATURAL VEGETATION

Adjacent to the Assiniboine River, willows and aspen dominate natural vegetation forms. Where oxbow lakes and flood prone lowlands have been left uncultivated, a variety of willow, dogwood and wild roses provide widespread shrub rather than forest cover. Valley slopes are most commonly in aspen forest although oak dominates local dry, south-facing slopes. Upland areas present a mixture of aspen grove and open mixed-grass prairie.

⁴⁴ Canada Land Inventory, Recreation Capability, Virden Mapsheet.

⁴⁵ Canada Land Inventory, Ungulate Capability, Virden Mapsheet.

⁴⁶ LIFT, Op. Cit., personal observation.

(5) SOILS

Alluvial valley bottom soils have been grouped under the Assiniboine Complex. Valley slopes provide a wide variety of local soil types most of which have been grouped under the Eroded Slopes Complex. Upland soils adjacent to the valley tend to be sandy (Souris loamy fine sands), shallow (Eastbank clay loams), and, in places, relatively infertile. Valley bottom lands have a moderate ("C") crop insurance risk classification. Upland areas have higher risk classifications ranging from "F" through "J". Most of the highest risk lands are located on the west side of the River.⁴⁷

(6) GROUNDWATER

Acquifers appear to be scarce in some areas of the valley bottom. Where water is available, from 5 to 200 gallons per minute may be pumped from sand and gravel aquifers. Water supplies on the upland areas is more erratic. Where groundwater is available, 5 to 200 gallons per minute may be pumped from shale aquifers.⁴⁸

(7) CURRENT RECREATIONAL OPPORTUNITIES

- Much of the Assiniboine River within this Node is used for canoeing. The River near Virden is used to provide instruction to secondary school students in the use of canoes.
- An abandoned municipal road extends down much of the valley, from near Virden to Miniota. The roadbed, though overgrown, is still passable to some vehicles and is used to a small extent by hikers.
- The Virden Ski Club operates a tow bar and Chalet on the right bank of the River, near Virden. Within the Node, other downhill ski slopes are present.
- Oxbow lakes may provide opportunities for swimming and bathing.

⁴⁷ Erlich, Pratt and Poyser, Op. Cit., pp. 47, 57, 61, 87, 91 and map; "Province of Manitoba, Crop Insurance Risk Areas"; Op. Cit., n.p.

⁴⁸ McKay, Op. Cit.

- Fort La Bosse, a Hudson's Bay Company fur trade post site is marked by a cairn east of Virden.
- The Virden Game and Fish Association has built two small dams on a stream tributary to the Assiniboine River. Designed to provide local fishing opportunity, the Association operates a picnicing and tenting area in conjunction with a stocked fish program.

(8) ACCESS

Access to the Node is limited to crossings over the Assiniboine River. The proximity of the Trans-Canada Highway provides easy automobile access to the periphery of the Node. The Assiniboine River itself provides water access to the Node.

(9) MUNICIPAL ZONING

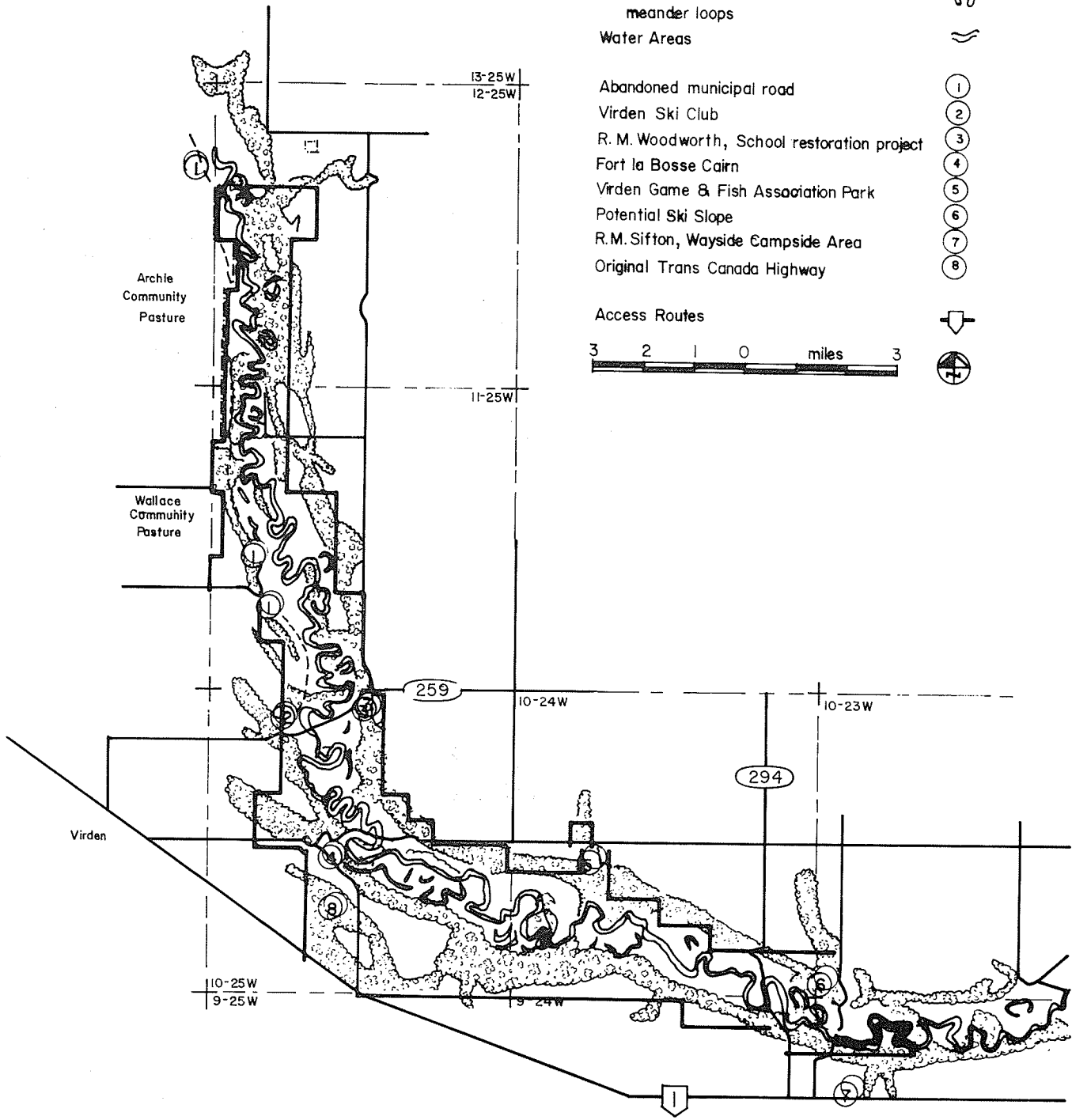
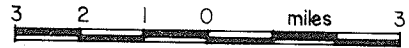
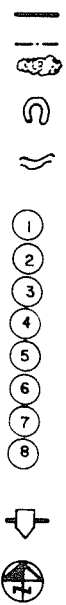
No municipal land zoning program has been adopted by any of the three Municipalities in which the Woodworth-Sifton Node is located.

(10) CONSTRAINTS TO DEVELOPMENT

The valley floor is subject to flooding. Valley sides are steep and susceptible to erosion. Sandy soils in the southwest parts of the Node are sensitive to use.

Woodworth-Sifton Node

- Woodworth-Sifton Node
 - Existing Crown Land
 - Native Tree Cover
 - Oxbow lakes and cut-off meander loops
 - Water Areas
 - Abandoned municipal road
 - Virden Ski Club
 - R. M. Woodworth, School restoration project
 - Fort la Bosse Cairn
 - Virden Game & Fish Association Park
 - Potential Ski Slope
 - R.M. Sifton, Wayside Campside Area
 - Original Trans Canada Highway
- Access Routes



MINIOTA NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

Recreation capability rating of Class 4 applies to lands within the Miniota Node. Scenic viewing, angling and camping opportunities account for the classification.⁴⁹

(2) WILDLIFE CAPABILITY

Class 1, 2 and 3 white-tailed deer habitat is available. Much of the habitat is significant as a wintering ground for deer.⁵⁰

(3) PRESENT LAND USE

The valley floor is devoted to cultivated agriculture. The north-facing valley sides are heavily forested and appear to be unused. The south-facing slopes are grazed. Upland areas tend to be grazed although better upland soils are cultivated.⁵¹

(4) NATURAL VEGETATION

Adjacent to the Assiniboine River and in flood prone lowlands, willow species appear to form the dominant cover. On drier sites, aspen are common. Aspen forest dominates the tree cover on north-facing valley slopes. Slopes with a southerly exposure have a mixed aspen-oak and prairie vegetative cover.

(5) SOILS

Soils in the valley floor are grouped together as the Assiniboine Complex. The valley sides are comprised of the Eroded Slopes Complex. Upland soils on the right bank of the Assiniboine Valley are Oxbow dry knolls and poorly drained depressions. Miniota loams characterize the upland soils of the left bank of the valley. The valley bottom has a low ("C") crop insurance risk classification. Uplands on the left bank of the valley have an "I" risk classification; uplands on the right bank of the valley have a moderate ("C") crop insurance risk classification.⁵²

⁴⁹ Canada Land Inventory, Recreation Capability, Virden Mapsheet.

⁵⁰ Canada Land Inventory, Ungulate Capability, Virden Mapsheet.

⁵¹ LIFT, Op. Cit., personal observation.

⁵² Erlich, Pratt and Poyser, Op. Cit., pp. 41-43, 60, 87, 91 and map; "Province of Manitoba, Crop Insurance Risk Areas" Op. Cit.

(6) GROUNDWATER

Sand and gravel aquifers on the valley floor may provide from 5 to 200 gallons of water per minute. From 5 to 50 gallons may be pumped from shale aquifers under the upland areas.⁵³

(7) CURRENT RECREATIONAL OPPORTUNITIES

- The Assiniboine River here is the origin of most canoe traffic downstream to Virden.
- A Provincial Wayside Park provides facilities to travellers on Provincial Trunk Highway #83.
- Miniota Golf Course is located on the uplands north of the valley.
- Cut-off meander loops and oxbow lakes may provide swimming opportunities.
- The Node includes one good ski slope.
- The Node is the northern terminus of an abandoned municipal road that extends southward down the valley to Virden.

(8) ACCESS

Access to the Node is available from the north and south via Provincial Trunk Highway #83. Provincial Road #467 terminates from the west at the Node.

(9) MUNICIPAL ZONING








No municipal zoning regulations effect land use within this Node.

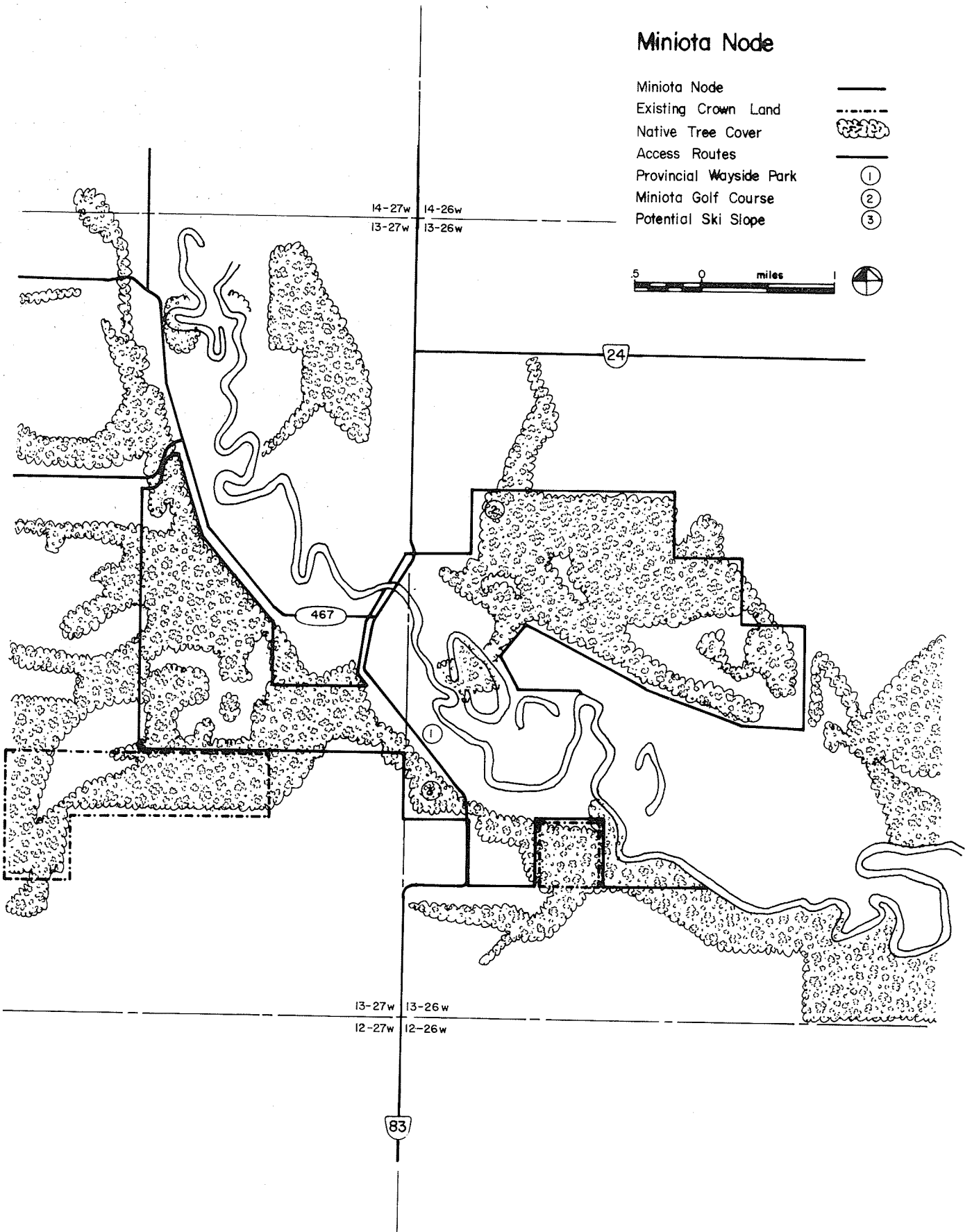
(10) CONSTRAINTS TO DEVELOPMENT

Valley slopes are steep and susceptible to erosion; this is especially so of south-facing slopes. The valley floor is subject to some flooding.

⁵³ McKay, Op. Cit.

Miniota Node

- Miniota Node 
- Existing Crown Land 
- Native Tree Cover 
- Access Routes 
- Provincial Wayside Park 
- Miniota Golf Course 
- Potential Ski Slope 



FORT ELLICE NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

The Class 4 Recreation Capability rating is due to the presence of historic Fort Ellice and the availability of camping and canoeing opportunities.⁵⁴

(2) WILDLIFE CAPABILITY

Ungulate capability is Class 3 for white-tailed deer.⁵⁵

(3) PRESENT LAND USE

Most lands within the Fort Ellice Node are grazed. Flooding of the valley floor has discouraged cultivation. The main line of the Canadian National Railways cuts through the Fort Ellice Node.⁵⁶

(4) NATURAL VEGETATION

Uncleared portions of the valley floor are dominated by willow and aspen. Valley sides are dominated by aspen and oak, the latter growing on drier slopes with a southerly exposure. Exposed knolls have a mixed grass prairie vegetative cover.⁵⁷

(5) SOILS

The valley floor is comprised of soils belonging to the Assiniboine Complex. Valley slopes are comprised of the Eroded Slopes Complex. Upland soils are Oxbow loams characterized by excessive run-off from slopes and very poor drainage from depressions. Fertile Newdale soils dominate the uplands on the left bank of the valley. Upland areas have high ("H" and "J") crop insurance risk classifications; the valley floor has a low ("C") risk classification for crop production.⁵⁸

⁵⁴ Canada Land Inventory, Recreation Capability, Virden Mapsheet.

⁵⁵ Canada Land Inventory, Ungulate Capability, Virden Mapsheet.

⁵⁶ LIFT, Op. Cit., personal observation.

⁵⁷ Personal observation.

⁵⁸ Erlich, Pratt and Poyser, Op. Cit., pp. 41, 68-71, 87, 91 and map; "Province of Manitoba, Crop Insurance Risk Areas," Op. Cit., n.p.

(6) GROUNDWATER

Test drilling to define the location and quantity of groundwater may be necessary in order to identify groundwater sources and amounts. Shale and sand and gravel aquifers could yield from 5 to 200 gallons of water per minute.⁵⁹

(7) CURRENT RECREATION OPPORTUNITIES

The Fort Ellice site experienced local use as a summer sports area. Cut-off meander loops may offer swimming opportunities.

(8) ACCESS

Access to the Fort Ellice Node is poor. The Node is accessible by car only from St. Lazare. The Node is accessible by water.

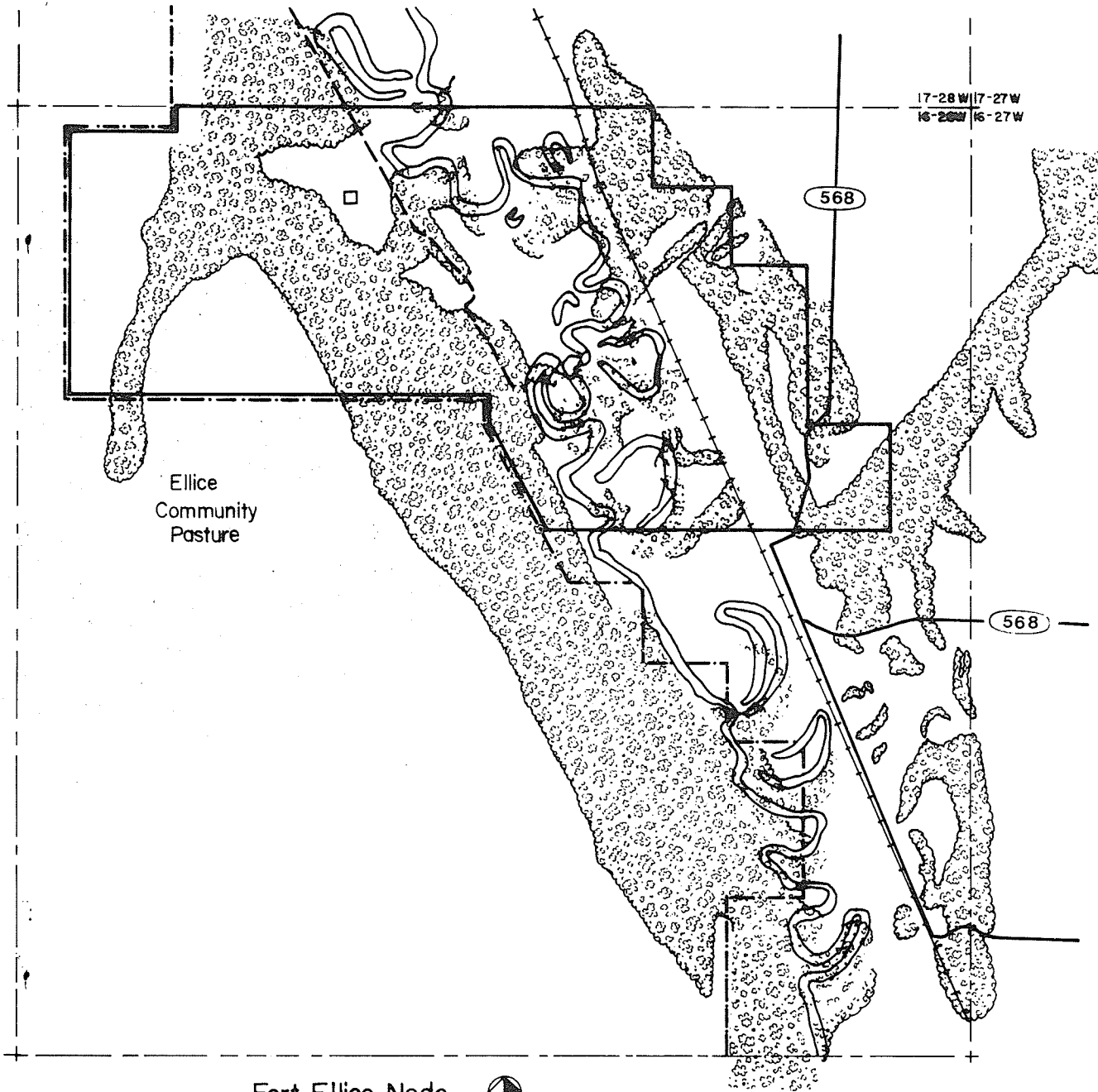
(9) MUNICIPAL ZONING

No municipal planning scheme applies to the Fort Ellice Node.

(10) CONSTRAINTS TO DEVELOPMENT

Valley slopes tend to be steep and may support only extensive use. Archaeological investigations of the Fort Ellice Site may demand minimal visitor access in the short term. Certain valley slopes are subject to erosion. Development must account for the railway which crosses the Fort Ellice Node.










⁵⁹ McKay, Op. Cit.



Ellice
Community
Pasture

Fort Ellice Node



- Fort Ellice Node 
- Existing Crown Land 
- Native Tree Cover 
- Oxbow lakes & cut-off loops 
- Water areas 
- Fort Ellice 
- Trail 
- Access Routes 
- Railways 

0 miles



MILLWOOD NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

Ranked as a Class 4 outdoor recreation area, the Node offers opportunities for camping, the viewing of wildlife and for hiking and nature appreciation.⁶⁰

(2) WILDLIFE CAPABILITY

The Millwood Node is comprised of Class 2 and 3 white-tailed deer range. All of the area provides wintering yards for deer.⁶¹

(3) PRESENT LAND USE

Valley bottom lands are used primarily for grazing and for the production of forage crops. Valley slopes are grazed. Little upland area within the Node is under cultivation. The Canadian Pacific Railway line from Winnipeg to Saskatoon and Edmonton traverses the length of the Node.⁶²

(4) NATURAL VEGETATION

Willow and aspen dominate riverine environments. Valley slopes are vegetated by aspen, oak and prairie depending on exposure and drainage. Upland areas are dominated by aspen groves.

(5) SOILS

The valley bottom is comprised of the Assiniboine Complex soils. Heavy Benton Clay soils on the right bank of the Assiniboine River Valley are prone to erosion from excessive run-off and are of little agricultural value. Wooded slopes are comprised of the Eroded Slopes Complex of soils. On the right and left banks of the valley, upland areas are comprised of fertile Newdale soils. Valley floor lands have a moderate ("D") crop insurance risk classification. Valley sites and upland areas have high ("I") risk ratings.⁶³

⁶⁰ Canada Land Inventory, Recreation Capability, Virden Mapsheet

⁶¹ Canada Land Inventory, Ungulate Capability, Virden Mapsheet.

⁶² LIFT, Op. Cit., personal observation

⁶³ Erlich, Pratt and Poyser, Op. Cit., pp. 68-71, 87, 89, 91 and map; "Province of Manitoba, Crop Insurance Risk Areas," Op. Cit., n.p.

(6) GROUNDWATER:

Groundwater from sand and gravel aquifers appears to be abundant in the valley floor. Here from 5 to 200 gallons of water may be pumped per minute. Upland areas have less groundwater and test drilling is necessary to define location and quantity of water. Groundwater in upland areas is derived from sand and gravel or shale aquifers. From 5 to 50 gallons of water per minute can be pumped from such aquifers.⁶⁴

(7) CURRENT RECREATIONAL OPPORTUNITIES

The Russell Ski Club lies immediately to the north of the Node.

(8) ACCESS

Provincial Road #579 provides access to the town of Millwood, in the Node, from Provincial Trunk Highway #41. Access to the Node is also available by municipal road from Provincial Trunk Highway #4, via Harrowby.

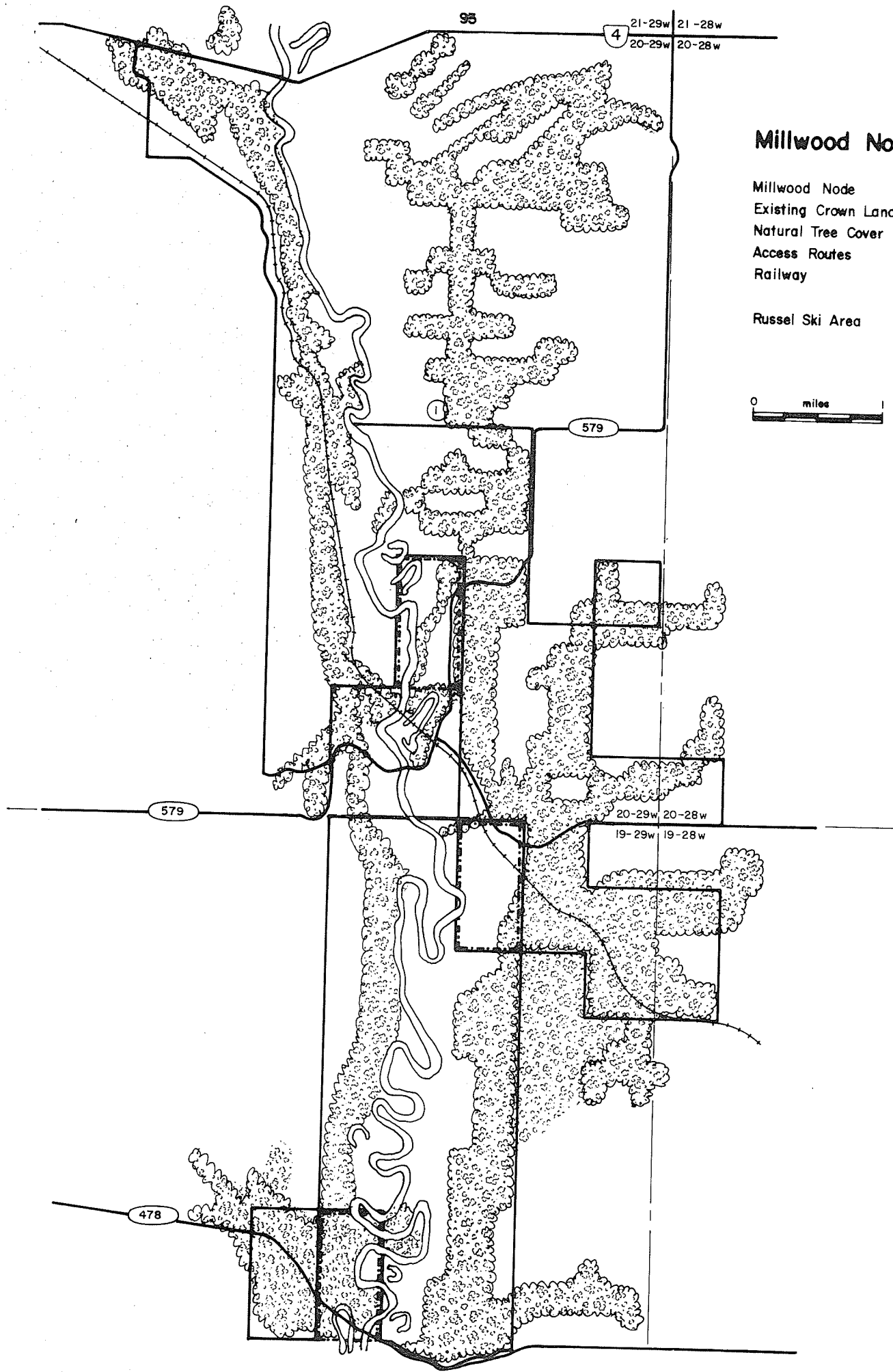
(9) MUNICIPAL ZONING

No municipal planning scheme or other land use regulation governs the use of land within the Millwood Node.

(10) CONSTRAINTS TO DEVELOPMENT

East-facing slopes are steep. West-facing slopes are prone to erosion. The development of facilities will have to take into account the railway which crosses the Node.

⁶⁴ McKay, Op. Cit.



Millwood Node

- Millwood Node
- Existing Crown Land
- Natural Tree Cover
- Access Routes
- Railway
- Russel Ski Area



SHELLMOUTH RESERVOIR AND SHELL RIVER NODES

Since lands immediately adjacent to the Shellmouth Reservoir are under Crown ownership, since the regulation of private lands within the designated Reservoir Area is administered through the Shellmouth District Planning Commission, and since the Shell River joins the Assiniboine River at Assinippi Provincial Park, the Shellmouth Reservoir and Shell River Nodes may both be considered as one. Emphasis in this description of attributes will focus on the Shell River since its recreational potential is under private ownership.

SHELL RIVER NODE

ATTRIBUTES:

(1) RECREATION CAPABILITY

Shell Valley lands are given a Class 4 recreation capability rating. The rating is due to the attractive interspersions of cultural and natural features, to the opportunities for hiking and nature study to the opportunities for viewing wildlife, and to the land form characteristics of the valley.⁶⁵

(2) WILDLIFE CAPABILITY

The Shell River Node is comprised of Class 1, 2 and 3 white-tailed deer habitat. Much of the Valley contains Class 1 wintering range.⁶⁶

(3) PRESENT LAND USE

Most of the Valley floor is grazed or used for forage production. Valley sides are often grazed as well. Upland areas are cultivated.⁶⁷

⁶⁵ Canada Land Inventory, Recreation Capability, Riding Mountain mapsheet.

⁶⁶ Canada Land Inventory, Ungulate Capability, Riding Mountain mapsheet.

⁶⁷ LIFT, Op. Cit., personal observation

(4) NATURAL VEGETATION

The natural vegetation of the Valley floor is comprised of willow and aspen near the Shell River. Bench terraces are prairie. Valley sides are dominated by aspen forest.

(5) SOILS

A narrow strip of Assiniboine Complex soils have developed on the Shell River flood plain. Benchland Complex soils are typical of the terraces and the Eroded Slopes Complex is typical of the Valley sides. Erickson soils on the upland areas are ranked as Class 2 and 3 for agriculture. Crop insurance risk classifications rank from moderate ("F") to high ("H").⁶⁸

(6) GROUNDWATER

Sand and gravel aquifers may provide from 5 to 200 gallons of water per minute. Groundwater water is most likely to be found within the Valley. On the Valley sides and on the upland it may be difficult to find an adequate supply of water where it is needed.⁶⁹

(7) CURRENT RECREATIONAL OPPORTUNITIES

The Shell River Valley is used for a variety of trail-oriented activities: cross-country skiing, walking and snowmobiling. The Shell River is used to some extent for canoeing.

(8) ACCESS

Access to the southern end of the Valley is available from Provincial Trunk Highway #83. A number of municipal roads approach and cross the Valley.

⁶⁸ W.A. Erlich, L.E. Pratt, and F.P. Leclaire, Report of Reconnaissance Soil Survey of Grandview Map Sheet Area, Manitoba Soil Survey, Soils Report No. 9, 1959, pp. 50-52, 76, 77 and map; "Province of Manitoba, Crop Insurance Risk Areas," Op. Cit., n.p.

⁶⁹ McKay, Op. Cit.

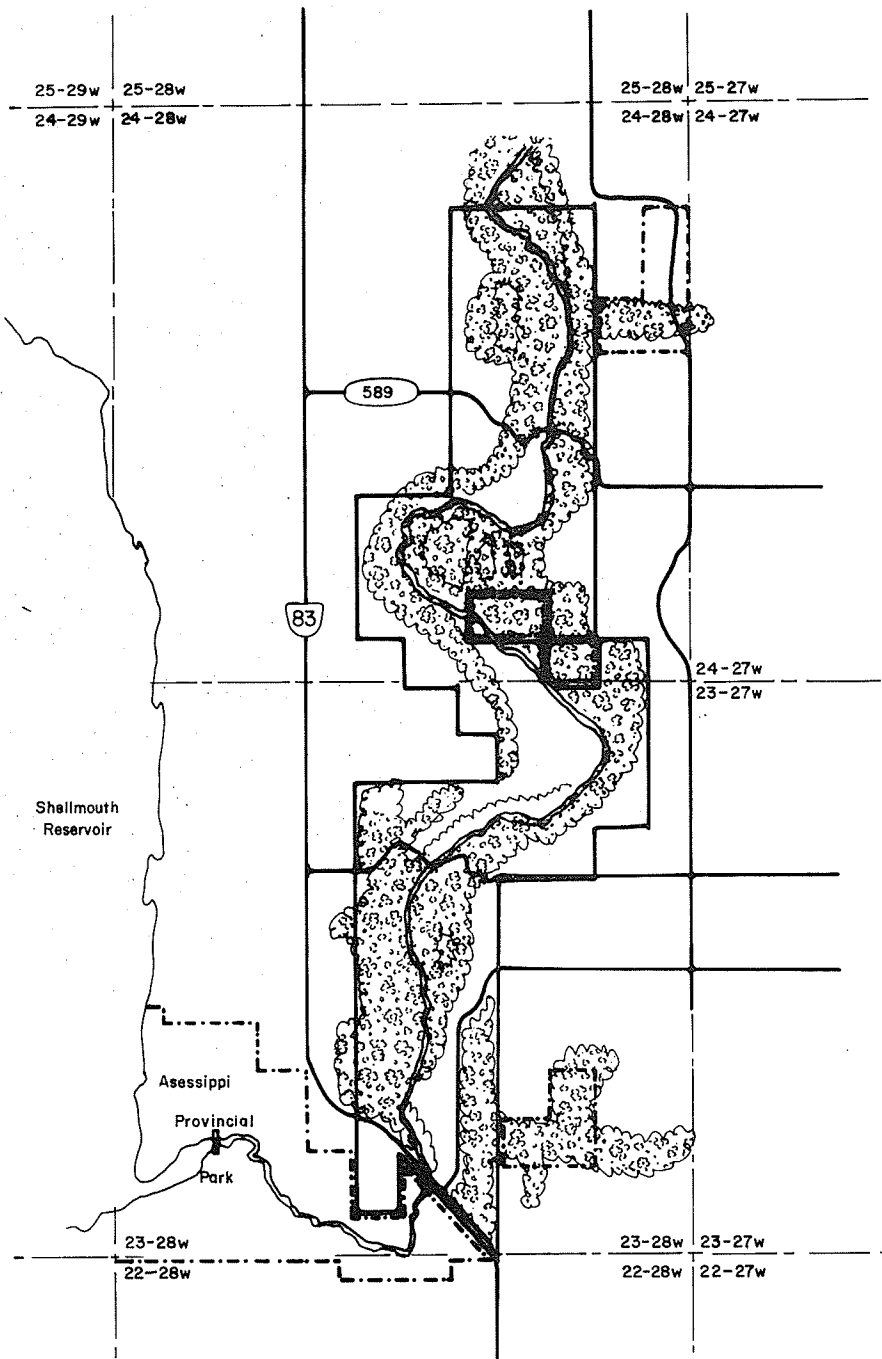
(9) MUNICIPAL ZONING

Although the Shellmouth District Planning Commission has the authority to regulate land use and development along the Shell River, the Commission has not yet done so. Rather, the Commission has stressed the orderly development of recreation facilities adjacent to the Shellmouth Reservoir.⁷⁰





(10) CONSTRAINTS TO DEVELOPMENT

Valley slopes are erodible.

⁷⁰ See above, p. 29 for details pertaining to Shellmouth District Planning Commission programs.



Shell River Node

- Shell River Node 
- Existing Crown Land 
- Native Tree Cover 
- Access Roads 



2. CRITERIA FOR RECREATION LANDS ACQUISITION

Once resource analysis has been used to define the areas of possible acquisition of lands for recreational purposes, it is possible and necessary to define the criteria under which acquisition should proceed.

The criteria to be used to define a recreation lands acquisition program will be based upon the precept that recreation is, in economic terms, a merit good. As a merit good, recreation is a means of improving public welfare with benefits accruing not only to the participants but also to other individuals and to society generally.⁷¹ As such, recreation provides the same types of services to society as do health and education programs.⁷² In this context, the planning of outdoor recreation opportunity should account for the pleasure, health and educational values attributed to recreation and should "...improve the range and quality of (recreational) choices made available."⁷³

To provide for outdoor recreation space requirements, land acquisition criteria should be based upon five variables. These include:

- a) the physical quality of the Recreation Node under consideration;
- b) accessibility to the Recreation Node;
- c) trends in recreation participation and characteristics of users;

⁷¹ Brinser describes investment in recreation as investment in production, but describes the product as a social good than in the traditional economic sense of physical output. See Brinser, Op. Cit., p. 19.

⁷² Ibid., p. 23.; Driver, Op. Cit., p. 109

⁷³ Brinser, Op. Cit., p. 33

- d) social welfare considerations in providing an equitable distribution of recreation opportunity to all Manitobans; and
- e) the current availability of public outdoor recreation opportunity in the vicinity of the Recreation Node.

(i) QUALITY OF THE RECREATION NODE

As a variable, the quality of the Recreation Node is comprised of number of components which may help define the subjective perception of a Recreation Node as good or bad or somewhere in between. Quality will be defined as the ability of the Node to provide for a desired environment. The quality of the Recreation Node, then, is a description and evaluation of the attractions found within the Node. Quality evaluation is based upon techniques developed by Eugene Mattyazovsky and by Taylor and Thomson and adapted to suit the environment of southwestern Manitoba.⁷⁴ Elements and ratings of the quality components include the presence of natural vegetative cover, landscape variety, the quantity and quality of drinking water available, the extent of still water available for water-oriented activities, and the presence of wildlife.⁷⁵

⁷⁴ E. Mattyazovsky, "Recreation Area Planning: Some physical and Ecological Requirements", in Fischer, Lewis and Priddle, (ed.) Op. Cit., pp. 221-236; See also G.D. Taylor and C.W. Thomson, "Proposed Methodology for an Inventory and Classification of Land for Recreation Use", in Ibid., pp. 258-265.

⁷⁵ Herbert D. Schellenberg, in developing an amenity index for a study of reservoir development at Ames, Iowa, found that "...wildlife and forest were shown to be two resource categories... for which the public felt strong agreement that preservation was important..." and that both were valued for their recreational benefits. Employing regression analysis it was further pointed out that wildlife, forest, free flowing streams, remnant prairie and prairie potholes, in order of importance, were perceived as providing amenity values. See Herbert D. Schellenberg, "Identification, Measurement and Incorporation of Environmental Quality Objective in Natural Resources Management", (Ph.D. dissertation, Iowa State University, 1973), pp. 213-214. Factors selected as elements of quality evaluation tend to vary slightly between authors depending on the scale of the analysis and the knowledge available. A more complete review of the literature on this aspect of the identification of recreation lands may be found in R.P.C. Ltd., An Historic and Present Land Use and Open Space Inventory of the Winnipeg Region, prepared for the Winnipeg Region Study Group, Manitoba Department of Municipal Affairs, 1975, pp. 3-7.

The presence of natural vegetative cover is a significant aspect of the quality of the Recreation Node where conditions are such that the provision of recreation opportunity is perceived as a need to be accommodated in the immediate future. Where natural vegetation is regarded as a significant component of the quality of the Node, it may not be desirable to invest funds in the acquisition of lands that will require the passage of some years before sufficient natural vegetation, especially tree cover, develops to accommodate preconceived expectations about natural-ness of the part of the user.⁷⁶ As a result, Recreation Nodes which are characterized by extensive urban or agricultural development are weighted as being less desirable to acquire than are lands which are predominantly prairie or forest. Lands which are predominantly forest⁷⁷ are ranked highest because of the preference for tree cover for many types of recreational activities. (Figure II).

Landscape variety is weighted most heavily in favour of those areas where a variety of landforms, terrestrial and riverine, contributes to the appreciation of a wide range of natural phenomena (Figure III). Areas with a uniform landscape offer a more limited range of aesthetic experiences than do other landscapes. Landscapes that present a mixture of land formations such as river bottomlands, terraces, cliffs and oxbow lakes with their concomitant varieties in vegetative species offer outdoor recreationists the opportunity to experience a greater appreciation of participation in outdoor activities. Landscape variety contributes greatly to a sense of aesthetic appreciation and to a greater range of possible opportunities, and is ranked accordingly.⁷⁸

⁷⁶ David R. Godschalk, and Francis H. Parker, "Carrying Capacity: A Key to Environmental Planning," Journal of Soil and Water Conservation 30 (July-August, 1975): 163-164.

⁷⁷ Marion Clawson, "Conflicts and Strategies in Forest Land Management," Journal of Soil and Water Conservation 30 (March-April, 1975): 66.

⁷⁸ E. Boyd Wennergren and Herbert H. Fullerton, "Estimating Quality and Location Values of Recreation Resources," Journal of Leisure Research 4 (Summer, 1972): 182.

FIGURE II VEGETATIVE COVER: SCALE OF WEIGHTINGS.

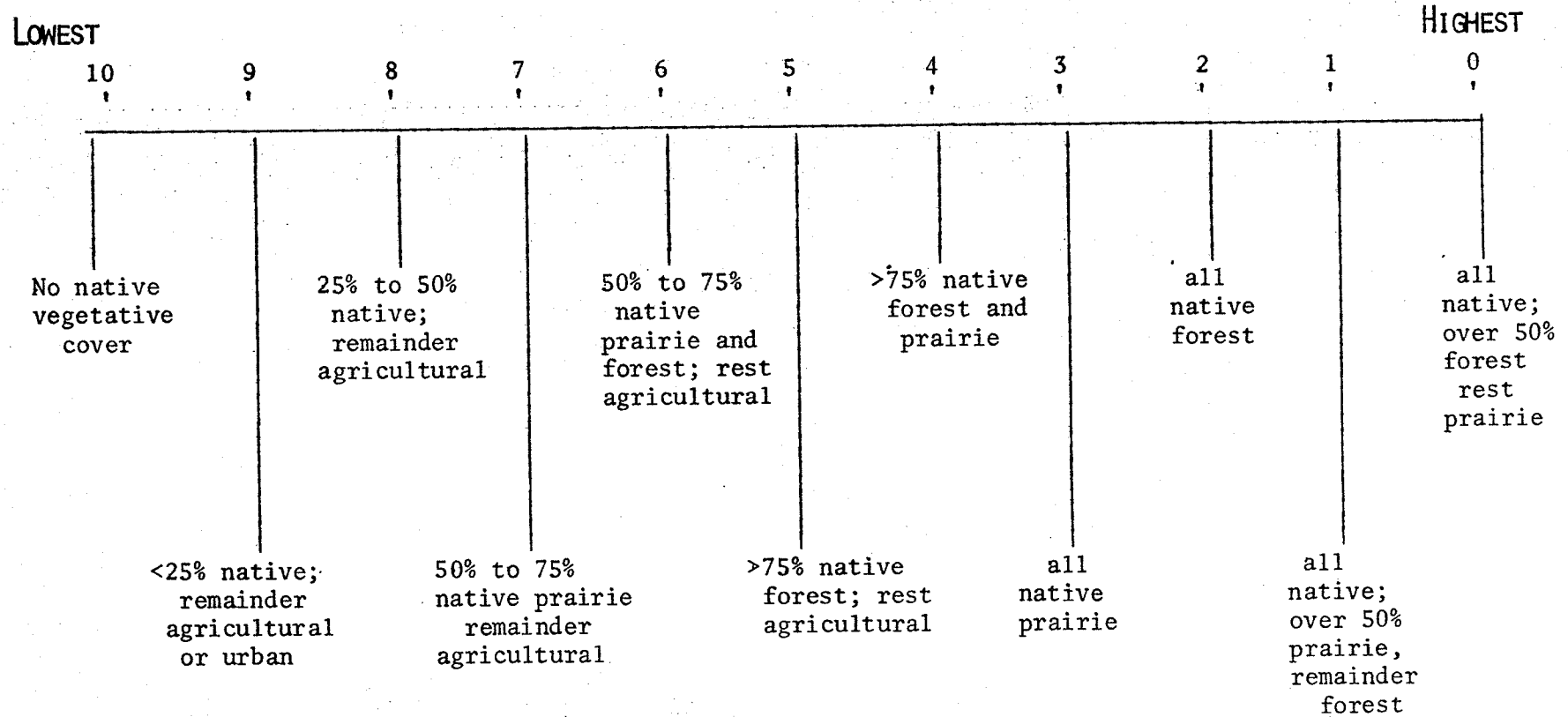
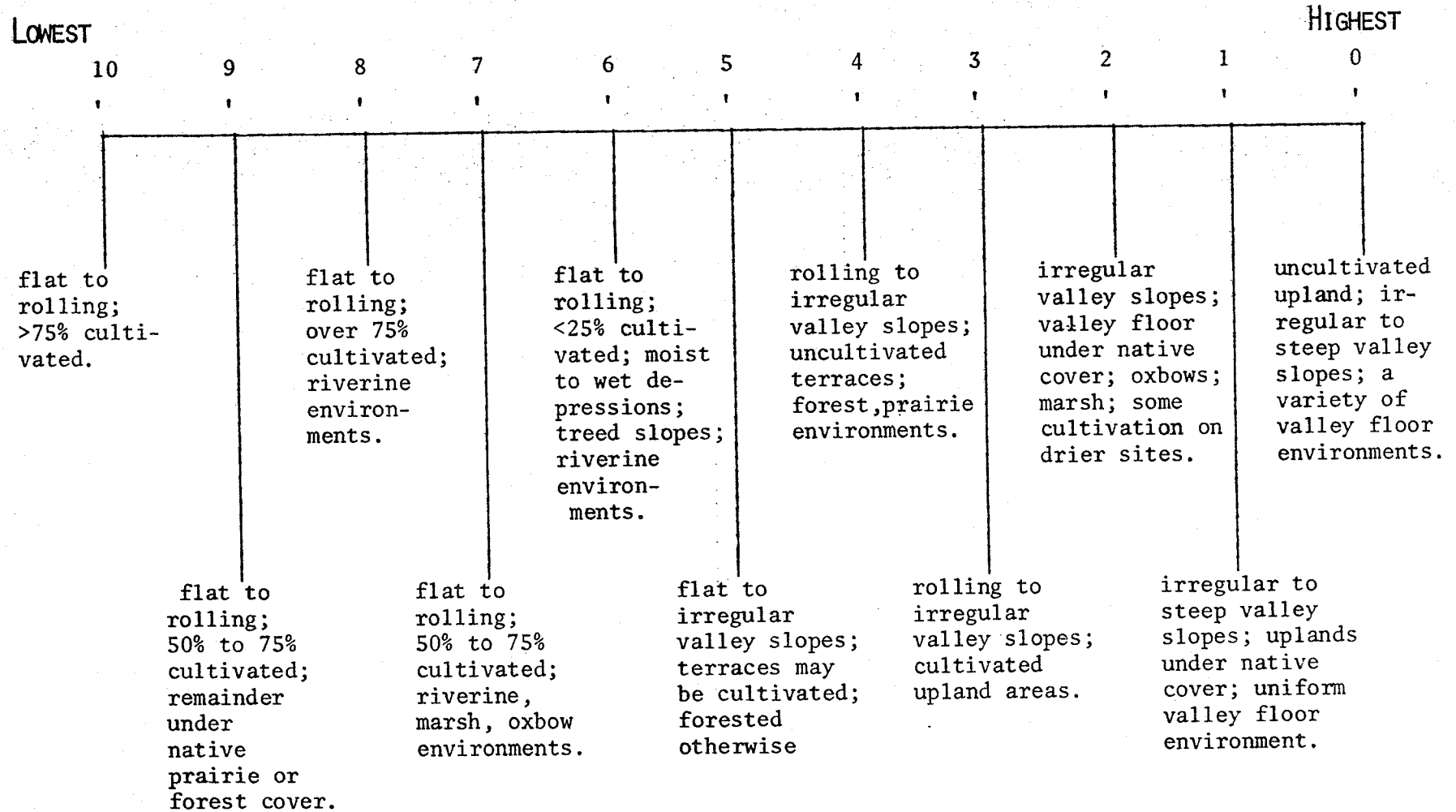


FIGURE III LANDSCAPE VARIETY: SCALE OF WEIGHTINGS.



The quality and quantity of drinking water available in the Recreation Node is weighted in favour of those areas where drinking water, provided by means of wells or through free flowing springs, is readily available to the recreationist.⁷⁹ (Figure IV).

In view of the water orientation of many outdoor recreational activities and because of the apparent preference for water as part of a recreational landscape,⁸⁰ the availability of still water occupies a significant role in the choice of recreation areas to which users go. The lowest rating is given to those recreation nodes which possess no still water areas (Figure V). The unsuitability of the Assiniboine River for many water-oriented activities suggests that the Assiniboine River itself be given a low value rating. Nevertheless, the River itself provides opportunities for canoeing and, at many sites, fishing. The River also adds to the visual landscape and contributes to its variety. The Assiniboine River itself, then, is given a moderately low rating. The lowest rating is reserved for those streams narrow in width and small in volume of water carried such that the stream is of little use to the user. Along the Assiniboine Valley, most still water is found in oxbow lakes and cut-off meander loops. Such still water areas tend to be replenished periodically with fresh water and, as the silt load of incoming flood waters is deposited, opportunities for swimming may be presented. Oxbow lakes tend to be narrow and activities such as water skiing may not be possible. The highest quality ranking is given to impoundments behind structures and to natural lakes. Here, broader expanses of water permit a broader spectrum of water-oriented activities.

The wildlife presence in a Recreation Node is weighted in favour of those areas where numbers and varieties of wildlife species are greatest (Figure VI). In terms of ungulate capability, all Recreation Nodes are significant white-tailed deer areas. White-tailed deer counts

⁷⁹ The availability of drinking water as a minimal cost of development is critical for certain types of outdoor recreational pursuits where it may be felt that large expenditures in ensuring an ample water supply must be weighed against the expected use of the water supplied.

⁸⁰ cf., for example, Taylor and Thomson, Op. Cit., p. 261

FIGURE IV DRINKING WATER: SCALE OF WEIGHTINGS.

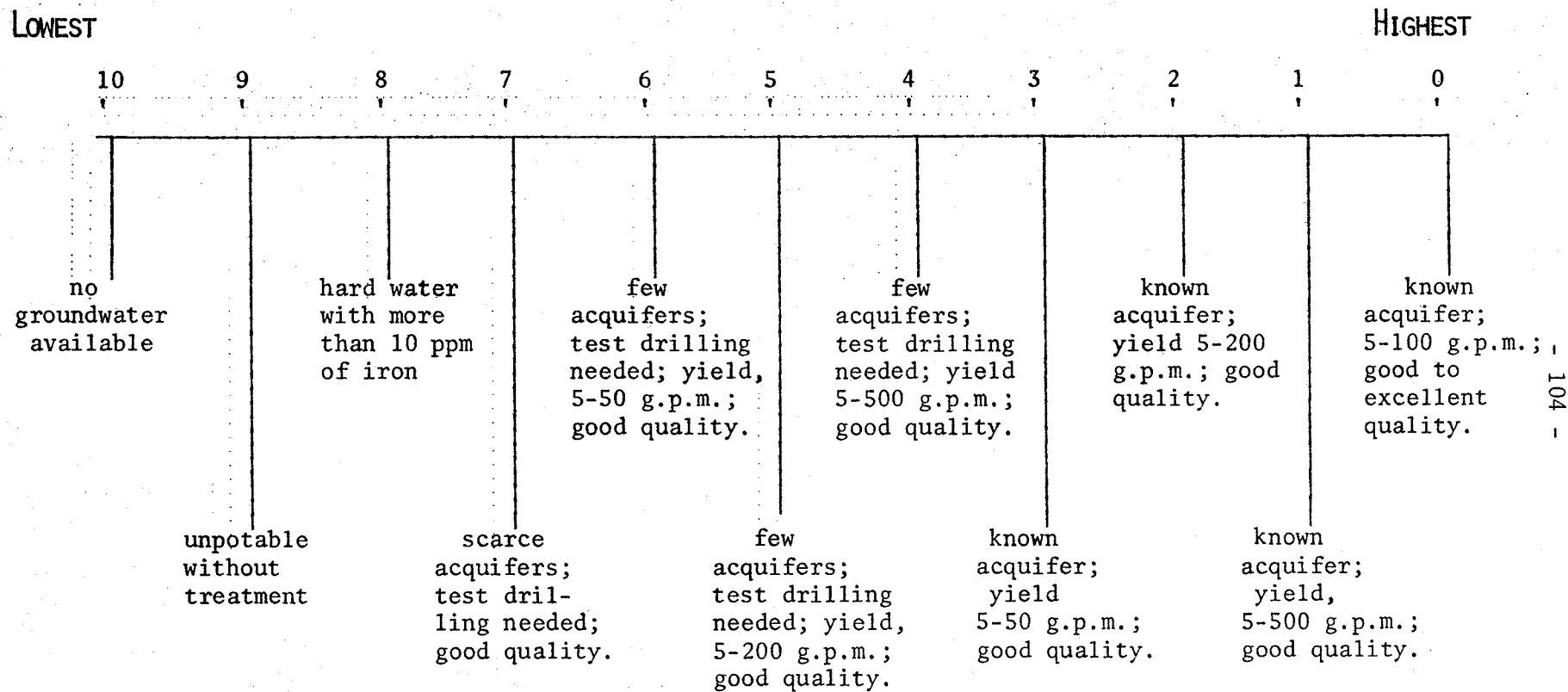


FIGURE V STILL WATER: SCALE OF WEIGHTINGS.

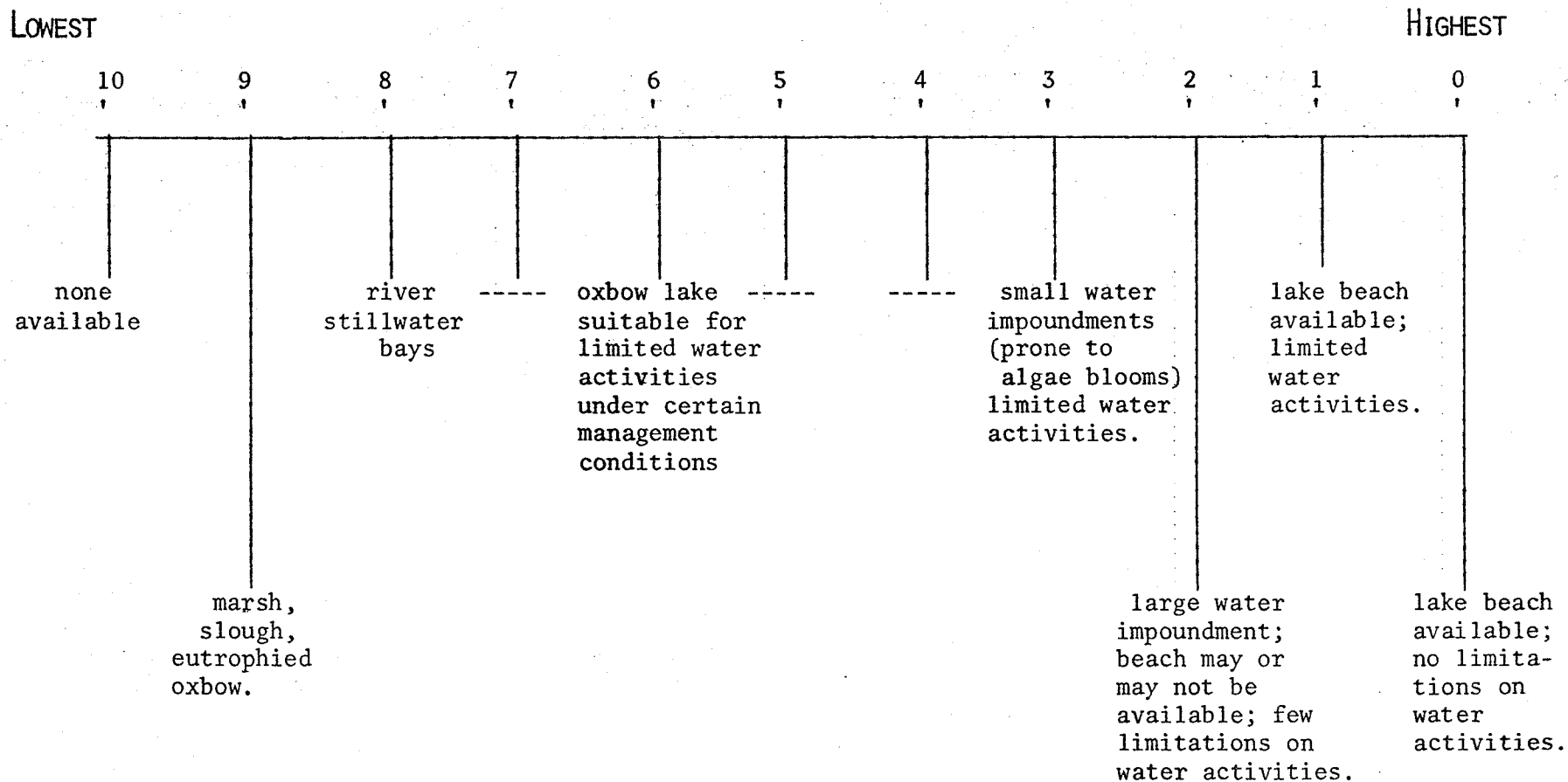
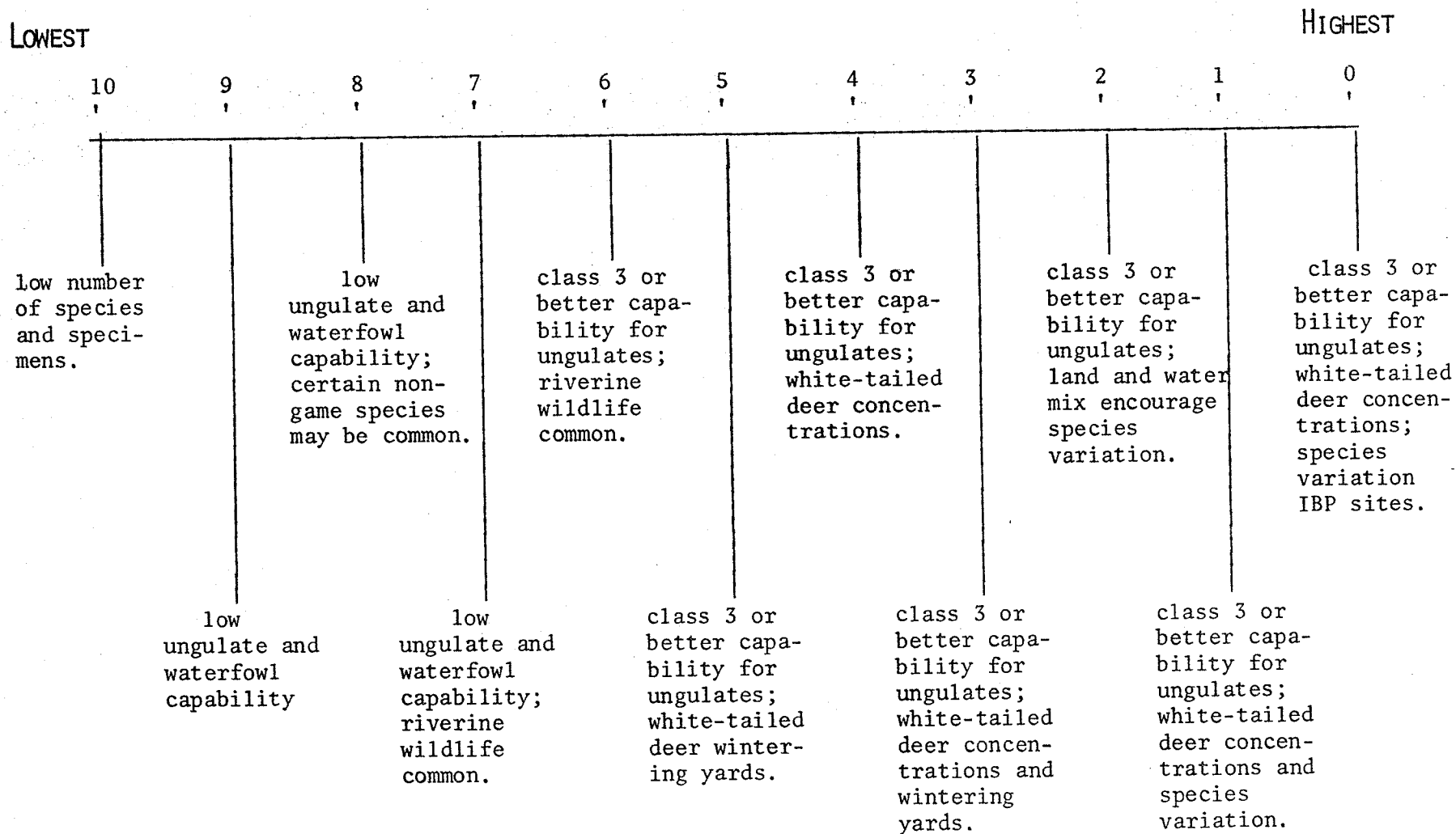


FIGURE VI WILDLIFE PRESENCE: SCALE OF WEIGHTINGS.



have determined that certain parts of the Assiniboine Valley are more important than others as white-tailed deer range. Where deer counts have revealed pockets of concentration, these pockets are ranked higher than are other high capability white-tailed deer areas.⁸¹ No high quality waterfowl lands appear in Recreation Nodes along the Assiniboine Valley. A critical consideration in the numbers and species of wildlife in a particular area lies in the intermixture of riverine and terrestrial environments and in the variety of landforms and habitat available. The highest wildlife rating is therefore given to those areas where white-tailed deer tend to concentrate, where there is landscape variety, and where there is an intermixture of riverine and terrestrial environments supportive of waterfowl, big game and upland game.

The ranking of Nodes in accordance with the physical quality of the recreational environment is something of a subjective process. Ultimately quality is a personal, subjective concept. Nevertheless, quality is frequently conceived of as the cumulative appreciation of a number of components. The quality of a camping experience may, for example, be defined in terms of the cumulative effect upon the user of the distance of the campground from swimming or other water experiences, the degree of use of the campground when the user is there, the visual appeal of the campground site and adjacent environment, and the range of services that may be provided to the user.

The foregoing discussion of physical quality has been based upon a weighting of factors - in themselves a reflection of more or less subjective considerations - that are perceived to add or detract from a quality recreational experience. The selection of quality factors has been explained above. To evaluate the physical quality of Recreation Nodes, then, each factor is applied to and weighted to reflect capabilities to satisfy the factor at, each defined Recreation Node. When each Node has been evaluated against each factor, the factor evaluations are averaged in order to provide a "Total Quality Valuation" for each Recreation Node.

⁸¹ Larche, Op. Cit.

Table V following, describes the evaluation of each quality factor in each Recreation Node. The lower the valuation, on a scale of 10 - 0, the "better" that factor is at that Node. The "Total Quality Valuation" is an average of all factor valuations and hence, from a physical quality point of view, the lower the "Total Quality Valuation" the "better" is the physical quality of the Node. In terms of physical quality, the "best" Node is the Waggle Springs Recreation Node, the "least good" is the St. Francois-Xavier Recreation Node.

(ii) ACCESSIBILITY TO THE RECREATION NODE

As of January 13, 1975, Winnipeg had a population of 583,016.⁸² If only residents of Manitoba are considered, Winnipeg residents provide overwhelmingly larger numbers of recreationists than any other community. Indeed, the majority of users of provincial recreation areas within two hour's drive of Winnipeg come from Winnipeg. Because of the significance of Winnipeg residents' attendance at recreation areas, accessibility to a Recreation Node can be defined in terms of the distance of the Node from Winnipeg.

The accessibility rating is based on a scale of 10-0 where the lowest rating (10) is given to a recreation area more than four hours' drive from Winnipeg. The highest rating (0) is attributed to those areas less than one-half hour's drive⁸³ from Winnipeg.⁸⁴

The accessibility weighting scale is described in Figure VII. Against the scale, each Recreation Node is compared to define a "Recreation

⁸¹ Larche, Op. Cit.

⁸² Computer Printout: Registrations, Manitoba Health Services Commission.

⁸³ Time-distance relationships are based upon highway speed limits.

⁸⁴ For a detailed treatment of the influence of time and distance relationships on outdoor recreation, see B. O'Rourke, "Travel in the Recreation Experience - A Literature Review, "Journal of Leisure Research 6 (Spring, 1974): 140-156

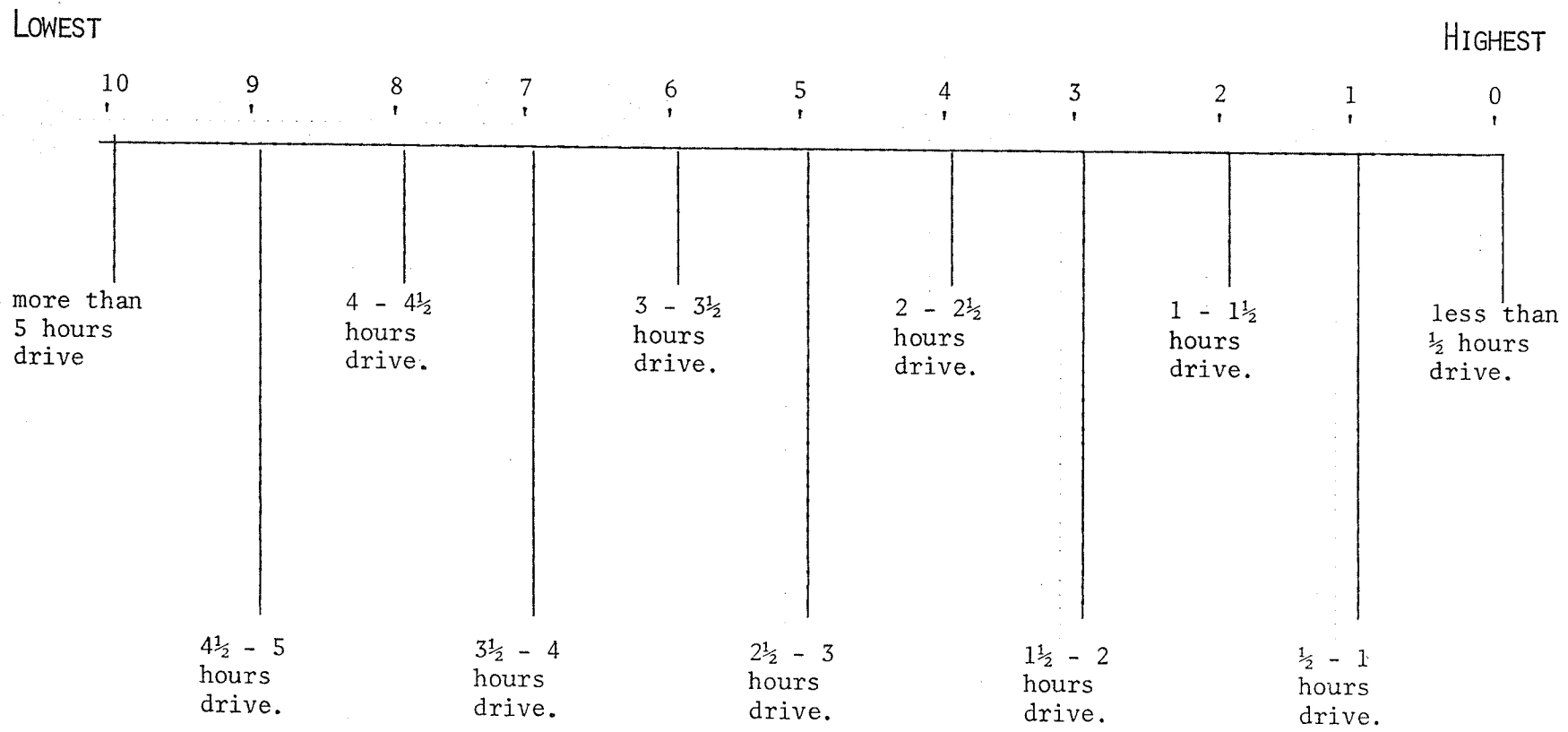
TABLE V RECREATION NODE QUALITY VALUATIONS

Recreation Node	Quality Elements (Scale of Weightings: 10-0)					Total Quality Valuation* (averaged)
	Vegetative Cover	Landscape Variety	Drinking Water	Still Water	Wildlife Presence	
St. Francois-Xavier	8	8	9	10	6	8.2
Norquay Beach	5	6	8	6	6	6.2
Portage la Prairie	5	6	7**	2	3	4.6
Treesbank	4	2	0	8	6	5.0
Waggle Springs valley floor	5	6	0	10	0	3.9
Waggle Springs elsewhere	0	3	0	10		
Brandon valley floor	9	8	7	6	5	6.0
Brandon elsewhere	4	5	6	10		
Woodworth-Sifton valley floor	8	7	5	6	1	5.1
Woodworth-Sifton elsewhere	4	3	6	10		
Miniota valley floor	8	7	2	6	4	5.0
Miniota elsewhere	0	3	6	10		
Fort Ellice valley floor	4	2	2	9	6	4.6
Fort Ellice elsewhere			6	10		
Millwood valley floor	4	0	2	9	3	4.1
Millwood elsewhere			6	10		
Shell River	6	5	6	10	5	6.4

* The total quality valuation is derived from summing the values given to each quality element and by dividing by the total number of quality elements.

** This value rating includes only groundwater supply and excludes the fresh water lagoon located immediately below the dam.

FIGURE VII ACCESSIBILITY FROM WINNIPEG: SCALE OF WEIGHTINGS.



Node Accessibility Valuation." Accessibility valuations are displayed in Table VI. Nodes closest to Winnipeg are given a lower valuation than more distant Recreation Nodes. From an accessibility point of view, the "best" Node is St. Francois-Xavier while the "least good" are the Millwood and Shell River Recreation Nodes, both of which are the greatest distance from the major source of users.

TABLE VI RECREATION NODE ACCESSIBILITY VALUATIONS

Recreation Node	Valuation
St. Francois-Xavier	0
Norquay Beach	1
Portage la Prairie	1
Treesbank	4
Waggle Springs	4
Brandon	4
Woodworth-Sifton (at Virden)	6
Miniota	7
Fort Ellice	8
Millwood	9
Shell River	9

(iii) OTHER CRITERIA FOR RECREATION LANDS ACQUISITION

The quality of the Recreation Node and accessibility to a Node from Winnipeg are capable of being ranked on a weighting scale. Underlying assumptions of the weighting scales used are that "more attractive" sites will be used more heavily than "less attractive" sites and that sites closer to a large population will be more heavily used than more distant sites.

Criteria for recreation lands acquisition should, however, take into account trends in recreation participation, certain social values and the present availability of alternative recreation lands. In these cases, it is not possible to develop a weighting scale. To weight trends

in recreation participation, for example, implies a subjective weighting of the activity itself, a subjective assertion that one type of activity is "better" than another. Similarly, social values cannot be weighted for the choice between values is properly a political choice.

Because of these considerations, trends in recreation participation, social values and availability of alternative recreation space, each Recreation Node is valued on a "yes-no" basis according to the ability of the Node to satisfy the criteria.

(iv) TRENDS IN RECREATION PARTICIPATION

Chapter III above, and Appendices I and II outlined certain trends in the use and characteristics of users of recreation lands along the Assiniboine River. Those trends and characteristics provide certain implications for the acquisition of land for recreational purposes.

Described in terms of their implications for recreation lands acquisition, the trends in outdoor recreation participation include:

- 1) an apparently rapidly growing use of undeveloped Crown lands as sites for outdoor education programs conducted by individual schools but authorized by the School Boards of individual School Divisions. Possibly the most important program is the schools' "orienteeing" program.⁸⁵ In view of the correlation between the outdoor experiences participated in by youth and the outdoor experiences participated in by adults,⁸⁶ the "orienteeing" and other school sponsored outdoor education programs suggest that in future years, the demand for relatively undeveloped recreation lands

⁸⁵ cf., above, p. 35.

⁸⁶ Dean R. Yoesting and Dan L. Burkhead, "The Significance of Childhood Recreation Experience on Adult Leisure Behaviour: An Exploratory Analysis," Journal of Leisure Research 5 (Winter, 1973): pp.25-36; and Andrew J. Sofranko and Michael F. Nolan, "Early-Life Experiences and Adult Sports Participation," Journal of Leisure Research 4 (Winter, 1972): pp. 6-18.

will rise dramatically. Outdoor education programs for children and adults conducted by the Manitoba Association of Foresters strengthen the impression that the educational value of undeveloped environments is of increasing importance.

- 2) camping, picnicking and swimming are and may continue to rank as the three most important pleasure-oriented activities in which large numbers of recreationists participate. The pattern of access to camping sites appears, however, to be changing. Rapidly increasing purchases of camper trucks and mobile homes suggest that participants are willing not so much to give up travel and an outdoor experience but to cut back on relatively expensive hotel and motel accommodation and in light of increasing gasoline prices, to reduce the distance travelled to the site.
- 3) much of the day-use participation at designated recreation areas within two hours drive of Winnipeg stems from recreationists who visit the area in the course of driving and sight-seeing trips.
- 4) in recent years, trail oriented activities such as snowmobiling, cross-country skiing, motorcycling, bicycling, and walking and hiking activities have received increased importance as recreational experiences. The future trends of these activities indicates that each will experience considerable growth.

On the basis of the trends in recreation participation, it would appear that additional recreation land is required to accommodate the increasing use of non-cultivated lands for a variety of educational activities, the continuing popularity of water-oriented recreational activities, and the increasing popularity of trail-oriented recreational activities.

To accommodate the educational values attributed to certain forms of outdoor recreation, it is necessary that large blocks of land be acquired. For "orienteering" programs, and for the group camping experiences participated in by Church groups, Boy Scouts and the like,

enough space is required for the participant to get lost and to be able to be found. Along the Assiniboine River, three Recreation Nodes are of sufficient size to accommodate the demands of such programs. These Nodes are:

- i) Portage la Prairie,
- ii) Treesbank, and
- iii) Woodworth-Sifton

Each of the three Nodes above are large enough, and varied enough, to accommodate a wide range of educational values that might include "orienteering" programs; group camping experiences; nature study, interpretation and appreciation; and classroom field trip experiences.

Educational experiences that center upon an appreciation of Manitoba's cultural past are available in three Nodes. These are:

- i) Treesbank,
- ii) Waggle Springs, and
- iii) Fort Ellice.

Each Node is possessed of unique and significant archaeological and historical sites. The importance of conducting research at the site before any recreational development occurs, suggests that access to the Treesbank, Waggle Springs and Fort Ellice Nodes be restricted until research is complete.

Outdoor recreational experiences that center upon the appreciation of unique natural phenomena are available in the Waggle Springs Recreation Node. A heron rookery in the Node has been designated an IBP site and public access to the site should be controlled.

The popularity of water-oriented recreational activities suggests that areas providing opportunity for swimming and other water sports be made more readily available to public use. Opportunities for swimming are available at the following Recreation Nodes:

- i) Norquay Beach,
- ii) Portage la Prairie,
- iii) Brandon,
- iv) Woodworth-Sifton, and
- v) Shell River.

Opportunities for water sports other than canoeing and swimming require larger expanses of water. Such expanses are found at:

- i) Portage la Prairie, and
- ii) Shell River.

Six Recreation Nodes are of a size, and of varied topography and vegetative variety to accommodate trail oriented activities such as snowmobiling, cross-country skiing, snow-shoeing, and horseback riding. These Nodes are:

- i) St. Francois-Xavier,
- ii) Portage la Prairie,
- iii) Treesbank,
- iv) Brandon,
- v) Woodworth-Sifton, and
- vi) Shell River.

Insofar as different trail activities require different trail designs, each of the Recreation Nodes should not necessarily be expected to provide trail facilities for all types of trail users. Cross-country skiing experiences, for example, benefit from flat to rolling but not from the irregular topography. Similarly, trail activities vary regionally. Cross-country skiing appears to date to be an urban phenomenon and ski trails should, accordingly, be constructed near urban areas.

iv) SOCIAL WELFARE CONSIDERATIONS

If the provision of recreational opportunity is perceived as part of a social service system where recreation provides health and educational benefits to participants and society generally, the provision of recreation opportunity should be expected to provide facilities to recreationists not able to travel to existing recreation areas. It is difficult to estimate the extent of the "latent" demand for outdoor recreation opportunity,⁸⁷ and it is even more difficult to hold the conclusion that if opportunities were developed to tap the latent demand that those opportunities would necessarily be the types of opportunities

⁸⁷ Trent L. Good, "A Planning Analysis of Outdoor Recreation in the Winnipeg Region," (M.A. thesis, University of Manitoba), 1970, pp. 81-83

wanted. For example, the camping experience appears to be very much a middle income and upper-middle income recreational activity. To suggest that lower income families would participate if camping facilities were closer (more accessible) does not necessarily and logically follow from the lack of low income participation at existing campground facilities. Lower income families may not wish to camp. Nevertheless, the participation of lower income families in the camping experience cannot be tested until such facilities are provided. It is noteworthy that the users of campgrounds within one hour's drive of Winnipeg have significantly lower incomes than do the users of campgrounds more distant from Winnipeg. It may be tentatively suggested, then, that more lower income families may participate in camping experiences if the opportunities were available.⁸⁸

In the provision of lands for recreational purposes, the following social welfare considerations may be taken into account in selecting the lands to be acquired for outdoor recreational activities:

- a) that recreational lands and facilities be more accessible to people who have not traditionally partaken in many forms of outdoor recreation;
- b) that recreation lands and facilities be made available to accommodate a wide variety of recreational interests ranging from intensive day-use facilities to undeveloped areas appropriate for a variety of educational and health benefits.

On the basis of the social welfare consideration that recreation lands should be made available near larger urban areas in order to accommodate potential lower income users, accessibility to those recreation

⁸⁸ Lindsay and Ogle in their study of use of recreation sites in Weber County, Utah (in which county is located Salt Lake City), noted that lower income families owning cars made use of recreation sites if they were easily accessible from urban core areas of Salt Lake City. See John J. Lindsay and Richard A. Ogle, "Socio-economic Patterns of Outdoor Recreation Use Near Urban Areas," Journal of Leisure Research 4 (Winter, 1972): 19-24.

areas should be weighted in favour of the development of Recreation Nodes within one hour's drive of urban areas. To achieve this social welfare objective, outdoor recreation lands can be acquired in the following Recreation Nodes.

- a) St. Francois-Xavier,
- b) Norquay Beach, and
- c) Portage la Prairie.

To accommodate potential lower income users in the City of Portage la Prairie, acquisition of recreation lands should take place in the Portage la Prairie Node. To accommodate lower income residents of Brandon, recreation lands acquisition should take place in the following Recreation Nodes:

- a) Treesbank,
- b) Waggle Springs,
- c) Brandon, and
- d) Woodworth-Sifton.

On the basis of the social welfare consideration that overcrowding of existing campgrounds reduces the quality of the camping experience, acquisition of lands for the provision of camping experiences should take place in the following Nodes:

- a) St. Francois-Xavier,
- b) Norquay Beach, and
- c) Portage la Prairie.

to accommodate overflow use of campgrounds at Norquay Beach.

Lands in the Treesbank Node could accommodate overflow use of the Kiche Manitou campground at Spruce Woods Provincial Park. Lands in the Brandon and Woodworth-Sifton Nodes may accommodate overflow use of the Grand Valley campground.

vi) CURRENT AVAILABILITY OF PUBLIC OUTDOOR RECREATION OPPORTUNITY

The rationale for increasing the availability of public outdoor recreation lands centers upon two considerations. First, existing recreational facilities are over-used resulting in an inferior quality of recreational experience. Second, public outdoor recreation opportunity must seek to improve the range and quality of recreational choices made available. Subsequently, land acquisition for recreational purposes

may be necessary when it has been identified that current recreational lands and facilities are not providing for experiences desired by the public.

Most publicly owned land -- Crown land -- is, under regulation, available for most forms of outdoor recreational activity. The use of Crown land, subject to access, to provide opportunities for consumptive and non-consumptive uses of wildlife; trail-oriented activities such as snowmobiling, cross-country skiing, and horseback riding; educational activities such as nature appreciation and techniques for survival in primitive environment; and more prosaic activities such as berry picking lead one to suggest that the presence or absence of suitable Crown land may encourage or serve as a deterrent to participation. The availability or non-availability of publicly accessible Crown land, then, should serve as a criterion for increased investment in land acquisition for recreational purposes.

The assumption is made that, if the quality of experience possible in the Recreation Node can be approximated or equalled on currently available Crown land nearby, the costs of acquiring land in the identified Recreation Node should be foregone either to develop facilities on existing Crown land or to acquire lands in other Recreation Nodes where no alternative, accessible Crown lands may be available.

Along the Assiniboine River are located six major blocks of Crown land. These blocks include Spruce Woods Provincial Park, Camp Shilo Military Reserve, Archie-Ellice Community Pasture, Wallace Community Pasture, Assissippi Provincial Park, and Crown lands adjacent to the Lake of the Prairies. For most purposes, public access is not allowed to the Camp Shilo Military Reserve and to Community Pastures. Spruce Woods and Assissippi Provincial Parks and the Crown lands adjacent to the Lake of the Prairies are of such an extent that a wide variety of land and water based recreational activities, pursued for pleasure, education or health, are possible. In the case of Spruce Woods Provincial Park, the range of outdoor experiences available there may be sufficient to outweigh the advantages of acquiring lands in the Treesbank Node for some forms of recreation. To its advantage, however, the Treesbank Node possesses a wide range of historic and archaeologic sites not available at Spruce Woods Provincial Park.

The Millwood and Shell River Recreation Nodes each lie within a half-hour's drive of Assissippi Provincial Park. The attributes of the Millwood and Shell River Nodes are such that the range of recreational activities possible can be duplicated and expanded by focusing investment at Assissippi Provincial Park and on the Crown lands adjacent to the Lake of the Prairies.

Recent acquisition of land west of Headingly for Beaudry Provincial Park carries unknown implications for the possible acquisition of land in the St. Francois-Xavier Node. It is anticipated that Beaudry Provincial Park will be developed as an outdoor education area, as a Natural Park. If many day-use activities and all extended use activities are precluded from Beaudry Provincial Park, the proximity of the St. Francois-Xavier Node to lower income families in Winnipeg suggests that the acquisition of lands in the St. Francois-Xavier Node may be directed to serve purposes other than education.

Further abroad from the Assiniboine River, blocks of Crown land at the south end of Lake Manitoba, in the Turtle Mountains, and around Oak Lake offer certain opportunities for recreational experiences to the respective populations of Portage la Prairie and Brandon.

The Federal-Provincial Delta Marsh land acquisition program may provide a variety of educational and hunting opportunities relating to wetland wildlife. The effect of the Portage Diversion in spoiling Lake Manitoba beaches at Delta has, however, reduced the inclination of Portage la Prairie and area residents from using beach facilities at Delta.⁸⁹ It would appear that the availability of accessible Crown land at the south end of Lake Manitoba may not be regarded as an attractive recreation area for the people of Portage la Prairie.

Within one hour's drive of Brandon, Crown lands at Spruce Woods Provincial Park and at Oak Lake provide certain ranges of outdoor recreational experiences. Turtle Mountain Provincial Park is over one hour's travel time from Brandon and, as such, Brandon visitors to a Provincial Park tend to drive to Spruce Woods. Spruce Woods Provincial Park is approximately one hour's drive from Brandon. Provincial

⁸⁹ Roteliuk, Op. Cit.

Recreation Areas at Oak Lake and Rivers are closer to Brandon and are heavily used. Both Provincial Recreation Areas are seen locally as being overcrowded,⁹⁰ and the Rivers reservoir is not suitable for recreational purposes after July 1 because of algae blooms.⁹¹

Development of recreational facilities along the Assiniboine River within the City of Brandon, under the West-Bran Work Activity Project, are directed primarily to serve the city's recreational needs.⁹² The implications of the West-Bran project on a recreation lands acquisition program are uncertain. The development of campground facilities may compensate for overcrowding at the Grand Valley campground. By the same token, the development of facilities for swimming, tennis, canoeing, picnicing and others may draw recreationists from the Brandon area generally. Nevertheless, the West-Bran project is developing an urban park and will not specifically serve recreational needs that center upon many educational and health benefits.

SUMMARY

The suitability of Recreation Nodes to satisfy non-weighted criteria for recreation lands acquisition is shown in Table VII. For each Recreation Node, suitability to satisfy identified recreation trends and social welfare considerations is denoted by a positive (+) assignation. Availability of alternative recreation space is displayed by a negative (-) assignation. A composite check list valuation is determined by summing the positive and subtracting the negative assignations.

⁹⁰ Interviews with W. Bertram, Secretary-Treasurer, Rural Municipality of Sifton, August 15, 1975, and C.L. Swain, Secretary-Treasurer, Rural Municipality of Daly, August 15, 1975.

⁹¹ Swain, Op. Cit.

⁹² Brown, Op. Cit.

TABLE VII CHECK LIST: RECREATION TRENDS, SOCIAL WELFARE CONSIDERATIONS, AND ALTERNATIVE PUBLIC RECREATION OPPORTUNITY

Recreation Node	RECREATION TRENDS (suitability for)					SOCIAL WELFARE CONSIDERATIONS		Current Avail- ability of Alternative Public Out- door Recrea- tion Opport- unity***	Check List Value
	General Outdoor Education	Historic Cultural Appreciation	Unique Natural Areas	Activities (except canoeing)	Trail Oriented Activities	Access by Lower Income Users**	Reduce Incidence of Campground Overuse		
St. Francois-Xavier					+	+	+		3
Norquay Beach				+*		+	+	-	2
Portage la Prairie	+			+	+	+	+		5
Treesbank	+	+			+	+	+		5
Waggle Springs			+			+			2
Brandon				+	+	+	+	-	3
Woodworth-Sifton	+			+*	+	+	+		5
Miniota									0
Fort Ellice		+							1
Millwood								-	-1
Shell River				+	+			-	1

* Swimming only.

** Access by low income residents of Portage la Prairie and Brandon is included.

*** Values are negative under the assumption that, all other factors equal, acquisition of land for recreational opportunity is unnecessary if alternative, public recreational land offering similar opportunities, is available near the proposed acquisition area. In this context, acquisition of lands in the Millwood and Shell River Recreation Nodes is downgraded because similar recreation opportunities are already available at nearby Assinippi Provincial Park.

PRIORIZATION OF ACQUISITION OF ASSINIBIOINE RIVER RECREATION NODES:

On the basis of the criteria listed above -- quality of the Recreation Node, accessibility from Winnipeg, trends in recreation participation, social welfare considerations, and the current availability near the Node of alternative public outdoor recreation opportunity-- it is possible to rank the sequence by which investment in recreation lands acquisition should take place. Table VIII summarizes the valuations attached to the criteria used for prioritizing. The Check List Valuations, since they are not based upon a 10-0 weighting scale, must be negated in order that they will complement the 10-0 ranking system.

TABLE VIII SUMMARY OF VALUATIONS

Recreation Node	Quality Valuation	Accessibility Valuation	Check List Valuation	Total Valuation
St. Francois-Xavier	8.2	0	-3	5.2
Norquay Beach	6.2	1	-2	5.2
Portage la Prairie	4.6	1	-5	.6
Treesbank	5.0	4	-5	4.0
Waggle Springs	3.9	4	-2	5.9
Brandon	6.0	4	-3	7.0
Woodworth-Sifton	5.1	6	-5	6.1
Miniota	5.0	7	0	12.0
Fort Ellice	4.6	8	-1	11.6
Millwood	4.1	9	+1	14.1
Shell River	6.4	9	-1	14.4

From Table VIII, the sequence of acquisition of lands of land in Recreation Nodes should proceed as follows:

- First, Portage la Prairie.
- Second, Treesbank.
- Third, St. Francois-Xavier.
Norquay Beach.
- Fourth, Waggle Springs.
- Fifth, Woodworth-Sifton.
- Sixth, Brandon.
- Seventh, Fort Ellice.
- Eighth, Miniota.
- Ninth, Millwood, and
- Tenth, Shell River.

3) DEVELOPMENT OF FACILITIES:

On the basis of trends in outdoor recreation participation and trends in recreational equipment ownership, certain guidelines can be defined for the development of recreational facilities. These guidelines include:

- a) trends in recreation participation suggest that camping, picnicing and swimming will continue to place heavy demands upon recreational facilities;
- b) cross-country skiing, bicycling, and snow-shoeing are continuing to experience rapid growth, a growth that is expected to continue into the foreseeable future;
- c) motorcycles, especially off-road trail and mini-bikes, appear to be increasingly popular outdoor recreational vehicles. Motorcycling would rank as one of the fastest, if not the fastest, growing outdoor recreational activity;
- d) snowmobiling is dependent upon a thick snow cover and an early snowfall. Given the snow cover, snowmobile sales are recovering strongly from the slump of 1973 and 1974. As an activity, snowmobiling may still rank as a growing sport;
- e) sales of water sports equipment -- motorboats, sailboats and water skis -- are generally steady and are not expected to decline or increase dramatically. The market is steady and sales appear to depend upon a growth in population to provide a growth in the market;
- f) sales of canoes have recently been erratic. Some local firms have experienced a decline in sales,⁹³

⁹³ Jorstad, Op. Cit.

other firms have experienced rapid growth in sales of canoes. Sales of canoes generally may be expected to increase at a slower rate than in recent years;

- g) it would appear that farmers, during the last three to four years, have become significantly more important as owners of water sports equipment. Combined with the farmer market for snowmobiles, an increased demand may be placed upon the use of trails and upon available open-water areas;
- h) the rapidly growing use of undeveloped lands for outdoor education purposes is probably the fastest growing area of outdoor recreational activity. The development of outdoor educational programs sponsored by the Manitoba Department of Education and by private organizations such as the Manitoba Association of Foresters has been very popular and carries many implications for the development of outdoor recreational facilities in the future;
- i) if sales of equipment can be assumed to provide insight into the growth trends of participation, equipment sales suggest that backpacking is a relatively low growth area;
- j) sales of campers are strong and are expected to continue strong for the next five years. Sales of camper trucks and mobile homes are rising much faster than are sales of fold-down tow campers;
- k) if the provision of outdoor recreation facilities for access by lower income groups is a priority, the development of facilities should take place within an hour's drive from, and preferably closer to, the source of lower income families.

The development of guidelines for the development of outdoor recreational facilities must acknowledge both the extent to which participants use existing facilities and the rate at which participation

in recreational activities is increasing. Participation in camping, swimming and picnicing is such that "the big three" provide the core of current outdoor recreational activities and programs. Other facilities -- the development of snowmobile trails, self-guiding nature trails, the provision of riding stables, etc. -- have been provided as the need has been perceived and where land has been available.

From the information garnered on the use of existing facilities and the expected increased participation in certain activities, the development of facilities to 1980 should proceed to:

- a) provide for more camping and picnicing facilities;
- b) provide for more trail systems to cater to cross-country skiers, motorcyclists, and snowmobilers;
- c) provide greater opportunity for outdoor educational experiences through the provision of group camping facilities, outdoor education and interpretation facilities, self-guiding nature trails, etc.

CAMPING AND PICNICING OPPORTUNITIES

A review of the camping trends in the Western Region of the Department of Tourism, Recreation and Cultural Affairs generally and along the Assiniboine River specifically, suggests that camping opportunities should be expanded. Expansion of camping opportunities should accommodate two primary objectives. First, camping experiences should provide for a quality of experience appropriate to satisfy the health, educational and pleasure values of the camper. To achieve this quality objective, overcrowding of existing campgrounds should be minimized⁹⁴ and campgrounds should be situated to provide opportunity

⁹⁴ In their study of families visiting large New England campgrounds, LaPage and Ragain point out that "...a close examination of 'overcrowding' comments revealed that they were almost always coupled with an elaboration about the consequences of heavy use, suggesting that the effects of crowding may be more important than real increases in population density. For example, many of the crowding complaints were associated with a comment about less desirable and less friendly campers. A great many crowding complainants went on to express concern about one or more of the following: uncertainty about finding a vacant campsite, unsafe campground conditions, poor campground maintenance and design and

for the drive-in camper, the walk-in camper and the canoe-in or boat-in camper.

The expansion of campground facilities to accommodate the drive-in camper should seek to compensate for overcrowding at the Grand Valley, Spruce Woods and Norquay Beach campgrounds. Suitable locations of such campgrounds are found at sites accessible by Provincial Trunk Highway and Provincial Roads in the Woodworth-Sifton, Portage la Prairie and possibly the Treesbank Recreation Nodes.⁹⁵ Alleviation of overcrowding at the Kiche Manitou campground in Spruce Woods Provincial Park may take place within the Park.

Facilities for primitive walk-in camping experiences are currently not available along the Assiniboine River although such facilities are planned in the proposed development of a walking and hiking trail system from Spruce Woods Provincial Park westward towards Brandon. Walk-in campsites would appeal to those people who participate in back-packing activities; they could also appeal to those who wish to remove themselves from various causes of urban stress.⁹⁶ It would appear that walk-in campsites may be necessary to provide certain types of recreational values to a limited number of, and a relatively slow growing population of, users. If this is the case, it may be more

rising costs resulting from campgrounds providing too modern facilities and services for the crowds of new campers with their fancy equipment." W.F. LaPage and D.P. Ragain, "Family Camping Trends - An Eight-Year Panel Study," Journal of Leisure Research 6 (Spring, 1974):109. Davis also notes that carrying capacity and definitions of crowding are really matters of interpersonal effect. Robert K. Davis, "Recreation Planning as an Economic Problem," Natural Resources Journal 3 (October, 1963): 247-248. See also H.E. Echelberger, D.H. Deiss and D.A. Morrison, "Overuse of Unique Recreation Areas: A Look at the Social Problems," Journal of Soil and Water Conservation 29 (July-August, 1974): 175.

⁹⁵ The suitability of the Treesbank Recreation Node as a drive-in camping area may be dependent upon the proposed construction of an extension of Provincial Trunk Highway 18 north from near Wawanesa, across the Assiniboine River, to the Trans-Canada Highway near Douglas.

⁹⁶ Use of limited access camping sites may be regulated by permit as in the example of certain campgrounds in New Hampshire's White Mountain National Forest. Echelberger, Deiss and Morrison, Op. Cit.

appropriate to test the use of walk-in campsites by locating them within a relatively short distance (perhaps from two to five miles) of existing or proposed drive-in campsites in the Woodworth-Sifton and Portage la Prairie Recreation Nodes. Walk-in campsites may also be appropriate campground forms in the St. Francois-Xavier Recreation Node. Here, the narrowness of the Node, proximity to Winnipeg and the lack of drinking water may discourage the development of other campground forms for practical and environmental reasons.

Canoe-in or boat-in campsites are accessible only from the water. The limited use of the Assiniboine River for canoeing and boating makes the development of canoe-in and boat-in campsites experimental. Canoe-in campsites should be constructed first where the Assiniboine River is known to be used for canoeing. The Assiniboine River is used as a canoe route from Miniota to Virden and from the Assiniboine River crossing of Provincial Trunk Highway 34 to Portage la Prairie. To a lesser extent, the River east of Portage la Prairie is used as a canoe route. Canoe-in campsites, then, should be constructed in the Woodworth-Sifton, Portage la Prairie and St. Francois-Xavier Recreation Nodes. Canoe-in campsites should serve as walk-in campsites and vice-versa.

Boat-in campsites are appropriate only where there is sufficient open water that the use of motorboats may be expected to any great extent. As such, boat-in campsites would most appropriately be located adjacent to the Lake of the Prairies, behind the Shellmouth Dam, and along the reservoir behind the inlet structure to the Portage Diversion. As an experimental campsite, a boat-in facility in the Portage la Prairie Recreation Node could serve both the canoeist and the walk-in user.

The second objective in expanding campground facilities would be to offer camping opportunities to lower income users. Such facilities should be located within an hour's drive of the source of the users. On the basis of the income levels of users of Norquay Beach, St. Ambroise and St. Malo campgrounds, it can be expected that lower income users would comprise a significant proportion of campers if camping facilities were built in the St. Francois-Xavier Recreation Node. The Portage la Prairie Node may also serve significant numbers of lower income campers. Lower income families in Brandon may take advantage of camping opportunities that will be offered within the city by the West-Bran Work Activity

Project. If Brandon's Assiniboine Valley recreational development program is perceived by users to be too much of an urban program, the development of campground facilities in the Woodworth-Sifton Recreation Node would be close enough to Brandon to offer lower income families a non-urban camping experience.

It is difficult to estimate the facility needs to accommodate picnickers. Trent L. Good estimated that in 1966, there was a shortage of approximately 2,272 picnic tables in the area he called the "Winnipeg Region", an area extending about 100 miles around Winnipeg.⁹⁷ In spite of increased picnic facilities at Spruce Woods and Hecla Provincial Parks, at Winnipeg Beach and at Stephenfield Provincial Recreation Area, Good estimated that by 1986 the "Winnipeg Region" would require a further 3,112 picnic tables.⁹⁸ If "latent demand" were accounted for, Good estimated that 4,850 picnic tables would be required in 1986.⁹⁹ It is difficult to judge the validity of Good's estimation since the methodology he used to derive estimates of demand is not clear.

Nevertheless, the demand for picnicking facilities is increasing. Survey information on the users of Provincial Recreation Areas in 1970 revealed that, in most areas, slightly fewer than half of all visitors picnicked.¹⁰⁰ As visitors to recreation areas increase, picnicking facilities will also have to increase. The majority of picnic facilities should be located near Winnipeg. Along the Assiniboine River, the most appropriate sites for picnicking appear to be the Portage la Prairie, St. Francois-Xavier and the Norquay Beach Recreation Nodes.

TRAIL SYSTEMS

Trail-oriented activities are growing most rapidly for cross-country skiers and motorcyclists. Cross-country skiing appears not to have become a significant recreational activity for rural Manitobans;¹⁰¹

⁹⁷ Good, Op. Cit., p. 83.

⁹⁸ Ibid., p. 85.

⁹⁹ Ibid.

¹⁰⁰ See Appendix I.

¹⁰¹ Interviews with Secretary-Treasurers and Reeves of the Rural Municipalities adjacent to the Assiniboine River revealed that few rural residents and few residents of small towns cross-country skied.

rather, cross-country skiing is urban. The numbers of skiers appears to be growing rapidly, and the Assiniboine River from St. Francois-Xavier eastward appears to be used extensively in most places as a cross-country ski route. Travel habits of cross-country skiers are unknown but personal observation as a participant leads one to think that skiers prefer sites reasonably close to their residences. If this is the case, cross-country ski trails should be developed at and eastward from the Portage la Prairie Recreation Node. Trail development in the Brandon and Woodworth-Sifton Recreation Nodes should accommodate skiers resident in Brandon.

Trail systems for motorcyclists are not yet specifically made available as part of a Provincial recreation system. The rapid growth in the numbers of off-road motorcycles and mini-bikes and the apparent congestion at existing sites suggest that the Crown assume a responsibility in providing motorcycle routes in the same manner that the Crown has provided snowmobile trails.

Snowmobile trails in some cases may serve during the summer as motorcycle trails, but many present snowmobile trails are constructed on sandy terrain. Motorcycle trails for motocross racing require a terrain that is neither sandy nor rocky. Cross-country motorcycle trails that offer a test of handling skills rather than speed should be developed on terrain that offers a variety of relief and a variety of land and water traps. Along the Assiniboine River, suitable terrain for cross-country motorcycle riding is available in the Woodworth-Sifton, the Treesbank and possibly the Portage la Prairie Recreation Nodes.¹⁰² Caution must be acknowledged in the development of motorcycle trails, for the deleterious impact of motorcycles on sensitive environments suggests that careful evaluations of site conditions are necessary to define which areas are capable of absorbing the potential impact. Along the Assiniboine

¹⁰² Private landowners in the Portage Sandhills, part of the Portage la Prairie Recreation Node, currently provide some opportunity for motorcyclists. The Sandhills are, however, ecologically sensitive and appear to be inappropriate for motorcycles. Other less sensitive areas in the Portage la Prairie Node appear to be better able to withstand the impacts of motorcycle use. For further information on the impact of motorcycles on the natural environment, see Donald A. Leitch, "The Environmental Impact and Regulation of Recreational All-Terrain Vehicles in Manitoba," (MNRM Practicum, University of Manitoba, 1975).

River, sites for motorcycle racing may be available only in the Woodworth-Sifton Recreation Node, but whether or not the Province should enter into this essentially commercial aspect of the motorcycling sport is doubtful.

Snowmobile sales have increased after a two-year hiatus and indications are that snowmobiling as a sport will, in the near future, continue to rank as an important winter activity. Snowmobile trail development should occur in the Woodworth-Sifton, Treesbank and Portage la Prairie Nodes. In each case, a variety of landscapes and extensive areas of undeveloped land could offer safe and interesting snowmobile routes. The provision of snowmobile trails in the Woodworth-Sifton and Portage la Prairie Nodes may also serve to encourage snowmobilers not to use the unsafe Assiniboine River as a snowmobile route.

OUTDOOR EDUCATION

Outdoor educational programs sponsored by the Manitoba Department of Education and by private organizations such as the Manitoba Association of Foresters and the increasing importance of non-consumptive users of wildlife suggest that priority be given to acquiring land and developing facilities to accommodate users who seek to become more aware of the natural environment. Lands within the Woodworth-Sifton, Waggle Springs, Treesbank and Portage la Prairie Recreation Nodes offer a variety of outdoor educational experiences. Because of unique natural and/or cultural features, the Waggle Springs and Treesbank Recreation Nodes should perhaps cater to the specific outdoor educational requirements of scientific, archaeological and historical study. The Woodworth-Sifton and Portage la Prairie Recreation Nodes, on the other hand, provide ideal opportunities for "orienteering" programs and programs generally designed to increase awareness of the natural environment.

The Woodworth-Sifton, Treesbank and Portage la Prairie Recreation Nodes also offer potential to serve as sites for group camping activities. Although the Parks Branch provides group camping facilities at Assinippi and Spruce Woods Provincial Parks and at Norquay Beach and Stephenfield Provincial Recreation Areas, it appears that in southwest Manitoba there is a general shortage of such facilities.

On the bases of the guidelines for development outlined above, certain Recreation Nodes stand out as offering a variety of recreational opportunity. Pre-eminently, the Woodworth-Sifton and the Portage la Prairie Recreation Nodes stand out as areas sufficiently large and varied to offer potential for a variety of recreational experiences. To a lesser extent, the Treesbank and St. Francois-Xavier Nodes offer recreational opportunities that may cater to specific types of users. The Treesbank and, to a lesser extent, the Waggle Springs Recreation Nodes offer unique outdoor recreational experiences. The value of the St. Francois-Xavier Recreation Node lies in its proximity to Winnipeg and its availability to lower income residents of Winnipeg.

Development of recreational facilities should reflect two considerations. First, development policy should reflect a need for facilities, and, once a need has been acknowledged, to develop facilities that will serve as broad a spectrum of users as possible. It is in this context, that development of facilities in the Portage la Prairie and Woodworth-Sifton Recreation Nodes are given priority.

Both the Portage la Prairie and the Woodworth-Sifton Recreation Nodes provide opportunities for a variety of land based recreational activities. Both Recreation Nodes are sufficiently large to accommodate a variety of competing recreational users and both are large enough to accommodate a variety of health and educational values. Unlike the Woodworth-Sifton Node, the Portage la Prairie Node offers a wide variety of water-based recreation opportunities. The Woodworth-Sifton Recreation Node is possessed of a number of cut-off meander loops and oxbows of the Assiniboine River that may, upon development, offer swimming opportunities.

Development of outdoor recreational facilities in the Woodworth-Sifton Recreation Node could serve to reduce the shortage of outdoor recreation opportunity in Southwest Manitoba by:

- a) providing outdoor educational opportunity readily accessible to many local School Divisions;
- b) providing a range of camping experiences that could serve as alternate choices to overcrowded campsites at Grand Valley, Rivers, Oak Lake and in southeastern Saskatchewan, and the more distant and relatively inaccessible campgrounds in Riding

Mountain National Park, and in Turtle Mountain, Spruce Woods and Asissippi Provincial Parks;

- c) providing a variety of trail systems to accommodate hikers, skiers, snowmobilers, and cross-country motorcyclists;
- d) providing, under management programs, wildlife habitat to provide a more secure white-tailed deer population to ensure long-term hunting opportunities on and adjacent to Crown land;
- e) providing swimming opportunities, by developing a suitable oxbow lake, to serve as an alternate site to those swimming opportunities at the Rivers reservoir and at Oak Lake; and
- f) providing for a scenic drive, between Miniota and Virden, following the course of an abandoned municipal road as described above, p. 82.¹⁰³

Development of outdoor recreation facilities in the Portage la Prairie Recreation Node would serve to expand the range of recreational opportunities available to the Portage la Prairie and Winnipeg populations by:

- a) providing outdoor educational opportunity readily accessible to School Divisions in, and in the vicinity of, the cities of Portage la Prairie and Winnipeg;
- b) providing a range of camping experiences that could serve as alternate choices to overcrowded campgrounds at Norquay Beach and St. Ambroise Beach Provincial Recreation Areas;
- c) providing a range of water oriented recreation experiences that could serve as alternate opportunity to deteriorating opportunity at the south end of Lake Manitoba;
- d) providing a variety of trail systems to accommodate hikers, skiers, snowmobilers and cross-country motorcyclists;

¹⁰³ cf., above, p. 82.

- e) providing, under management programs, wildlife habitat to provide a more secure white-tailed deer population to ensure long-term hunting opportunities on and adjacent to Crown lands; and
- f) providing opportunities for group camping.

The St. Francois-Xavier, Treesbank and Waggle Springs Recreation Nodes provide certain types of specialized outdoor recreational activities. The St. Francois-Xavier Node may provide for a variety of trail oriented and camping experiences near a large urban population. The Treesbank and Waggle Springs Nodes possess unique archaeological, historical and ecological features of value to educational programs.

Further development of recreational facilities in the Brandon Recreation Node should be postponed until the impact of Brandon's Assiniboine Valley recreation development program can be evaluated.

Development of outdoor recreation facilities at the Miniota, Fort Ellice, Millwood and Shell River Recreation Nodes are limited by the quality of the Node, accessibility by large numbers of users, and the availability of alternative outdoor recreation areas. Development of recreational facilities in these Nodes should be postponed until perceived needs for further recreational choice becomes apparent. The decline in wildlife habitat acreage near the Miniota, Fort Ellice, Millwood and Shell River Recreation Nodes are limited by the quality of the Node, accessibility by large numbers of users, and the availability of alternative outdoor recreation areas. Development of recreational facilities in these Nodes should be postponed until perceived needs for further recreational choice becomes apparent. The decline in wildlife habitat acreage near the Miniota, Fort Ellice and Millwood Nodes suggests that, should land acquisition take place within these Nodes, development should be geared to the provision of secure white-tailed deer range.

Development of recreational facilities in the St. Francois-Xavier and Portage la Prairie Nodes may alleviate the pressures for further development of facilities at the Norquay Beach Recreation Node.

By way caution, development of recreational facilities should account for local site conditions. Except in a very broad context, this Practicum has not dealt with the suitability of specific sites to accommodate development. Before developments are prepared, detailed analysis

of Recreation Nodes must be undertaken to define the ecological sensitivity of areas and constraints to development at particular sites.

DEVELOPMENT PRIORITIES

On the basis of trend projections in recreation participation and on the basis of increasing participation in certain outdoor recreational pursuits, development of facilities should take place in order of the following Recreation Nodes:

- First, Portage la Prairie,
- Second, Woodworth-Sifton,
- Third, St. Francois-Xavier,
- Fourth, Treesbank,
Waggle Springs,
- Fifth, Brandon,
- Sixth, Miniota,
Fort Ellice,
Millwood,
Shell River, and
Norquay Beach.

4) URBAN ACQUISITION AND DEVELOPMENT

The acquisition and development model described above is best applied to rural resource-based recreation development. Recreation lands acquisition and development in urban areas is governed not so much by the presence of natural environments which may offer recreational opportunity but more by the availability of specific sites which may accommodate certain perceived recreational needs and social values.

The large concentrations of people in urban areas, and the relatively limited scope for resource-based¹⁰⁴ recreational opportunities along the urbanized stretches of the Assiniboine River, suggest that the primary criteria for acquiring urban riverbank recreation land centers not on the quality of the land, but rather on the ability of specific sites to accommodate recreational needs.

In Brandon and Portage la Prairie, urban government has undertaken to expand the recreational opportunities available in the respective cities by developing a variety of sports oriented (tennis courts, swimming pools, softball and baseball diamonds, etc.) and pleasure-oriented (campground and picnic facilities, and ice rinks for hockey and curling) facilities. In the absence of information on the participation in urban forms of recreation in these cities, it is difficult to define the possible effects of such programs as means of meeting perceived recreational needs.

Assuming that many of the characteristics of users of urban parks in Winnipeg may be extrapolated to describe users in Brandon and Portage la Prairie, it would appear that current recreational development

¹⁰⁴ As defined by Clawson and Knetsch, resource-based recreational opportunity is dominated by outstanding natural characteristics. Clawson and Knetsch, Op. Cit., p. 259.

programs may be catering to the articulate and politically aware middle class. Recreational developments in both Brandon and Portage la Prairie appear to be catering to those who can pay admission charges (swimming pools, hockey and curling rinks, tennis courts) and to those which have the means of buying recreational equipment for activities where there may or may not be admission charges. The provision of public recreational facilities has, however, been a recent undertaking of both cities and the development of such facilities may be interpreted as a starting point.

Winnipeg, however, has provided for public recreation facilities for many years. Sketchy information on the characteristics of users of parks and recreation facilities suggests, however, that the users of urban parks and facilities may be the same people who use the Provincial Park system and who can afford to purchase recreational equipment. As such, those who earn less than about \$2,000 less than the average Winnipeg family income, and those who are over 55 years of age appear to make little use of existing public recreational facilities. The suburban location of major Winnipeg parks further discourages those living more than four miles from a park from using that park.¹⁰⁵

Criteria for the acquisition and development of Assiniboine River property for recreation should acknowledge current use patterns of Winnipeg's major parks. Along the Assiniboine River, it can be argued that the John Blumberg Park and Golf Course, Westdale Park, Sturgeon Creek Park, Assiniboine Park and Assiniboine Forest currently provide a wide range of accessible outdoor recreational opportunities for people who wish to use them and who live in western Winnipeg.

From Assiniboine Park east to the junction of the Assiniboine and Red Rivers, public recreation land along the Assiniboine River is limited. Recreational facilities east of Assiniboine Park are also

¹⁰⁵ Donald McAllister points out that if equity is defined in terms of the variation of distance to the nearest facility, then equity is inversely proportional to spacing. He further considers that special attention must be paid to accessibility, that size sacrifices accessibility. Donald M. McAllister, "Planning an Urban Recreation System: A Systematic Approach," Natural Resources Journal 15 (July 1975): 573.

limited to the provision of bicycle paths, walking paths, some game areas, and to the provision of open space for resting, sunbathing, etc.

The major suburban parks administered by the Parks and Protection Division of the City of Winnipeg essentially provide services little used by the residents of the Midland, Centennial, Lord Selkirk and Fort Rouge Community Committee Areas. If riverbank property is to be acquired, priority should then be given to acquiring riverbank land east of the Assiniboine Park and development of facilities appropriate to the recreational needs of residents of the Inner City living within three to four miles of the Assiniboine River.

The City of Winnipeg Parks and Protection Division administers a riverbank land acquisition program. The program has not been a notable success.

In 1973, the City of Winnipeg adopted a five-year program to acquire lands along major Winnipeg rivers. To date, however, the city has emphasized acquisition of lands along the Seine River under the program. Along the Assiniboine River, the riverbank acquisition program was used in an ad hoc fashion, to acquire part of the Bonnycastle Park site, McFadyen Park, and the Granite Curling Club site. Proposals by the Parks and Protection Division to acquire lands on the south side of the Assiniboine River from the Donald Street Bridge to the Red River, to buy all privately owned land on the north side of the Assiniboine River from Osborne Street to the Red River, to buy lands on the south side of the Assiniboine River from Lord Roberts Community Club to the Assiniboine Parkway, and to buy riverbank lands from Omand's Park to the St. James Bridge have not been acted upon. Acquisition of riverbank east of Osborne and Donald Streets would focus on the possible development of a park on Canadian National Railways property at the confluence of the Assiniboine and Red Rivers.¹⁰⁶

The acquisition of narrow strips of riverbank per se may be of limited recreational value if access to and from the Assiniboine River is not perceived as being significant by potential users. Development of facilities also depends upon the feasibility of stabilizing the

¹⁰⁶ Interview with Martin Benum, Director, City of Winnipeg Parks and Protection Division, February 16, 1976.

riverbank. Until the riverbank is stabilized, use of riverbank parkland will be extensive in nature. To this end, some games areas, tennis courts, playgrounds and trail systems are all that are planned for Assiniboine River parklands.¹⁰⁷ On the other hand, the recreational value of narrow strips of riverbank land may increase if those strips are used to connect recreation nodes where recreational facilities are concentrated.

Along the Assiniboine River east of Assiniboine Park, a program of recreation land acquisition should pre-eminently account for the recreational needs of people living in the area. For the most part these needs are not known, and it should not be automatically assumed that most residents of the Inner City would prefer the same types of recreational experiences available to suburban residents. The ability of acquired riverbank land to support intensive development is questionable. It is not at all clear that the provision of trail systems is appropriate for the area if potential users are unable to afford to purchase the equipment needed to use the trails.

Aesthetics appears to have been the most important reason for acquiring Inner City riverbank lands. It is not enough, however, that riverbank lands in the densely populated Inner City be acquired for aesthetic reasons. The acquisition of Inner City riverbank lands will cost several tens of millions of dollars. With that cost, there should be some assurance that the acquired lands would be used by the people in the area. The objectives of acquiring riverbank lands in Winnipeg are not clear. Who are the clientele to be served by acquisition programs? In what manner should land acquisition proceed in order to achieve some quality of life standard? What aesthetic roles are to be played by the development of parklands along Inner City rivers? Finally, what recreational values are to be served and for whom are they to be provided by acquiring riverbank land. An accurate identification of the recreational needs of Inner City residents -- often poor, often aged, often less mobile than their suburban counterparts -- should form part of the *raison d'être* of any proposed riverbank acquisition and development programs in the Inner City.

¹⁰⁷ Ibid.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

A) CONCLUSIONS:

It has been the objective of this Practicum to define which lands along the Assiniboine River, from Winnipeg to the Saskatchewan Border, are suitable for outdoor recreation pursuits and to prioritize the acquisition of land and the development of facilities along the Assiniboine River. The land acquisition and development model obtained should be applicable to the acquisition of land and the development of facilities along other river systems in southern Manitoba. Criteria developed in the model are readily transferrable from one river system to another if one assumes that facilities development should occur as recognized needs for facilities develop. The application of the model to rivers such as the Souris, Pembina or Seine will bring out identifiable Recreation Nodes wherein land acquisition should be concentrated. An analysis of the use of recreation lands on or near the rivers, trends in the ownership of equipment, characteristics of users, and trends in the participation in recreation activities will more closely define the character of facilities that may be developed.

From the analysis present in this Practicum, certain conclusions can be drawn and that bear upon the direction or focus recreation policy. These include:

- a) camping, picnicking and swimming appear to continue to be the three most significant recreational activities;
- b) the fastest growing outdoor recreational activities include outdoor educational programs, cross-country skiing, bicycling, and motorcycling;

- c) snowmobiling is not abating as an outdoor activity;
- d) water sports activities are growing at a rate comparable to the growth in population. Canoeing may have peaked as an increasing-participation activity;
- e) sales trends in mobile homes, camper trucks, cross-country skis, bicycles, motorcycles are increasing rapidly. Snowmobile sales are again increasing after a two year hiatus;
- f) users of the Provincial Parks system tend to be mobile, lower-middle income to upper middle-income families. Lower income families are significant users of campgrounds within an hour's drive of their residences;
- g) users of major parks in the city of Winnipeg appear to be the same people who use the Provincial Parks system;
- h) the Assiniboine River from Winnipeg to Saskatchewan is used for a variety of outdoor recreational pursuits;
- i) potential recreation lands along the Assiniboine River offer a wide range of recreational opportunities. Development of facilities within Recreation Nodes may serve a wide variety of recreational interests and may accommodate at least certain social welfare values. The Assiniboine River may be treated as a recreation corridor along which Recreation Nodes provide focus for facilities development.

B) RECOMMENDATIONS:

On the basis of resource quality criteria, accessibility from Winnipeg, trends in recreation use, certain social welfare considerations and the availability of existing alternative outdoor recreation opportunity, the acquisition of lands for outdoor recreation should take place within Nodes in the following sequence:

- | | |
|----------|-------------------------------------|
| First, | Portage la Prairie Recreation Node |
| Second, | Treesbank Recreation Node |
| Third, | St. Francois-Xavier Recreation Node |
| | Norquay Beach Recreation Node |
| Fourth, | Waggle Springs Recreation Node |
| Fifth, | Woodworth-Sifton Recreation Node |
| Sixth, | Brandon Recreation Node |
| Seventh, | Fort Ellice Recreation Node |
| Eighth, | Miniota Recreation Node |
| Ninth, | Millwood Recreation Node |
| Tenth, | Shell River Recreation Node |

User analysis suggests that the development of outdoor recreation facilities take place in the following sequence:

- | | |
|----------|-------------------------------------|
| First, | Portage la Prairie Recreation Node |
| Second, | Woodworth-Sifton Recreation Node |
| Third, | St. Francois-Xavier Recreation Node |
| Fourth, | Treesbank Recreation Node |
| | Waggle Springs Recreation Node |
| Fifth, | Brandon Recreation Node |
| Sixth, | Miniota Recreation Node |
| Seventh, | Fort Ellice Recreation Node |
| Eighth, | Millwood Recreation Node |
| Ninth, | Shell River Recreation Node |
| Tenth, | Norquay Beach Recreation Node |

The acquisition and development prioritizations above are effected in isolation of each other. Acquisition priorities do not take into account development potential; development priorities do not take into account acquisition criterion. Where outdoor recreation land acquisition is to account for development possibilities, the acquisition and development prioritizations must be integrated. To accomplish this, the ranking of each Recreation Node for acquisition and development is compared. A combined acquisition and development prioritization is effected by noting the order in which Recreation Nodes appear in each column. The list of ranked acquisition and development priorities is shown below.

TABLE IX ACQUISITION, DEVELOPMENT, AND ACQUISITION AND DEVELOPMENT PRIORITIES, BY RECREATION NODE.

Acquisition Priorities Only	Development Priorities Only	Acquisition and Development Priorities
Portage la Prairie	Portage la Prairie	Portage la Prairie
Treesbank	Woodworth-Sifton	
St. Francois-Xavier Norquay Beach	St. Francois-Xavier	St. Francois-Xavier
Waggle Springs	Treesbank;Waggle Springs	Treesbank
Woodworth-Sifton	Brandon	Waggle Springs
Brandon	Miniota	Woodworth-Sifton
Fort Ellice	Fort Ellice	Brandon
Miniota	Millwood	Fort Ellice
Millwood	Shell River	Miniota
Shell River	Norquay Beach	Millwood Shell River Norquay Beach

Portage la Prairie and Woodworth-Sifton Recreation Nodes should be acquired and developed in order to provide a wide spectrum of land and water based activities to satisfy a variety of educational, health and pleasure values.

The St. Francois-Xavier Recreation Node should be developed to provide a range of facilities accessible to lower income users residing in the City of Winnipeg.

The Treesbank Recreation Node should be developed as an outdoor educational centre focusing development on the unique archaeological and historic heritage of Manitoba that is focused within the Node.

The Waggle Springs Recreation Node should be acquired and developed to serve as an outdoor educational experience stressing the unique ecological features of the Node.

Acquisition of lands for recreation landbanking should occur within Recreation Nodes. In the final analysis, future recreation preferences and needs are unknown in the present. To accommodate those needs, acquisition of lands should take place to help ensure a speedy response to recreational demands and to help ensure the availability of public recreation space when the space is required. Development of recreational opportunities in Nodes other than those mentioned above, should take place as needs are perceived and to emphasize the unique attributes of those Nodes.

In order to define the recreational goals and objectives of an urban riverbank acquisition and development policy, research should be undertaken to define the recreational needs of the urban residents who are expected to use the land made available. Upon completion of the research, the riverbank acquisition policy should be amended accordingly.

C) AREAS OF FURTHER RESEARCH

Analysis in the Practicum points out the need for further research in certain areas in order that outdoor recreational opportunity be made available to more Manitobans. These areas include, in no particular order:

- a) survey the recreational needs and preferences of urban populations to define the recreational objectives of riverbank land acquisition programs;
- b) survey the recreational preferences of the urban poor and aged to define the outdoor recreational requirements, if any, suitable for these groups;
- c) evaluate the impacts of the Assiniboine River recreational development programs in the cities of Brandon and Portage la Prairie for their regional attractiveness and for their abilities to provide for a variety of recreational opportunities for a variety of users; and
- d) survey the outdoor recreational preferences of students involved in Department of Education outdoor education programs to define outdoor recreational requirements during the next 10 - 15 - 20 years.
- e) review ecological impacts of development at the site level.

APPENDIX I

THE ASSINIBOINE RIVER;
USE OF PUBLIC OUTDOOR RECREATION FACILITIES

APPENDIX I

THE ASSINIBOINE RIVER: USE OF PUBLIC OUTDOOR RECREATION OPPORTUNITY

A) USE OF PROVINCIAL OUTDOOR RECREATION OPPORTUNITIES:

1. USE OF CAMPGROUNDS:

For purposes of analyzing the use of provincial recreation areas along the Assiniboine River, it is necessary to place such use within the context of the entire Western Region of the Manitoba Department of Tourism, Recreation and Cultural Affairs. By placing Assiniboine River recreation areas within the Regional context, it should be possible to achieve a more accurate reflection of the importance or lack of importance, of Assiniboine River recreation areas to the people of Manitoba.

In order to develop the regional context, recreation use of existing Provincial Parks, Provincial Recreation Areas and Provincial Campgrounds must be analyzed. This analysis should provide patterns of recreational use against which the use of Assiniboine River recreation areas can be measured.

The Regional analysis will be comprised of four parts. The first part studies vehicle attendance at Provincial Recreation Areas. Vehicle attendance indicates the number of automobiles entering a recreation area for any purpose. The second part of the analysis describes the use made of Provincial Recreation Areas for extended periods of time. The third section describes the patterns of use developing around day-use activities. The final part of the analysis will provide projections on the use of Provincial Recreation Areas against which can be compared projections of the use of Assiniboine River recreation areas.

1(A) WESTERN REGION: VEHICLE ATTENDANCE:

The Parks Branch of the Manitoba Department of Tourism, Recreation and Cultural Affairs has collected statistics on the number of automobiles entering Provincial Recreation Areas since 1967. Various methods have been employed to provide vehicle attendance information. At heavily used recreation areas, vehicle attendance has been counted manually. At other areas, electronic counters have been used. At lesser used sites, a variety of techniques, based on park entrance permits, camping permits and previous survey results have been used to provide data on vehicle attendance.¹

Vehicle attendance statistics are estimated to be accurate to within +10% of the actual number of automobiles entering Provincial Recreational Areas.² As such, vehicle attendance provides an indication of the number of users attracted to recreation areas.

Throughout the Western Region, 1974 vehicle attendance at all campgrounds, Provincial parks and Provincial recreation areas increased substantially (18.11%) over 1973. In part, this increase may have been due to poor weather conditions and high water levels in the Eastern region. In the Western region, Provincial recreation areas adjacent to the Assiniboine River and Lake Manitoba were affected by high water levels and several major recreation areas did not open until June 22, four weeks late.³ Provincial recreation areas not located near the Assiniboine River or Lake Manitoba experienced normal or greater than normal vehicle attendance.

Except for 1971, total vehicle attendance at all Provincial recreation areas in the Western region has increased steadily since 1970. By 1974, vehicle attendance was 67% greater than in 1970, and

¹ Manitoba Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch, 1974 Traffic Attendance in Campgrounds, 1974, pp 19-21.

² Ibid., p. 2.

³ Ibid., p.i.

approximately one-quarter of all vehicles attending all provincial recreation areas in Manitoba were accounted for in the Western region.

Vehicle attendance at Provincial recreation areas in the Western region are tabulated in Table II. The four recreation areas located along the Assiniboine River together account for more than one-third of the total vehicle attendance in the Western region. The vehicle attendance statistics do suggest that, since 1970, the Assiniboine River recreation areas have continued to attract larger numbers of users. Table II also suggests, however, that since 1970 Assiniboine River recreation areas have been attracting proportionally fewer users as vehicle attendance throughout the Western region increases.

TABLE 1 VEHICLE ATTENDANCE RELATIONSHIPS.

Year	Total Vehicle Attendance: All Provincial Recreation Areas (Man.) ⁴	Total Vehicle Attendance: All Provincial Recreation Areas (Western Region) ⁵	Percent Change From Previous Year (Western Region)	Percent of Total Manitoba Vehicle attendance in Western Region
1970	779,350	140,283	-	18%
1971	854,438	120,250	-14.3%	14%
1972	922,857	154,512	+28.5%	17%
1973	1,083,089	198,082	+28.2%	18%
1974	1,019,791	233,957	+18.1%	23%

Year	Percent Increase in Total Manitoba Vehicle Attendance in Western Region. (Cumulative since 1970).
1970	-
1971	+14.0%
1972	+10.0%
1973	+41.0%
1974	+67.0%

⁴ Ibid., p. 4.

⁵ Ibid., p. 8.

TABLE 11. VEHICLE ATTENDANCE AT WESTERN REGION RECREATION AREAS,
1970 - 1974⁶

Recreation Area	Y E A R				
	1970	1971	1972	1973	1974
Assiniboine River Areas	54,054				
Norquay Beach	24,033	19,040	16,937	30,700	36,128
Spruce Woods	25,000	-	22,632	20,547	19,091
Grand Valley	(est.) 5,021	4,615	5,435	9,873	11,173
Assissippi	-	-	10,808	11,728	15,317
Other Recreation Areas					
St. Ambroise	9,027	6,771	10,057	16,038	19,615
Rivers	5,139	5,231	5,691	11,233	12,716
Lynch's Point	-	-	8,778	14,120	8,166
Adam Lake	-	-	5,117	8,875	12,731
Manipogo Beach	-	-	11,386	10,226	8,974
Rainbow Beach	-	-	42,237	29,121	28,460
Duck Mountain	-	13,793	15,434	19,999	21,429
Stephenfield	-	-	-	-	24,666
Whitefish Lake				568	586
Methley Beach		↑		1,208	1,813
William Lake		estimated		1,454	1,206
Oak Lake		attendance		3,392	2,938
Rock Lake		only		2,634	2,938
Amaranth		↓		2,000	1,800
Margaret Bruce				1,516	1,452
Max Lake				2,850	2,758
Other	77,883	70,800	-	-	-
TOTAL	140,283	120,250	154,512	198,082	233,957
TOTAL ASSINIBOINE R. RECREATION AREAS	54,054	-	55,812	72,848	81,709
PERCENT OF TOTAL	39%	-	36%	37%	35%

⁶ Ibid.

1(B) WESTERN REGION: EXTENDED-STAY USE PATTERN:

Since 1969, increasing numbers of Manitobans have been using Provincial Recreation Areas for extended periods of time. Extended-stay will be defined as visits to recreation areas that last longer than one day. Extended-stay visits, then, center upon the overnight use of campgrounds in recreation areas.

The average length of stay of overnight visitors ranged in 1970 from 1.1 days at Grand Valley, 1.5 days at Kiche Manitou (Spruce Woods Provincial Park), 2.0 days at St. Ambroise Beach, 2.3 days at Norquay Beach, and 3.7 days at Rivers.⁷

To measure extended-stay use patterns, two sets of statistics are available. Campground permit sales indicate the number of people who have bought camping permits. A single camping permit is of indeterminate duration, the permit may be for a single night or for several. Unit-day statistics on the number of camping spots filled provide an indication of the extent to which the capacity of a campground is used.

The sale of campground permits at Provincial Campgrounds throughout the Western Region has increased an average of 17.9% annually since 1969. With 1969 as a base year, use of campgrounds had increased by 130.5% in 1973 but declined to 122.6% in 1974. (See Tables III and IV following). Spring flooding and high water levels along the Assiniboine River and the Lake Manitoba shoreline precluded use of important campgrounds until the third week of June in 1974. As a result, the total sale of campground permits in the Western Region in 1974 may have been lower than what might have been expected. From 1971 to 1974 inclusive, campground permit sales increased over the previous year during the months of July, August and September. Total campground use during May appears to be erratic and subject to variable late spring weather conditions. Attendance during May declined in 1972 from 1971, but a warm May in 1973 encouraged almost twice as many people to use campgrounds as in 1971. The decline in campground permit sales for 1974

⁷ Canada Department of Northern Affairs, National and Historic Parks Branch, Canadian Outdoor Recreation Demand Study (CORDS), Ottawa, 1970, pp. 3, 12, 24, 35, 57.

TABLE III WESTERN REGION: MONTHLY DISTRIBUTION OF CAMPGROUND PERMIT SALES - 1969 - 1974⁸

Month	Number of Permits sold and Percent Change from Previous Year					
	1969	1970	1971	1972	1973	1974
May	183	330(+80.3%)	600(+81.8%)	453(-24.5%)	1152(+154.3%)	191(-83.4%)
June	1674	2688(+60.6%)	2661(-1.0%)	3178(+19.4%)	4189(+31.8%)	2630(-37.2%)
July	5742	6545(+14.0%)	9548(+45.9%)	10006(+4.8%)	12204(+21.9%)	15688(+28.5%)
August	4924	7196(+46.1%)	9051(+25.8%)	11575(+27.9%)	13873(+19.8%)	12641(-8.9%)
September	2976	2495(-16.2%)	2775(+11.2%)	4665(+68.1%)	4303(-8.4%)	3354(-22.1%)
TOTAL	15499	19254(+24.2%)	24635(+27.9%)	29877(+21.3%)	35721(+19.6%)	34504(-3.4%)

⁸ Manitoba Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch, Manitoba Park Statistics, 1972. Report No. 125, 1973, p. 253; Manitoba Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch, Manitoba Park Statistics, 1974, p. 218. Hereafter, references to Manitoba Park Statistics will be noted by the initials MPS, and the year.

TABLE IV WESTERN REGION: GROWTH IN CAMPGROUND PERMIT SALES,
1971 - 1974⁹

Year	Total Permits Sold	Percent Change from 1969	Percent Change from Previous Year
1969	15,499	-	-
1970	19,254	+24.2%	+24.2%
1971	24,635	+58.9%	+27.9%
1972	29,877	+92.8%	+21.3%
1973	35,721	+130.5%	+19.6%
1974	34,504	+122.6%	- 3.4%
	1969 - 1974	5 year average	+17.9%
	1969 - 1973	4 year average	+23.3%

⁹ MPS, 1974. p. 218.

may be regarded as a deviation in the growth pattern of campground permit sales at Western Region recreation areas.

The growth patterns of campground permit sales in the Western Region are outlined in Tables III and IV following. The monthly distribution of campground permit sales is shown in Table III. The cumulative growth in campground permit sales is revealed in Table IV where 1969 attendance is set as the base year.

The average annual growth in campground permit sales between 1971 and 1974 has amounted to 17.9%. If the low sales record for 1974 is a deviation from the growth pattern of permit sales, the average annual growth in permit sales from 1969 to 1973 amounted to 23.3%. Table IV also suggests that, in recent years, the greatest increase in campground permit sales occurred in 1971 when 27.9% more permits were sold than in the previous year. During 1972 and 1973, the growth in permit sales declined each year from the year before. It is tempting to infer from that decline that the future growth of campground permit sales will be less dramatic than it has been in the past.

Where campground permit sales provide an indication as to the number of people using campgrounds, the number of unit-days sold indicate the number of actual campsites occupied by permit holders. One unit-day is defined as one campsite occupied for one night.

In the Western Region, the total number of unit-days sold consistently increased from 1971 to 1974. Information on the number of unit-days sold before 1971 is not available. Any trends based on the 1971-1974 data can only be regarded as tentative.

TABLE V WESTERN REGION: NUMBER OF UNIT-DAYS SOLD, 1971 - 1974¹⁰

Month	Number of Unit-days sold and Percent Change from Previous Year			
	1971	1972	1973	1974
May	1600	762(-52.4%)	2846(+273.5%)	731(-74.3%)
June	6235	6197(-.7%)	8726(+40.8%)	6527(-25.2%)
July	17057	16991(-.4%)	22144(+30.3%)	28774(+29.9%)
August	16706	20344(+21.8)	24133(+18.6%)	24267(+.6%)
September	4208	7426(+76.5%)	9529(+28.3%)	8295(-13.0%)
TOTAL	45806	51720(12.9%)	67378(+30.3%)	68594(+1.8%)

¹⁰ Ibid.

Where campground permit sales realized a decline in 1974, the number of unit-days sold increased in 1974 over 1973. By 1974, the number of unit-days sold was almost 50% higher than in 1971. Table VI reveals the growth patterns of the total numbers of unit-days sold in the Western Region from 1971 to 1974.

TABLE VI WESTERN REGION: GROWTH IN NUMBERS OF UNIT-DAYS SOLD, 1971 - 1974

Year	Total Number ¹¹ Unit-Days Sold	Percent Change from 1971	Percent Change from Previous Year
1969	N/A		
1970	N/A		
1971	45,806	-	-
1972	51,720	+12.9%	+12.9%
1973	67,378	+47.1%	+30.3%
1974	68,594	+49.7%	+ 1.8%

By dividing the number of unit-days sold by the number of campground permit sales, it is possible to determine the average length of stay at campgrounds. In Table VII, it is suggested that, since 1972, the average length of stay at campgrounds has been increasing slightly.

TABLE VII WESTERN REGION: LENGTH OF STAY AT CAMPGROUNDS, 1971 - 1974

Year	Total Number of Camping Permits Sold ¹²	Total No. of Unit-days Sold ¹³	Average Length of Stay/Permit holder
1969	15,499	N/A	
1970	19,254	N/A	
1971	24,635	45,806	1.86 days
1972	29,877	51,720	1.73
1973	35,721	67,378	1.89
1974	34,504	68,594	1.99

¹¹ Ibid.

¹² MPS, 1972, p. 253; MPS, 1974, p. 218.

¹³ MPS, 1974, p. 218.

11. USE OF ASSINIBOINE RIVER CAMPGROUNDS:

Throughout the Western Region of the Department of Tourism, Recreation and Cultural Affairs are scattered 20 Provincial Recreation Areas, exclusive of Wayside Parks whose function it is to provide services to highway travellers. Of the 20 areas, four are located adjacent to the Assiniboine River. The four areas are Norquay Beach Provincial Recreation Area, Spruce Woods Provincial Park, Grand Valley and Assissippi Provincial Park. A fifth recreation area, not yet developed, will be located on the Assiniboine River at Beaudry. For purposes of this analysis, the proposed Provincial Park at Beaudry will not be considered.

11(A) NORQUAY BEACH PROVINCIAL RECREATION AREA:

Located between the cities of Winnipeg and Portage la Prairie, Norquay Beach Provincial Recreation Area was designed to serve travellers along the Trans-Canada Highway. Nevertheless, Norquay Beach has come to provide important recreational opportunities for local populations.

Vehicle attendance records provide an overview to the increasing use made of Norquay Beach. Since vehicle attendance records began in 1967, Norquay Beach had, by 1974, experienced a growth of over 150% in the number of vehicles entering this Provincial Recreation Area.

TABLE VIII NORQUAY BEACH: VEHICLE ATTENDANCE, 1967 - 1974¹⁴

Year	Vehicle Attendance	Percent Change from Previous Year	Percent Change from 1967 Base Year
1967	14,135	-	-
1968	12,762	-9.7%	-9.7%
1969	16,868	+32.2%	+19.3%
1970	24,033	+42.5%	+70.0%
1971	19,040	-20.8%	+34.7%
1972	16,937	-11.1%	+19.8%
1973	30,700	+81.3%	+117.2%
1974	36,128	+17.7%	+155.6%

¹⁴ CORDS, *Op. Cit.*, p. 12., for years 1967 to 1970; 1974 Traffic Attendance, *Op. Cit.*, p. 8., for years 1970 through 1974.

On average vehicle attendance at Norquay Beach has increased 18.87% each year from 1967 to 1974. During this same period, the number of vehicles entering the Provincial Recreation Area has more than doubled.

Table VIII indicates that the years 1973 and 1974 saw particularly heavy use of Norquay Beach. In 1973, high vehicular attendance corresponds to a record high sale of campground permits. In 1974, however, higher vehicle attendance did not translate into higher campground permit sales. Table IX following, points out that campground permit sales in 1974 dropped by 20.7% from the 1973 level, while vehicle attendance climbed by 17.7% over the 1973 level. The decline in campground permit sales may be partly attributed to the flooding of Norquay Beach Provincial Recreation Area and drinking water quality problems in May and early June of 1974. During this period, Norquay Beach was closed to the public. The high vehicle attendance for 1974 may be attributed, at least in part, to a greater use of Norquay Beach as a day-use area for local people.

Campground permit sales at Norquay Beach steadily increased from 1969 to 1973 inclusive. Table X does, however, suggest that since 1971, the growth in the number of permits sold at Norquay Beach has been increasing at a less rapid rate than before 1971. The low 1974 campground permit sales level may be attributed at least in part to climatic conditions, flooding and water quality problems and as such the considerable decline in 1974 may be interpreted as a deviation from the growth patterns shown in Tables IX and X.

The use of the Norquay Beach campground by Manitoba campers is heavily dominated by residents from Metropolitan Winnipeg and the Rural Municipality and City of Portage la Prairie. Although only 23% of campers at Norquay Beach in 1970 were residents of Manitoba, 75.7% of Manitoba campers using the area came from Winnipeg and Portage la Prairie. Table XI details the origin of Manitoba campers using the Norquay Beach campground. Within the vicinity of the Rural Municipality and City of Portage la Prairie, Norquay Beach Provincial Recreation Area provides an important opportunity for camping. Within approximately one hour's drive of the City of Portage la Prairie are four Provincial campgrounds, one of which is located at Norquay Beach. The other three

TABLE IX NORQUAY BEACH: MONTHLY DISTRIBUTION OF CAMPGROUND PERMIT SALES, 1969 - 1974.

Number of Permits Sold ¹⁵ and Percent Change from Previous Year.						
Month	1969	1970	1971	1972	1973	1974
May	0	100(-)	100(0%)	125(+25.0%)	275(+12.0%)	0(-)
June	547	1178(+115.4%)	800(-32.1%)	1275(+59.4%)	1274(0%)	200(-84.3%)
July	3248	3223(-.8%)	3350(+3.9%)	2974(-11.2%)	3249(+9.2%)	3189(-1.6%)
August	1225	1999(+63.2%)	2675(+33.8%)	3400(+27.1%)	3350(-1.5%)	2999(-10.5%)
September	1416	531(-62.5%)	1110(+109.0%)	874(-21.3%)	959(+9.7%)	825(-14.0%)
TOTAL	6436	7028(+12.5%)	8035(+14.3%)	8648(+7.6%)	9107(+5.3%)	7223(-20.7%)

¹⁵ MPS, 1972, p. 277; MPS, 1974, p. 256.

TABLE X NORQUAY BEACH: GROWTH OF CAMPGROUND PERMIT SALES,
1969 - 1974¹⁶

Year	Total Permits Sold	Percent Change from Previous Year	Percent Change from Base Year
1969	6436	-	-
1970	7028	+12.5%	+9.2%
1971	8035	+14.3%	+24.8%
1972	8648	+ 7.6%	+34.4%
1973	9107	+ 5.3%	+41.5%
1974	7223	-20.7%	+12.2%

TABLE XI NORQUAY BEACH: ORIGIN OF MANITOBA CAMPERS, 1970¹⁷

Municipality &/or Local Gov't. District	Party Nights	Percent of Total Manitoba Party Nights
Cornwallis	72	3.7%
Dufferin	27	1.4%
Grey	46	2.4%
North Cypress	24	1.2%
North Norfolk	27	1.4%
Portage la Prairie	526	27.3%
Stanley	24	1.2%
Mystery Lake	33	1.7%
Metro. Winnipeg	931	48.4%
Flin Flon	19	1.0%
TOTAL	1729	89.7%
Other Manitoba Sources	195	10.3%
TOTAL MANITOBA CAMPERS	1924	100.0%

¹⁶ Ibid.

¹⁷ CORDS, Op. Cit., pp.18-19.

campgrounds are located at Spruce Woods Provincial Park, Lynch's Point and St. Ambroise Beach. Table XII compares the travel patterns of Portage la Prairie campers to each of the four Provincial campgrounds in 1970.

TABLE XII DESTINATION OF PORTAGE LA PRAIRIE CAMPERS, 1970¹⁸

Destination	Number of Party Nights	Percent of Total Manitoba Campers at Destination	Distance from Portage la Prairie
Norquay Beach	526	27.3%	6 miles
Spruce Woods Prov. Park	72	3.9%	70 miles
Lynch's Point	N/A	N/A	30 miles
St. Ambroise Beach	91	6.0%	35 miles
Others:			
Delta Beach	N/A	N/A	20 miles

The decline in campground permit sales during 1964 was matched by a comparable decline in the number of unit-days sold at Norquay Beach. In 1974, like campground permit numbers, unit-day sales were lower than the sales of each corresponding month of 1973. For the first time since 1971, when unit-day records were initiated, unit-day sales experienced a decline. Table XIII outlines the history of unit-day sales at Norquay Beach.

TABLE XIII NORQUAY BEACH: MONTHLY DISTRIBUTION OF UNIT-DAY SALES, 1971 - 1974¹⁹

Month	Unit-day Sales and Percent Change From Previous Year			
	1971	1972	1973	1974
May	152	166(+9.2%)	350(+111.8%)	0(-)
June	893	1428(+59.9%)	1477(+3.4%)	221(-85.0%)
July	3690	3402(-7.8%)	3834(+12.7%)	3573(-6.8%)
August	3038	3851(+26.8%)	3881(+.8%)	3508(-9.7%)
September	1191	983(-17.5%)	1007(+2.4%)	912(-9.5%)
TOTAL	8970	9830(+9.6%)	10549(+7.3%)	8214(-22.1%)

¹⁸ *Ibid.*, pp. 18, 41, 63.

¹⁹ MPS, 1974, p.256.

The average length of stay at the Norquay Beach Provincial Recreation Area is slightly over one day. Since 77% of all campers using the Norquay Beach campground in 1970 were not residents of Manitoba,²⁰ it is apparent that most campers use the campground as a rest stop before moving on.

TABLE XIV NORQUAY BEACH: LENGTH OF STAY, 1971 - 1974

Year	Total Number Camping Permits Sold ²¹	Total Number Unit-days Sold ²²	Average Length of Stay per Permit Holder
1969	6436	N/A	-
1970	7028	N/A	-
1971	8035	8970	1.12 days
1972	8648	9830	1.14 days
1973	9107	10549	1.16 days
1974	7223	8214	1.14 days

The campground at Norquay Beach Provincial Recreation Area contains 124 camping sites. During July and August of 1974, when the number of the campground permit sales and the number of unit-day sales reached a four-year low, weekend occupancy reached 100.80% of available camping sites.²³ During July and August of that year, the number of campers exceeded the number of available sites on 14 occasions. Those 14 occasions, overflow days, accounted for 362 unit-days of campground use. In June 1974, two overflow days accounted for 78 unit-days. In July and August of 1972, there were a total of 22 overflow days; there was 1 overflow day in June. July and August together accounted for 432 unit-days in campground overflow in 1972. One overflow day in June accounted for 54 overflow unit-days of campground use.

²⁰ CORDS, Op.Cit., p. 18

²¹ MPS, 1972, p. 277; MPS, 1974, p. 256.

²² MPS, 1974, p. 256

²³ Ibid., p.255.

TABLE XV NORQUAY BEACH: OVERFLOW OF CAMPGROUND CAPACITY,
1970 - 1974²⁴

Month	Number of Days of Overflow/Unit-days of Overflow				
	1970	1971	1972	1973	1974
May	0	0	0	0	0
June	0	0	1/54	1/13	2/78
July	5/78	7/58	18/306	22/767	8/193
August	4/57	6/62	4/126	6/25	6/169
September	0	0	0	0	0
TOTAL	9/135	13/220	23/486	29/995	16/440
Average No. } of Unit-days } per day of } Overflow }	15	16.9	21.13	34.3	27.50

The extent to which the Norquay Beach overflow camping area is used reflects the extent to which available camping sites are used. July and August are the months with the greatest number of unit-day sales. During July and August (62 days) the 124 available camping sites could provide a total of 7,688 unit-days of camping experience. As Table XVI suggests, the Norquay Beach campground is used, on an average night, at close to capacity during July and August.

²⁴ MPS, 1970, n.p., MPS, 1971, p. 305; MPS, 1972., p. 276, MPS, 1973. p. 273; MPS, 1974, p. 255.

TABLE XVI NORQUAY BEACH: CAMPGROUND USE, JULY AND AUGUST²⁵

	1971	1972	1973	1974
Campground Capacity	7688	7688	7688	7688
Month	Number of Unit-days Sold, July and August			
July	3690	3402	3834	3573
August	3038	3851	3881	3508
TOTAL	6728	7253	7715	7081
Total Unit-day Sales as a Percent of Campground Capacity, July and August.	88%	94%	135%	92%

²⁵ MPS, 1974, p. 256.

11(B) SPRUCE WOODS PROVINCIAL PARK:

Straddling the Assiniboine River, Spruce Woods Provincial Park was the first Provincial park to be established in southwestern Manitoba since Turtle Mountain Provincial Park was designated in 1962. The campground at Kiche Manitou is located adjacent to Provincial Road 258 about 17 miles south of the Trans-Canada highway at Carberry.

Vehicle attendance records provide an overview to the use of Spruce Woods Provincial Park. Spruce Woods Provincial Park was opened to the public in 1970. Vehicle attendance was estimated in 1970 to amount to 25,000 cars.²⁶ Since vehicle counts began at Spruce Woods Provincial Park in 1972, the number of vehicles entering the Park has declined steadily. The three-year period covered by vehicle attendance records may be too brief to draw anything but tentative conclusions.

TABLE XVII SPRUCE WOODS PROVINCIAL PARK: VEHICLE ATTENDANCE, 1970 - 1974²⁷

Year	Vehicle Attendance	Percent Change from Previous Year	Percent Change from 1970 Base Year
1970	25,000(est.)	0	0
1971	-	-} -9.5%	} -9.5%
1972	22,632	-}	}
1973	20,547	-9.2%	-17.8%
1974	19,091	-7.1%	-23.6%

The decline in vehicle attendance since 1970 appears to be abating; the decline in vehicle attendance from 1973 to 1974 was less than the decline from 1972 to 1973 and from 1970 to 1972. Spruce Woods Provincial Park, like Norquay Beach Provincial Recreation Area, was closed all of May and until the 21st of June 1974, because of flooding. Had the Park been open during May and early June, vehicle attendance at the Park may have been higher.

²⁶ 1974 Traffic Attendance, Op. Cit., p.8

²⁷ Ibid.

In spite of declining vehicular attendance, the sales of campground permits has tended to rise since the Park opened. Table XVIII following, describes the growth of campground permit sales at Kiche Manitou, the campground area of Spruce Woods Provincial Park.

As Table XVIII points out, until 1974, the use of the Kiche Manitou campground showed increased use every month, with one exception, over the corresponding month of the previous year. In 1974, however, flooding of the campground during the late spring greatly reduced the number of 1974 campground permit sales. If the 1970-1974 trend of increased campground use during May and June is valid, flooding may have cost Kiche Manitou approximately one thousand campground permit sales to within 400 of the 1973 campground permit sales level.²⁸

Because of spring flooding, the sharp drop in 1974 campground permit sales may be interpreted as a deviation from the trend of increasing campground use. Table XIX further illustrates the trend of increasing campground use until 1974. Like Norquay Beach, the greatest increase in the use of the Kiche Manitou campgrounds occurred between 1970 and 1971. From 1971 to 1973, the rate of growth of increasing campground permit sales declined.

The use of Kiche Manitou has, nevertheless, increased dramatically since the campground opened in 1970. Table XIX points out that from 1970 to 1973, campground permit sales increased by 199.1%. The great increase may be a reflection of traditionally low use patterns during the first years of a campground establishment. Low campground permit sales in 1970, the first year of the campground's existence, may produce an artificially high rate of growth over subsequent years. If 1971, rather than 1970, is taken as the base year from which is measured the growth of campground permit sales, the growth rate is less marked although still impressive. With a 1971 base level of 3,465 campground permit sales, sales increased by 34.2% in 1972, by 72.5% in

²⁸ An estimated loss of one thousand campground permit sales during the four weeks the Kiche Manitou campground was closed because of flooding may be conservative. Table XVIII indicates that campground permit sales have increased steadily during the months of May and June since the campground opened. If the trend of increasing use of the campground during May and June had continued through 1974, the campground would have been used, throughout the season, by approximately the same number of campers in 1974 as in 1973.

TABLE XVIII KICHE MANITOU: MONTHLY DISTRIBUTION OF CAMPGROUND PERMIT SALES, 1970 - 1974²⁹

Month	Number of Permits Sold and Percent Change from Previous Year.				
	1970	1971	1972	1973	1974
May	0	75(-)	200(+166.6%)	250(+25.0%)	0(-)
June	174	325(+86.8%)	450(+38.5%)	800(+77.8%)	100(-87.5%)
July	225	1150(+411.1%)	1824(+58.6%)	2150(+17.9%)	2325(+8.1%)
August	1074	1550(+44.3%)	1723(+11.2%)	2225(+29.1%)	1800(-9.1%)
September	525	365(-30.5%)	452(+23.8%)	551(+21.9%)	407(-26.1%)
TOTAL	1998	3465(+73.4%)	4649(+31.2%)	5976(+28.5%)	4632(-22.5%)

TABLE XIX KICHE MANITOU: GROWTH OF CAMPGROUND PERMIT SALES, 1970 - 1974³⁰

Year	Total Permits Sold	Percent Change from Previous Year	Percent Change from 1970 Base Year
1970	1998	-	-
1971	3465	+73.4%	+73.4%
1972	4649	+31.2%	+132.7%
1973	5976	+28.5%	+199.1%
1974	4632	-22.5%	+131.8%

²⁹ MPS, 1972, p. 265; MPS, 1974, p. 244.

³⁰ Ibid.

1973, and by 33.7% in 1974.

Kiche Manitou appears to be heavily used by campers who reside within Manitoba. In 1970, the only year for which information is available, 67% of all campers at Kiche Manitou resided within the Province. Of this 67%, over half were campers residing in Winnipeg. Table XX lists those municipalities which contributed more than one percent of the Manitoba campers.

TABLE XX KICHE MANITOU: ORIGIN OF MANITOBA CAMPERS, 1970³¹

Municipalities or Local Government Districts	Party Nights	Percent of Total Manitoba Party Nights
Cornwallis	167	9.2%
North Cypress	129	7.1%
Portage la Prairie	72	3.9%
South Cypress	86	4.7%
Metropolitan Winnipeg	1069	58.6%
TOTAL	1523	83.5%
Other Manitoba Sources	302	16.5%
TOTAL MANITOBA CAMPERS	1825	100.0%

While campers from Winnipeg provide an important element of the camper population at Kiche Manitou, the campground is also heavily used by local residents of the Rural Municipalities of North Cypress and South Cypress. Together, both municipalities contributed 215 party nights of campers in 1970 or 11.8% of all Manitoba campers attending Kiche Manitou campground.

At a distance of 52 miles, Brandon is the closest major urban community to Spruce Woods Provincial Park. Within approximately one hour's drive from Brandon are several Provincial campgrounds. The campgrounds are located in Spruce Woods Provincial Park, Turtle

³¹ CORDS, *Op. Cit.*, pp.63-64.

Mountain Provincial Park, Oak Lake, Rivers Provincial Recreation Area, and Grand Valley. Residents from Brandon, included within the Cornwallis

TABLE XXI CORNWALLIS CAMPERS: DESTINATION (1970)³²

Destination	Number of Party Nights	Percent of Total Manitoba Campers at Destination	Distance from Brandon
Spruce Woods Prov. Park	167	9.2%	52 miles
Turtle Mountain Prov. Park	78	13.5%	50 miles
Oak Lake	N/A	N/A	45 miles
Rivers	1041	64.2%	27 miles
Grand Valley	41	10.9%	5 miles

appellation, appear to prefer overwhelmingly to camp at Rivers Provincial Recreation Area.

The decline in campground permit sales in 1974 was matched by a decline in the number of unit-days sold. In 1974, only in July did unit-day sales increase over the 1973 sales level. At Kiche Manitou, the decline in the number of unit-day sales was the first since Spruce Woods Provincial Park opened in 1970.

TABLE XXII KICHE MANITOU: MONTHLY DISTRIBUTION OF UNIT-DAY SALES, 1971 - 1974³³

Month	Unit-Day Sales and Percent Change From Previous Year			
	1971	1972	1973	1974
May	98	305(+211.2%)	444(+45.6%)	0(-)
June	416	615(+47.8%)	1248(+102.9%)	164(-86.9%)
July	1488	2707(+81.9%)	3591(+32.7%)	3881(+8.1%)
August	2195	2742(+24.9%)	3525(+28.6%)	3122(-11.4%)
September	526	672(+27.8%)	843(+25.4%)	559(-33.7%)
TOTAL	4723	7041(+49.1%)	9651(+37.1%)	7726(-20.0%)

³² Ibid. pp. 19, 30, 63.

³³ MPS, 1974, p. 244.

The average length of stay at the Kiche Manitou campground is longer than it is at Norquay Beach Provincial Recreation Area. (see Table XIV). Table XXIII indicates that the average length of stay is somewhat over one and a half days and is increasing. The longer visit to Kiche Manitou may be due to at least two factors. First, use of the campground is dominated by Manitoba residents and, specifically, residents from Winnipeg. These visitors appear to be spending two and three day visits at the campground and thus compensate for the overnight stops of through-travellers. Second, Kiche Manitou is located approximately 17 miles south of the Trans-Canada Highway and does not appear to attract relatively large numbers of eastward and westward heading travellers from the Trans-Canada highway.

TABLE XXIII KICHE MANITOU: LENGTH OF STAY, 1971 - 1974

Year	Total Number of Camping Permits Sold ³⁴	Total Number of Unit-Days Sold ³⁵	Average Length of stay per Permit Holder
1970	1998	N/A	-
1971	3465	4723	1.36 days
1972	4649	7041	1.51 days
1973	5976	9651	1.61 days
1974	4632	7726	1.67 days

The campground at Kiche Manitou has 121 camping sites; 76 are unserviced, 45 have electrical hookups. During July and August of 1974, the number of campers exceeded campground capacity during eight of the ten weekends during the two-month period. Average weekend occupancy rate during July and August reached 98.30% while average week-day occupancy reached 86.91%.³⁶ The 19 overflow days during July and August accounted for 962 unit-days of campground use. Three

³⁴ MPS, 1972, p. 265; MPS, 1974, p. 244.

³⁵ MPS, 1974, p. 244.

³⁶ Ibid., p. 240.

overflow days in June accounted for a further 283 unit-days. In 1970, by comparison, overflow occurred on only two occasions and amounted to 22 unit-days of campground use. Table XXIV illustrates the pattern of overflow use developing at Kiche Manitou.

TABLE XXIV KICHE MANITOU: OVERFLOW OF CAMPGROUND CAPACITY, 1971 - 1974³⁷

Month	Number of Days of Overflow/Unit-days of Overflow				
	1970	1971	1972	1973	1974
May	0	0	1/10	0	0
June	0	0	1/12	0	3/283
July	0	0	0	0	10/590
August	0	4/43	0	0	9/372
September	0	0	0	0	0
TOTAL	0/0	4/43	2/22	0/0	22/1245
Average No. of Unit-days per Day of Overflow	0	10.7	11.0	0	56.59

The extent to which the Kiche Manitou overflow camping area is used reflects the extent to which available camping sites are used. July and August are the months with the greatest unit-day sales, and the months where the likelihood of requiring overflow space is greatest. During July and August (62 days) the 121 available camping sites could provide a total of 7,502 unit-days of campground use. As Table XXV indicates, occupancy of the Kiche Manitou campground during any given day during July and August is reaching capacity levels.

Since 1971, the use of the Kiche Manitou campground has increased dramatically. In 1971, on any given day during July and August, about half of the campsites were occupied. By 1973 and 1974, average daily campsite occupation was approaching capacity.

³⁷ MPS, 1971, p. 317; MPS, 1972, p. 264; MPS, 1973, p. 265; MPS, 1974 p. 243.

TABLE XXV KICHE MANITOU: CAMPGROUND USE, JULY AND AUGUST³⁸

	1971	1972	1973	1974
Campground Capacity	7502	7502	7502	7502
Month	Number of Unit-days Sold, July and August			
July	1488	2707	3591	3881
August	2195	2742	3525	3122
TOTAL	3683	5449	7116	7003
Total Unit-day Sales } as a Percent of } Campground Capacity } July and August }	49%	73%	95%	93%

11(c) GRAND VALLEY:

Located in the valley of the Assiniboine River west of Brandon, Grand Valley, like Norquay Beach Provincial Recreation Area, was designed to serve travellers on the Trans-Canada Highway.

Like Norquay Beach and Spruce Woods Provincial Park, Grand Valley was closed during the first part of the 1974 travel season. The Grand Valley campground, however, was opened on June 1 rather than on June 22 as was the case with Provincial Recreation Areas further east. Grand Valley was, thus, open to the public for a longer season than were Norquay Beach and Spruce Woods Provincial Park. The use of the Grand Valley campground during the month of June, 1974 may provide an indication of the use that might have been made of Norquay Beach had it been open for the entire month of June.

Vehicle attendance records for Grand Valley have been kept since 1967. Until 1973, the number of vehicles entering Grand Valley fluctuated annually between 4,500 and 5,500 vehicles. In 1972 and 1974, however, the number of vehicles entering the campground increased by more than double the 1971 number. The dramatic increase

³⁸ MPS, 1974, p. 244.

in vehicle entries in 1973 is comparable to the increase in entries to Norquay Beach. The same jump in vehicle entries from 1972 to 1973, is observeable at many western region campgrounds and is observeable in the vehicle attendance statistics for the Western Region generally (see Table I).

TABLE XXVI GRAND VALLEY: VEHICLE ATTENDANCE, 1967 - 1974³⁹

Year	Vehicle Attendance	Percent Change from Previous Year	Percent Change from 1967 Base Year
1967	4746	-	-
1968	5030	+6.0%	+6.0%
1969	5435	+8.1%	+14.5%
1970	4387-5201	-19.3% - -4.3%	-7.6% - +9.6%
1971	4615	5.2% - -11.3%	-2.8%
1972	5435	+17.8%	+14.5%
1973	9873	+81.7%	+108.0%
1974	11173	+13.2%	+135.4%

Substantial increases in vehicle attendance at Grand Valley during 1973 and 1974 have not been reflected in similar increases in campground permit sales. This would suggest that Grand Valley, with its wading pool and picnic facilities, has become more attractive as a day-use recreation area for the local population. Campground permit sales during 1973 and 1974 did continue an upward trend and, unlike Norquay Beach and Spruce Woods Provincial Park, campground permit sales in June more than tripled over the June 1973 level. Grand Valley is heavily used by campers who are not resident of Manitoba. Manitoba residents accounted for 13% of campground permit sales in 1974. From 1971 to 1974, the percentage of Manitobans buying permits at Grand Valley increased slightly from 9%. In 1970 the only year for which information is available, the largest group of Manitobans, who used the Grand Valley campground, resided in Winnipeg. The next largest resident group using the campground came from nearby Brandon and the Rural Municipality of Cornwallis.

³⁹ CORDS, *Op. Cit.* p. 3. for years 1967 through 1970; 1974 Traffic Attendance, *Op. Cit.*, p. 8, for years 1970 through 1974. The discrepancy in 1970 estimates in vehicle attendance arises from a change in technique in estimating attendance.

TABLE XXVII GRAND VALLEY: MONTHLY DISTRIBUTION OF CAMPGROUND PERMIT SALES, 1969 - 1974⁴⁰

Month	Number of Permits Sold and Percent Change from Previous Year					
	1969	1970	1971	1972	1973	1974
May	46	75(+63.0%)	0(-)	0(-)	84(-)	0(-)
June	359	175(-51.3%)	375(+114.3%)	275(-26.7%)	216(-21.3%)	707(+227.3%)
July	919	1675(+82.3%)	1475(-11.9%)	1675(+13.6%)	1475(-11.9%)	1885(+27.8%)
August	1700	1000(-41.2%)	1625(+62.5%)	1425(-12.3%)	18000(+26.3%)	1296(-28.0%)
September	609	725(+19.1%)	551(-24.0%)	625(+13.4%)	710(+13.6%)	437(-38.4%)
TOTAL	3633	3650(-.5%)	4026(+10.3%)	4000(-.7%)	4285(+7.1%)	4325(+.9%)

TABLE XXVIII GRAND VALLEY: GROWTH IN CAMPGROUND PERMIT SALES, 1969 - 1974.

Year	Total Permits Sold ⁴¹	Percent Change from Previous Year	Percent Change from 1969 Base Year
1969	3633	-	-
1970	3650	+ 5%	+ 5%
1971	4026	+10.3%	+10.8%
1972	4000	-.7%	+10.1%
1973	4285	+7.1%	+17.9%
1974	4325	+ .9%	+19.1%

⁴⁰ MPS, 1972, p. 261; MPS, 1974, p. 240.

⁴¹ Ibid.

TABLE XXIX GRAND VALLEY: ORIGIN OF MANITOBA CAMPERS, 1970⁴²

Municipality or Local Government District	Party Nights	Percentage of Total Manitoba Party Nights
Cornwallis	41	10.9%
Hanover	7	1.9%
Portage la Prairie	8	2.1%
St. Andrews	7	1.9%
South Cypress	5	1.3%
Woodlands	7	1.9%
Alexander	4	1.1%
Metropolitan Winnipeg	231	61.6%
TOTAL	310	82.7%
Other Manitoba Sources	65	17.3%
TOTAL MANITOBA CAMPERS	375	100.0%

In spite of the proximity of Grand Valley to the City of Brandon, the campground does not appear to be used very much as a camping area by the local population. As Table XXI indicates, residents of Brandon and the Rural Municipality of Cornwallis prefer to go, first, to the Rivers Provincial Recreation Area, second, to Spruce Woods Provincial Park and, third, to the Turtle Mountain Provincial Park for camping experiences.⁴³

The increase in campground permit sales at Grand Valley has been matched by an increase in unit-day sales. Table XXX describes the trend in growth of unit-day sales.

The average length of stay at Grand Valley is slightly over one day, suggesting that, like Norquay Beach Provincial Recreation Area, campers use the campground simply as a resting spot before moving on.

The campground at Grand Valley has 47 camping sites of which 40 are unserviced. During July and August of 1974, the number of campers entering Grand Valley exceeded campground capacity on 42 occasions.

⁴² CORDS, *Op. Cit.* p. 9

⁴³ c.f. above, p.170.

TABLE XXX GRAND VALLEY: MONTHLY DISTRIBUTION OF UNIT-DAY SALES, 1971 - 1974⁴⁴

Month	Unit-day Sales and Percent Change from Previous Year			
	1971	1972		
May	0	0(-)	94(-)	0(-)
June	397	302(-23.9%)	229(-24.8%)	755(+232.6%)
July	1513	1753(+15.9%)	1568(-10.6%)	2005(+27.9%)
August	1663	1440(-13.4%)	1852(+28.6%)	1353(-26.8%)
September	554	631(+13.9%)	719(+13.9%)	451(-37.3%)
TOTAL	4127	4126(-)	4460(+8.1%)	4564(+2.3%)

TABLE XXXI GRAND VALLEY: LENGTH OF STAY, 1971 - 1974

Year	Total Number of Camping Permits Sold ⁴⁵	Total Number of Unit-Days Sold ⁴⁶	Average Length of Stay per Permit Holder
1970	3650	N/A	-
1971	4026	4127	1.03 days
1972	4000	4126	1.03 days
1973	4285	4460	1.04 days
1974	4325	4564	1.06 days

⁴⁴ MPS, 1972, p. 261; MPS, 1974, p. 240.

⁴⁵ MPS, 1972, p. 261; MPS, 1974, p.240.

⁴⁶ MPS, 1974, p. 240.

During July and August, 473 unit-days of campground use were attached to overflow camping areas. Weekend occupancy of the campground reached 105.04% of designated campsites during July and August; average weekday occupancy reached 110.59% of capacity.⁴⁷ One overflow day in June accounted for one unit-day of overflow campground use.

TABLE XXXII GRAND VALLEY: OVERFLOW OF CAMPGROUND CAPACITY, 1971 - 1974

Month	Number of Days of Overflow/Unit-days of Overflow ⁴⁸				
	1970	1971	1972	1973	1974
May	0	0	0	0	0
June	0	0	0	1/17	1/1
July	0	2/12	1/2	10/86	28/350
August	0	0	0	2/24	14/123
September	0	0	0	0	0
TOTAL	0/0	2/12	1/2	13/127	43/474
Average No. of } Unit-days/day } of Overflow }	0	6	2.0	9.8	11.02

Table XXXII suggests that there has been an increasing need to allocate campers to overflow areas. By 1974, Grand Valley experienced overflow conditions during all but three days of July and for almost half of the days in August.

The extent to which the Grand Valley overflow camping area is used reflects the extent to which available designated camping sites are used. July and August are the months of greatest unit-day sales, and the months with the greatest likelihood of requiring overflow camping areas. During July and August (62 days), the 47 designated camping sites could provide a total of 2,914 unit-days of campground use. As Table XXXIII

⁴⁷ Ibid., p. 239.

⁴⁸ MPS, 1971, p. 293; MPS, 1972, p. 260; MPS, 1973, p. 261; MPS, 1974, p. 239.

indicates, occupancy of the Grand Valley campground during any given day of July and August is great enough that use of the overflow area may be anticipated.

TABLE XXXIII GRAND VALLEY: CAMPGROUND USE, JULY AND AUGUST⁴⁹

	1971	1972	1973	1974
Campground } capacity in } Unit Days } Month	2914	2914	2914	2914
Number of Unit-days Sold, July and August				
July	1513	1753	1568	2005
August	1663	1440	1852	1353
TOTAL	3176	3193	3420	3358
Total Unit-day } Sales as a } Percent of } Campground } Capacity, } July and August }	109%	110%	117%	115%

11(D) MISSISSIPPI PROVINCIAL PARK:

Mississippi Provincial Park was first opened to the public in 1972. The Park comprises lands downstream from the Shellmouth Dam and lands adjacent to the Shellmouth Reservoir. Opening on May 17, Mississippi Provincial Park was the only Assiniboine River Recreation Area not affected by late spring flooding.

Since the Park opened in 1972, vehicle attendance records indicate increasing use of the Park. As Table XXXIV points out, vehicle attendance increased by 40% in the first three years of operation.

Increased vehicle attendance at Mississippi Provincial Park has reflected increased numbers of campground permit sales. Data on campground permit sales is available only for 1973 and 1974. The total number

⁴⁹ MPS, 1974, p. 240.

TABLE XXXIV ASISSIPPI PROVINCIAL PARK: VEHICLE ATTENDANCE,
1971 - 1974⁵⁰

Year	Vehicle Attendance	Percent Change From Previous Year	Percent Change from 1972 Base Year
1972	10,808	-	-
1973	11,728	+8.5%	+8.5%
1974	15,317	+30.6%	+41.7%

of permit sales increased from 975 to 1,422 (+45.8%) from 1973 to 1974.⁵¹ It is difficult to postulate a trend from the permit sales data, and to infer growth patterns from such limited data.

No published information is available analysing the characteristics of campers at Asissippi Provincial Park. Nor is there published information available on the origin of campers at the Park.

Unit-day sales data are available for 1973 and 1974 but trend analysis on such limited data is unreliable. Between 1973 and 1974, total unit-day sales increased from 1,284 to 1,930 unit-days, an increase of 50.3%.⁵² The average length of stay, for the same period, increased from 1.32 to 1.36 days.

The Asissippi Provincial Park campground contains 96 camping sites. All sites are unserviced. During 1974, the numbers of campers using the campground at no time reached the campground capacity level, hence, no overflow day-units of camping space was recorded. During 1974, the average weekend occupancy reached 34.9% of campground capacity during July and August. Average weekday occupancy was 20.4% of campground capacity.⁵³

Asissippi Provincial Park has been open to the public only since 1972. The data available on the use of the Park make it difficult to define trends of use of the campground at the Park. On the basis of

⁵⁰ 1974 Traffic Attendance, Op. Cit. p. 8.

⁵¹ MPS, 1974, p. 226.

⁵² Ibid.

⁵³ Ibid., p. 225.

vehicle attendance, however, it may be postulated that vehicle attendance will continue to increase. If that attendance increased, one should expect to see increased use of the Asissippi Provincial Park campground.

B) DAY-USE

DAY USE ACTIVITY AT PROVINCIAL CAMPGROUNDS:

The Parks Branch of the Department of Tourism, Recreation and Cultural Affairs has not undertaken annual analyses of participation in day-use activities at Provincial campgrounds and Provincial Parks along the Assiniboine River. Day-use analysis of 1974 visitors is being conducted for Spruce Woods and Asissippi Provincial Parks and Norquay Beach Provincial Recreation Area. Published data on day-use is available only for Spruce Woods Provincial Park and at Grand Valley and Norquay Beach Provincial Recreation Area. The published data is based upon 1970 surveys of Park attendants.

NORQUAY BEACH PROVINCIAL RECREATION AREA:

A survey of the use of Norquay Beach Provincial Recreation Area in 1970 pointed out that the recreation area attracted 13,200 day-use visitors used in the area; an average day 130 day-use visitors used the area; an average Sunday attracted 290 day-use visitors. On one occasion, the peak use day, 590 day visitors used the Norquay Beach Provincial Recreation Area.⁵⁴ In 1970, 49.4% of all 6,250 day use visitors originated in the City and Rural Municipality of Portage la Prairie; a further 32.9% of the total originated from Winnipeg.⁵⁵ 4,343 residents from the Rural Municipalities of De Salaberry, Grey, Hanover, North Norfolk, Roland, Rosser, St. Clements, Stanley, Thompson and Woodlands accounted for 15.2% of day-use visits. Only 2.5% of day-use visitors were non-residents of Manitoba.⁵⁶

⁵⁴ CORDS, p. 12.

⁵⁵ Ibid., p. 21.

⁵⁶ Ibid.

In order of importance, picnicking, swimming and walking opportunities are the major activities of day users. In 1970, 33.1% of surveyed respondents, aged 15-25, indicated that Norquay Beach was a stop on a driving and sightseeing trip. Respondents in the same age group participated in picnicking (51.8%), swimming (48.8%) and walking and hiking (41.1%) activities. Swimming was, cumulatively, the most important activity for the 0-9, 10-14, and 15-24 year age groups. Picnicking was an important activity for persons up to the 25-44 year age group. Unlike participation in swimming and picnicking facilities, participation in walking activities was evenly distributed across all age groups.⁵⁷ Norquay Beach is used by the Red Cross to provide swimming lessons to youths from Oakville⁵⁸ and is also used by local groups - Boy Scouts, Girl Guides, Church groups and others - for organized group camping opportunities.⁵⁹

SPRUCE WOODS PROVINCIAL PARK:

A 1970 survey of the use of Spruce Woods Provincial Park reveals that during the 100 days the Park was open, 5,500 day-use visitors used the Park. An average, 55 day users visited the Park each day, while 110 day-users visited the Park on Sundays. The peak use day saw 220 day users. No statistical information is available on the origin of day users at Spruce Woods Provincial Park.⁶⁰ Interviews with officials

⁵⁷ Ibid. p. 17.

⁵⁸ Interview with W. McMillan, Secretary-Treasurer, Rural Municipality of Portage la Prairie, July 14, 1975.

⁵⁹ Interview with Wayne Luchik, Recreation Director, City of Portage la Prairie, July 15, 1975.

⁶⁰ CORDS, p. 57.

of the Rural Municipalities of South Cypress, South Norfolk indicate, however, that local populations contribute large numbers of day users to Spruce Woods Provincial Park.⁶¹

In order of rates of participation, walking and hiking, swimming and picnicking are the most important day use activities. In 1970, 66.3% of day users walked, 52.1% participated in swimming and 41.9% of day users used picnic facilities. Youths under 14 years of age made particularly heavy use of the swimming opportunities available. The participation rate for the 0-9 year age grouping was 64.9% while 70.0% of the 10-14 year olds participated in swimming. Slightly less than 50% of individuals in the 15-24 and 25-44 year age groups participated in swimming activities. Walking and hiking activities were well represented in all age groupings. In all groupings, more than half of the individuals participated. Participation was highest (71.2%) for the 45-64 year age group. More than 60% of individuals aged 44 or younger participated in walking activities. Participation in picnicking hovered around 40% for individuals younger than 44. The participation in picnicking of individuals older than 45 declined 50 35%.⁶²

Respondents indicated that 52.6% of users of facilities at Spruce Woods Provincial Park were participating in driving and sight-seeing trips.⁶³ It would appear that, unlike participation at Norquay Beach Provincial Recreation Area, participation in activities at Spruce Woods Provincial Park was an integral part of a driving and sightseeing tour. The low driving and sightseeing participation level at Norquay Beach suggests that users were going to Norquay Beach for specific purposes, that Norquay Beach was a predetermined destination and not simply one point in a day's recreational drive.

⁶¹ Interview with M. Vertz, Reeve, Rural Municipality of South Cypress, August 26, 1975.

Interview with R.F. Culbert, Reeve, Rural Municipality of South Norfolk, August 12, 1975.

⁶² CORDS, p. 62.

⁶³ Ibid.

C) USE OF DESIGNATED WILDLIFE LANDS:

Traditionally, the Department of Mines, Resources and Environmental Management has tended to acquire upland and marsh lands and to designate acquired lands as Wildlife Management Areas. The primary function of such acquisitions was to provide secure habitat primarily for white-tailed deer and waterfowl. As such, Wildlife Management Areas were comprised of blocks of land of various sizes, the location of which were generally unknown to the public, and accessibility to which was generally difficult. As a result, most Wildlife Management Areas have not generally been used for recreation purposes by the general public.⁶⁴

Exceptions there are: waterfowl and upland game hunters have had access to Wildlife Management Areas, and hunters have comprised a significant proportion of the users of most Wildlife Management Areas. It is difficult to know, however, how many hunters specifically and how many people generally made use of Wildlife Management Areas.

The primary function of Wildlife Management Areas has been and is to provide habitat for wildlife. Nevertheless, the educational objectives of Oak Hammock Marsh Wildlife Management Area and the decision to publicize the recreational opportunities available in Wildlife Management Areas suggests that in the future greater public use will be made of Wildlife Management Areas. Indeed, certain critically located Wildlife Management Areas are already receiving recreationists who wish to picnic, camp, pick berries, photograph or study wildlife. The Souris Bend Wildlife Management Area is a case in point.

⁶⁴ The Department of Renewable Resources and Transportation Services is continuing a program initially undertaken by the Department of Mines, Resources and Environmental Management to inform the public about potential recreational opportunities on Wildlife Management Areas. To date, brochures have been published for Oak Hammock Marsh, Mantagao and Narcisse Wildlife Management Areas.

D) USE OF OTHER OUTDOOR RECREATION OPPORTUNITIES:

URBAN MUNICIPALITIES

USE OF PARKS:

The Assiniboine River flows through the cities of Winnipeg and Brandon and adjacent to the City of Portage la Prairie. In each City, certain lands adjacent to the Assiniboine River are set aside as public recreation areas. In each city, such recreation lands are designed to help satisfy urban recreation needs.

WINNIPEG:

Most outdoor recreation lands owned and facilities operated by the Province lie beyond the boundaries of the City of Winnipeg. Within the city, outdoor recreation opportunities are made available by various Parks and Recreation Departments of the City of Winnipeg and its component Community Committees. The Parks and Protection Division of the City of Winnipeg administers major open space recreation areas within the City. Various Community Committees administer recreation programs at smaller parks, community centers and at schools.

For purposes of this Practicum, only the major parks and open space land administered by the Parks and Protection Division of the City of Winnipeg will be examined. As of January 1, 1975, the following lands adjacent to the Assiniboine River were administered by the Parks and Protection Division.⁶⁵

⁶⁵ City of Winnipeg, Parks and Protection Division, Unpublished MSS, n.p.

1) Assiniboine Park	285.70 acs.}	375.70
Assiniboine Park Zoo	90.00 acs.}	
2) Assiniboine Forest		703.00
3) Bonnycastle Park		7.8
4) John Blumberg Golf Course	193.45 acs.}	278.40
John Blumberg Park	84.95 acs.}	
5) Sturgeon Creek Park		89.68
6) Westdale Park		14.10
TOTAL ACREAGE		<u>1,468.68</u>

Except for Bonnycastle Park, the remaining open space lands administered by the Parks and Protection Division are located westward of the St. James bridge crossing of the Assiniboine Park. Open space lands adjacent to the Assiniboine River account for 46% of all lands (3,221.43 acs.)⁶⁶ administered by the Parks and Protection Division in Metropolitan Winnipeg. Except for Bonnycastle Park, Assiniboine Park is the most easterly located parkland along the Assiniboine River.

Information on the use of major parks in Winnipeg is available only for Assiniboine Park. During 1970-1971, users of Assiniboine Park were surveyed in order to gain basic information on the characteristics of users.⁶⁷ On the basis of the survey, it was discovered that 88.5% of June visitors, 87.8% of August visitors and 90.2% of February visitors drive to the Assiniboine Park.⁶⁸ Approximately 89% of all visitors arrived at Assiniboine Park by car.

On the basis of traffic counts at Assiniboine Park and an assumed passenger load of 3.5 visitors per automobile it is possible to estimate the number of visitors who have been to Assiniboine Park.⁶⁹

⁶⁶ Ibid.

⁶⁷ Glenn Church, Initial Analysis of August Survey of Assiniboine Park Visitors, unpublished MSS for City of Winnipeg, Parks and Protection Division, 1971, n.p.

⁶⁸ Ibid.

⁶⁹ Estimated total visitors can be calculated from the assumption that 89% of all visitors (yearly average) arrive by car. The assumed passenger load of 3.5 visitors per car is derived from the pattern of visitation to Assiniboine Park. Families with children accounted for approximately thirty percent of all visitors; groups of friends accounted for approximately fifteen percent of all users, Church. Op. Cit. n.p.

TABLE XXX ESTIMATED YEARLY NUMBER OF VISITORS TO ASSINIBOINE PARK, 1969 - 1974.

	Estimated Yearly Attendance					
	1969	1970	1971	1972	1973	1974
Vehicle Counts ⁷⁰	501,299	584,118	598,062	N/A	582,832	533,523
Arrivals by car @3.5 visitors/car.	1,754,547	2,044,413	2,093,217	N/A	2,039,912	1,867,734
ESTIMATED TOTAL VISITORS	1,947,547	2,269,298	2,323,471	N/A	2,264,302	2,073,185

⁷⁰ City of Winnipeg, Op. Cit. n.p.

Assiniboine Park essentially serves western Winnipeg. Over 60% of all visitors live within four miles of the Park. Depending on the season, from 38.2% (spring), to 49.2% (winter) of Park visitors live within three miles of the Park.⁷¹ Translating the mileage into areas of the City, from twenty-eight to thirty-four percent of August and June visitors to the Park live in the River Heights-Crestwood area of Winnipeg, and the Deer Lodge, Sturgeon Creek-Silver Heights-Birchwood areas of St. James-Assiniboia. The Kirkfield Park-St. Charles-Heritage Park areas of St. James-Assiniboia were the origins of approximately eight percent of Assiniboine Park users. Fort Garry, St. Vital, St. Boniface, East Kildonan and the Fort Rouge-Riverview areas each contributed from five to six percent of Park users. The core areas represented by the St. John Centennial and Lord Selkirk Community Committee areas were the origins of few Park users (approximately 1.9% of all Park users).⁷²

The Zoo and the Conservatory are two important attractions at Assiniboine Park. During the summer months of 1970, over three-quarters of all visitors to Assiniboine Park went to the Zoo. The Conservatory throughout the year, was visited by approximately half of all visitors to the Park.⁷³ Other activities engaged in by over one-third of Park visitors included walking and hiking, pleasure driving, using the food facilities at the Park, and visiting the duck pond. In August, visits to the English Garden were engaged in by 51.7% of Park visitors.⁷⁴

The local use of Assiniboine Park is more pronounced during the winter than during the summer. In February 1970, 42.9% of Park users originated from the River Heights-Crescentwood area of Winnipeg and from the Birchwood-Sturgeon Creek-Silver Heights-Deer Lodge area of St. James-Assiniboia. Similarly, 49.2% of Park users lived within three miles of the Park, and two out of three park visitors lived within four miles of the Park.⁷⁵ Primary winter activities of users included visits

⁷¹ Church, n.p.

⁷² Ibid.

⁷³ Ibid.

⁷⁴ Ibid.

⁷⁵ Glenn Church, Assiniboine Park Winter Survey, Unpublished MSS for City of Winnipeg Parks and Protection Division, 1971, n.p.

to the Zoo and Conservatory, pleasure driving, and use of food facilities. In February 1970, only 18.6% of visitors made use of the skating pond and only 4.1% of users participated in tobogganing.⁷⁶

USE OF GOLF COURSES:

Statistics are available on the number of golfers who have played games at John Blumberg Golf Course. Since the Course opened in 1969, the number of games played has increased steadily from 11,707 games in 1969 to 43,830 games in 1971 to 53,544 games in 1974.⁷⁷ John Blumberg Golf Course is the only publicly owned golf course in west Winnipeg. Since 1969, the John Blumberg Golf Course has accounted for an increasing percentage of the total games played on municipal golf courses - 23% in 1970, 25% in 1971, 25% in 1972, 26% in 1973 and 28% in 1974.⁷⁸ Of Municipal Golf Courses, only John Blumberg has consistently experienced increased use since 1972.

The increased use of the John Blumberg Golf Course may possibly be attributed to the rapid population increase of western Winnipeg. In 1970, 30.5% of the owners of golf clubs in Metropolitan Winnipeg lived within the St. James-Assiniboia (21.4%) and the Assiniboine Park (9.1%) Community Committee areas.⁷⁹ In 1971, an estimated 62,900 Winnipeggers over the age of 18 owned golf clubs.⁸⁰ Of this number, approximately 13,460 owners would live in St. James-Assiniboia and 5,725 in Assiniboine Park Community Committee Areas. By contrast, the owners of golf clubs in the Centennial, St. Johns and Lord Selkirk Community Committee Areas would number respectively, 1,069, 1,258 and 3,019 in 1970.⁸¹

⁷⁶ Ibid.

⁷⁷ City of Winnipeg, Op. Cit., n.p.

⁷⁸ Ibid.

⁷⁹ Manitoba Department of Tourism, Recreation and Cultural Affairs, Research and Planning Branch, Winnipeg Recreation and Travel Survey, 1972, pp. 45, 57.

⁸⁰ Ibid. p. 63.

⁸¹ Ibid. p. 57.

USE OF RIVERBANK:

The City of Winnipeg maintains as one of its objectives the gradual public acquisition of riverbank land within the City of Winnipeg. To date a number of parcels of land adjacent to the Assiniboine River have been confirmed or acquired as public. Many of the smaller pieces of public land are street rights-of-way extending from the end of developed streets to the River. The largest parcels of publicly owned riverbank property are administered by the City of Winnipeg's Parks and Protection Division. The Division administers Assiniboine riverbank properties known as Bonnycastle Park and Assiniboine Parkway. Both parcels of land are narrow strips of land offering limited opportunities for use.

The Assiniboine Parkway appears to be used more extensively than is Bonnycastle Park. The Assiniboine Parkway may be considered a part of a linear recreation corridor extending eastward from Assiniboine Park along the Parkway and along Wellington Crescent. As such the Parkway is used as a walking, bicycling and cross-country ski route. The wooded and undulating topography of the Assiniboine Parkway do provide walkers and bicyclers with a visually attractive trail whose "monkey trails" provide bicyclers with an opportunity to test and challenge their skills.

Statistical data on the use of riverbank property is not available. It may be realistic to assume that such narrow strips of public land are generally unsuitable to support many forms of outdoor recreation and that the use of riverbank property is very limited.

PORTAGE LA PRAIRIE:

The Assiniboine River per se forms part of the southern boundary of the City of Portage la Prairie. While the river is used for fishing, canoeing, and boating, most recreational activity is concentrated on Crescent Lake, an oxbow of the River, and its adjacent lands, Island Park. Island Park is designed to accommodate day-use activities, the Park is comprised of a small zoo, picnic facilities, baseball diamonds, football fields, a band shell and canoe and boat rental facilities. Island Park will be the site for a \$4.5 million dollar

recreation complex, construction of which will provide indoor swimming, hockey, skating and curling facilities.⁸²

Limited information on the users of Island Park is available. It has been estimated that approximately 100 people visit Island Park on summer week-day evenings while considerably more use the Park during summer week-end days.⁸³

The City of Portage la Prairie is anticipating rapid growth in its population. During the next five years, approximately 5,000 industrial and administrative positions are expected to come to Portage la Prairie.⁸⁴ In view of the likely expansion of the city's population, the City has made the commitment to acquire all patented lands within the meander loop formed by Crescent Lake and adjacent to Island Park.⁸⁵

BRANDON:

Most of the lands adjacent to the Assiniboine River, within the City of Brandon and between the 1st Street bridge and Curran Park are owned by the City of Brandon. Patented lands adjacent to the River and within the City, will be acquired by the City as they become available for sale.⁸⁶

Lands adjacent to the Assiniboine River are designated as park and recreation land. Development of recreation facilities are being effected by the Westbran Work Activity Project. The Project's primary objective is to provide work skills to the unemployed and unemployable; the provision of recreation facilities is a means to that end.

Development of recreational facilities by Westbran are taking place in accordance with proposals developed by Garry Hilderman and Associates, Landscape Architects and Planners, in 1974. Eventually,

⁸² Luchik, Op. Cit.

⁸³ Ibid.

⁸⁴ Interview with R. Roteliuk, General Manager, Central Plains Regional Development Corporation, July 15, 1975.

⁸⁵ Luchik, Op. Cit.

⁸⁶ Interview with Victor Brown, Director, Parks and Recreation Department, City of Brandon, August 27, 1975.

Brandon's Assiniboine park will accommodate a variety of outdoor and indoor, summer and winter activities. To date, camping and picnic facilities, tennis courts, games areas and a network of walking and cycling trails have been constructed.⁸⁷ Much of the landscaping for future recreational development has also been accomplished. Eventually, a swimming pool, canoe and boat launches, a marina, an information and refreshments building, and a variety of other recreational facilities will be provided along the river park. The park will provide more intensive use and extensive use areas.

The Assiniboine park lies eastward of and is connected through trail networks, a pedestrian ferry across the Assiniboine River, and expanded day-use areas on the north side of the River, to Curran Park. Until the Westbran Project was undertaken, Curran Park was the only designated recreational area along the Assiniboine River within the City of Brandon. Curran Park provides facilities for camping and a variety of day-use activities. Curran Park has a swimming pool, games areas and picnicking facilities. Curran Park gets heavy week-end and day use and it appears that the Park is especially important to lower income people who do not have a cottage or go to a lake.⁸⁸ The swimming pool in Curran Park is capable of handling 1,000 people at a time; no admissions are charged. Brandon's Parks and Recreation Director indicated that in 1970, the last year in which admission fees to the swimming pool were charged, that 2,500 admissions were common on summer Saturdays and Sundays. Since then, admissions to the swimming pool have increased by an indeterminate number.⁸⁹

During 1975, Curran Park was expected to draw more than 100,000 visitors.⁹⁰ By August 10, 1975, an estimated 75,000 users had visited the Park. By 1975, the seventh season of operation for the campground, revenue from camping permits had increased from \$1,300 in 1969 (@\$1.75 and \$3.00/campsite) to over \$13,000 (@\$2.50 and \$4.00/campsite).⁹¹

⁸⁷ Interview with D. Wark, Project Manager, WestBran Work Activity Project, August 13, 1975.

⁸⁸ Brown, Op. Cit.

⁸⁹ Ibid.

⁹⁰ Ibid.

⁹¹ Ibid.

Admission is charged to enter Curran Park. To August 10, 1975, 6,975 daily passes and 1,436 seasonal passes had been sold. On daily passes, an estimated 200 to 300 cars entered Curran Park each day.⁹²

⁹² Ibid.

E) OTHER RURAL OUTDOOR RECREATION OPPORTUNITIES:

Statistical analysis of the use of recreation lands in Manitoba provides an indication of the increasing numbers of people using those recreation lands. An appreciation of the recreational activities engaged in can be gleaned partly from statistics but more from interviews with officials of municipalities located along the Assiniboine River.

Interviews with municipal officials make it clear that the Assiniboine River and its adjacent lands are used for a variety of recreational activities from the Lake of the Prairies through to Winnipeg. For discussion purposes, the Assiniboine River will be divided into three segments. The first segment will comprise the Assiniboine River from Winnipeg to and including the Portage la Prairie Reservoir. The second segment extends from the Portage la Prairie Reservoir to west of Brandon. The third segment extends to the Manitoba-Saskatchewan boundary.

THE WINNIPEG TO PORTAGE LA PRAIRIE SEGMENT:

This first segment of the Assiniboine River lies within approximately one hour's drive from Winnipeg. Within the segment are urban recreation lands in Winnipeg and Portage la Prairie. Along the rural stretches of the river, Beaudry Provincial Park is under development. Norquay Beach Provincial Recreation Area is the only provincially administered recreation area open to the public between Winnipeg and Portage la Prairie.

Norquay Beach Provincial Recreation Area is heavily used by local populations. It was pointed out above that considerable use is made of the campground facilities at Norquay Beach by local populations.⁹³

⁹³ c.f. above, p.

Along the Assiniboine River, eastward and westward of Norquay Beach, fishing sites are common but are generally located on private land, and are accessible only to landowners and their friends.⁹⁴ East of Norquay Beach, the Assiniboine River is used, to some extent by canoeists. During winter, the river is used extensively by snowmobilers and, periodically, snowmobilers crash through the ice. To a lesser extent, the river is used as a cross-country ski route.⁹⁵ Water quality problems preclude use of the Assiniboine River for swimming.

Residents of the eastern sections of the Rural Municipalities of St. Francois Xavier and Cartier appear to make considerable use of the private recreational facilities developed at Sunny Harbour and Jellystone.⁹⁶ Both sites offer camping, swimming and picnicking facilities.

Between Norquay Beach and Portage la Prairie, the Assiniboine River appears to be little used. Road access to the River is more difficult here than it is eastward of Norquay Beach. At Portage la Prairie, however, between the bridge crossing of Provincial Road 240 and the Reservoir, the Assiniboine River is heavily used as a local fishing area. Large numbers fish regularly at the fast water areas immediately below the dam at Portage la Prairie. There is good road access to the site and it appears the site is very popular with lunch-hour, evening and week-end fishermen from the City of Portage la Prairie. The Reservoir itself is now used, to some extent, as a water sport area. The City and the Rural Municipality of Portage la Prairie are under some pressure to permit the construction of boat ramps to facilitate launchings into the Reservoir. Apparently, the public pressure to develop facilities has increased with the deterioration of the quality of beaches at Delta at the south end of Lake Manitoba.⁹⁷

⁹⁴ Interview with Geo. Moore, Secretary-Treasurer of the Rural Municipality of St. Francois-Xavier, July 9, 1975.

Interview with A. Carriere, Secretary-Treasurer of the Rural Municipality of Cartier, July 9, 1975; McMillan, Op. Cit.

⁹⁵ Carriere, Op. Cit.

⁹⁶ Moore, Op. Cit., Carriere, Op. Cit.

⁹⁷ Roteliuk, Op. Cit.

Water quality in the Reservoir is suitable to permit swimming. Fine sand beaches appear to be developing on the eastern, southeastern and northeastern edges of the Reservoir. No recreation facilities have yet been developed around the Reservoir, and if the proposed planning scheme for the Designated Reservoir Area is adopted by the Council of the Rural Municipality of Portage la Prairie, few recreational facilities will be developed around the Reservoir.⁹⁸

Adjacent to, and lying to the southeast of, the Reservoir lie extensive sandy lands. The Rural Municipality proposes in its planning scheme to focus recreational development on to these lands. In recent years, the sandy lands have become increasingly used for a variety of trail oriented recreational activities. Horseback riders, cross-country skiers, snowmobilers and mini-bikers now make use of road allowances and such trails that exist on privately owned property.⁹⁹

Within the City of Portage la Prairie, Island Park is intensively developed to serve residents of the City of Portage la Prairie. Located within a cut-off meander loop of the Assiniboine River, Island Park is currently zoned for agriculture and recreation. As agricultural land has come up for sale, the City of Portage la Prairie has committed itself to buying that land and reserving it for present and future recreation land.¹⁰⁰

Island Park currently provides certain recreation facilities in the way of picincking sites, tennis courts, wading pool, band shell and a rudimentary zoo. Crescent Lake, the meander loop of the river is used for boating and canoeing but the water in the lake and the river is unsuitable for swimming. A major recreational sports complex that will include an indoor swimming pool is planned for Island Park and is expected to meet some of the demand for sports facilities.

Island Park is being developed as an intensive-use urban park. During summer week day evenings, approximately 100 people use Island

⁹⁸ McMillan, Op. Cit.

⁹⁹ McMillan, Op. Cit.

¹⁰⁰ Luchik, Op. Cit.

Park facilities. Each week-end day attracts approximately 1,000 users. Island Park is also used as a field-trip destination by some elementary school children from Winnipeg. On each of three occasions in June 1975, Canadian National Railways transported 600 elementary school children to Portage la Prairie for outings at Island Park.¹⁰¹

PORTAGE LA PRAIRIE TO BRANDON SEGMENT:

This second segment of the Assiniboine River, extending from the Portage la Prairie reservoir to Brandon lies within approximately two hours drive from Winnipeg. Within this segment lies Spruce Woods Provincial Park, the only Provincial Recreation Area along this segment of the Assiniboine River. The Park is heavily used as a camping area and it appears that the Park attracts a large day-use population from the surrounding area.

Except for Spruce Woods Provincial Park, the Assiniboine River between Portage la Prairie and Brandon appears to be lightly used. Canoeists apparently make only limited use of the River. Snowmobilers and cross-country skiers seldom use the River because of slush ice conditions. Rather, snowmobilers and cross-country skiers make more intensive use of trails through bush land north and south of the River from Treesbank, east to Lavenham and Rathwell. According to the Reeves of the Rural Municipalities of South Norfolk and South Cypress, snowmobilers prefer to use trails on privately owned land than the designated trails laid out in Spruce Woods Provincial Park.¹⁰²

Fishing is common along the Assiniboine River where streams empty into the Assiniboine River. Locally important fishing spots include the mouths of the Cypress, Souris and Little Souris Rivers.¹⁰³

Between Portage la Prairie and Brandon, privately owned recreational outlets appear to offer significant opportunities for populations living more than thirty or forty miles from Spruce Woods Provincial Park. Along the Assiniboine River northwest of Rathwell and Treherne, the Bambi Gardens and Belle Isle resorts provide tenting,

¹⁰¹ Ibid.

¹⁰² Vertz, Op. Cit.; Culbert, Op. Cit.

¹⁰³ Ibid.

picnicking, swimming and summer sport facilities. Both resorts have constructed swimming pools since the Assiniboine River itself is unsuitable for water activities. The Belle Isle resort appears to be financially successful while Bambi Gardens suffers erosion problems from the Assiniboine River and is of doubtful financial success. Bambi Gardens is open all year and provides facilities for snowmobilers. A third private recreational outlet is under construction immediately north of the Assiniboine River Valley and adjacent to Provincial Trunk Highway 34. This enterprise expects to cater to snowmobilers and cross-country skiers.¹⁰⁴

Between Spruce Woods Provincial Park and the City of Brandon are no public or private recreation lands along the Assiniboine River. The Town of Wawanesa has a small outdoor recreational area centering on a small dam in the Souris River. The reservoir created behind the dam provides swimming opportunity. Tenting and picnicking facilities have been developed adjacent to the Reservoir. Except for the facilities provided at Wawanesa, opportunities for berry picking, tenting and picnicking adjacent to the Assiniboine River are available primarily on private lands. The use of such opportunities is limited to landowners and their friends and acquaintances.¹⁰⁵

At Brandon, the Westbran Work Activity Project is undertaking to develop a wide variety of recreational facilities on city-owned property in the Assiniboine River Valley. Eventually, much of the Assiniboine River Valley within the City of Brandon will be developed for recreational purposes. The development of recreation facilities is a bi-product of the Westbran job-training program. Facilities developed and under development include tennis courts, trail systems, points of access for canoe launchings, picnic sites, and tenting areas. The Valley will be developed as an urban park.

¹⁰⁴ Culbert, Op. Cit.

¹⁰⁵ Interview with P.G. Marsden, Reeve, Rural Municipality of Cornwallis, August 11, 1975.

Interview with R.C. Fisher, Secretary-Treasurer, Rural Municipality of Oakland, August 12, 1975.

The City of Brandon administers Curran Park, located adjacent to the north bank of the Assiniboine River. Curran Park contains a swimming pool which appears to be heavily used. No admission charges are levied against pool users. In 1970, however, when admissions were charged, the pool regularly exceeded its capacity of 1,000 swimmers.

Admission is charged against visitors who enter Curran Park. To August 10, 6,975 daily passes, 1,436 seasonal passes, and approximately 2,900 camping permits had been issued in 1975. It was estimated that by August 10, 75,000 people were admitted to Curran Park in 1975. The City anticipates attendance for the entire 1975 season to surpass 100,000.¹⁰⁶ Although statistical support is lacking, it was felt that Curran Park was an especially important recreational outlet for lower income families who did not have the means to go to lakes.¹⁰⁷

BRANDON TO THE MANITOBA-SASKATCHEWAN BOUNDARY SEGMENT:

The Assiniboine River westward from Brandon lies more than two hours drive from Winnipeg. This third segment of the Assiniboine River has two Provincial Recreation Areas: Grand Valley and Asissippi Provincial Park. Both recreation areas have campground facilities, those at Grand Valley are used beyond capacity.

In 1970, approximately 4,500 day visitors used Grand Valley outdoor recreation facilities. An average of 45 day use visitors attended the area during its 100 day season. The average Sunday attendance was 50 individuals and the peak use day saw 130 day users attend Grand Valley.¹⁰⁸ No information on activities participated in by day use visitors at Grand Valley is available.

¹⁰⁶ Brown, Op. Cit.

¹⁰⁷ Ibid.

¹⁰⁸ CORDS, Op. Cit. p. 3

Asissippi Provincial Park was not open to the public in 1970. As a result, no survey information is available on day use activities at the Park. It appears, however, that Asissippi Provincial Park and the Lake of the Prairies attract considerable numbers of people from eastern Saskatchewan.¹⁰⁹ On lands adjacent to the Lake of the Prairies, camping, picnicking, boat launching and swimming facilities have been developed. Currently, cottage, trail and ski slope facilities are under development.

Downstream from Asissippi Provincial Park, little recreational use is made of the Assiniboine River itself. The River near Virden is used to provide canoe lessons. It also appears that each year a small group canoes down the Assiniboine River from Miniota to the bridge crossing of Provincial Road 259.¹¹⁰ Valley sides and wooded uplands adjacent to the Assiniboine River Valley have traditionally provided important hunting opportunities to local and regional populations.

Negotiations are being undertaken between private landowners, and the Manitoba Department of Agriculture and Tourism, Recreation and Cultural Affairs to bring the Fort Ellice site, south of the mouth of the Qu'Appelle River, under Crown ownership.¹¹¹

¹⁰⁹ Interview with W. Boughton, Director, Roblin and District Planning Commission, Roblin, August 21, 1975.

¹¹⁰ Interview with R.H. Davey, Director, Virden Recreation Commission, Virden, September 15, 1975.

¹¹¹ Interview with C. Cranston, Manitoba Department of Agriculture, Soils and Crops Branch, July 29, 1975.

APPENDIX II

.....
THE ASSINIBOINE RIVER

.....
USERS OF PUBLIC OUTDOOR RECREATION OPPORTUNITY

APPENDIX II

THE ASSINIBOINE RIVER: USERS OF PUBLIC OUTDOOR RECREATION OPPORTUNITY

1. A) NORQUAY BEACH PROVINCIAL RECREATION AREA¹

Forty miles from Winnipeg, 23% of users reside in Manitoba.
48.4% of Manitoba users reside in Metropolitan Winnipeg.

TABLE I INCOME ANALYSIS OF NORQUAY BEACH USERS.

Income	Percent of Manitoba Users Residing in Winnipeg	Number of Users Residing in Winnipeg
\$ 0 - \$ 3000	9.8%	91
\$ 3000 - \$ 5999	34.0%	317
\$ 6000 - \$ 7999	26.1%	243
\$ 8000 - \$ 9999	12.2%	114
\$10000 - \$ 14999	11.5%	107
> \$ 15000	6.5%	61
		933
Mean income of Manitoba Users:		\$ 7,172
Median Income of Manitoba Users:		\$ 6,480
Occupations of Winnipeg Users:		
Professional/Technical		28.1%
Crafts/Foremen		5.7%
Managers/Officials/Proprietors		15.1%
Clerical		10.6%
		59.5%

Over half of the Winnipeg users of Norquay Beach had not attended University. 28.3% of users had attended University, but 13% of users had not completed University.

¹ CORDS, Op. Cit. pp. 11-19.

B) ST. MALO PROVINCIAL RECREATION AREA²

Forty-two miles from Winnipeg, 90% of users reside in Manitoba. of this 90%, 82.9% live in Winnipeg.

TABLE II INCOME ANALYSIS OF ST. MALO USERS.

Income	Percent of Manitoba Users Residing in Winnipeg	Number of Users Residing in Winnipeg
\$ 0 - \$ 3000	6.8%	301
\$ 3000 - \$ 5999	30.4%	1345
\$ 6000 - \$ 7999	30.1%	1332
\$ 8000 - \$ 9999	15.2%	672
\$10000 - \$14999	13.8%	611
> \$15000	3.7%	164
		4425

Mean Income of Manitoba Users: \$ 7,318
 Median Income of Manitoba Users: \$ 6,851

Occupations of Winnipeg Users at St. Malo:

Professional/Technical	26.5%
Crafts/Foremen	14.7%
Managers/Official/Proprietors	6.9%
Clerical	4.6%

Of the users originating in Manitoba, 66.2% had not attended University and only 50% had either partially or completely finished a secondary school education. Those who had attended University amounted to 25.6% of users.

² Ibid., pp. 45-52.

C) ST. AMBROISE BEACH PROVINCIAL RECREATION AREA³

Fifty miles from Winnipeg, 95% of users originate in Manitoba. Of these 80.8% reside in Winnipeg.

TABLE III INCOME ANALYSIS OF ST. AMBROISE BEACH USERS.

Income	Percent of Manitoba Users Residing in Winnipeg	Number of Users Residing in Winnipeg
\$ 0 - \$ 3000	9.1%	112
\$ 3000 - \$ 5999	26.9%	332
\$ 6000 - \$ 7999	26.7%	329
\$ 8000 - \$ 9999	16.6%	205
\$10000 - \$14999	15.3%	189
> \$15000	5.4%	67
		1234
	Mean Income of Manitoba Users:	\$ 7,572
	Median Income of Manitoba Users:	\$ 7,049
Occupations of Winnipeg Users at St. Ambrose:		
	Professional/Technical	23.9%
	Crafts/Foremen	14.8%
	Managers/Officials/Proprietors	8.7%
	Clerical	7.0%

Of the 1,526 total number of campground visitors at St. Ambrose Provincial Recreation Area, 46% had at least some secondary education. 30.7% of users had attended University, while 19.7% of users had completed a University education.

³ Ibid., pp. 34-41.

D) SPRUCE WOODS PROVINCIAL PARK⁴

One hundred and twenty-two miles from Winnipeg, 67% of users originate in Manitoba, and of these 58.6% originate in Winnipeg.

TABLE IV INCOME ANALYSIS OF SPRUCE WOODS USERS.

Income	Percent of Manitoba Users Residing in Winnipeg	Number of Users Residing in Winnipeg
\$ 0 - \$ 3000	3.0%	33
\$ 3000 - \$ 5999	19.6%	210
\$ 6000 - \$ 7999	29.3%	313
\$ 8000 - \$ 9999	20.4%	218
\$10000 - \$14999	18.6%	199
> \$15000	9.1%	97
		1070

Mean Income of Manitoba Users: \$ 8,735
 Median Income of Manitoba Users: \$ 7,871

Occupations of Winnipeg Users at Spruce Woods:

Professional/Technical 33.4%
 Crafts/Foremen 20.1%
 Managers/Officials/Proprietors 8.5%
 Clerical 3.1%

Of the 1,825 party nights consumed by residents of Manitoba, 45.10% of users possessed at least some secondary education. 35.7% of Manitoba originating users possessed some level of University education.

⁴ Ibid., pp. 56-64.

E) GRAND VALLEY⁵

One hundred and thirty-eight miles from Winnipeg, 14% of users of campground facilities originated in Manitoba. Of these, 61.6% resided in Winnipeg.

TABLE V INCOME ANALYSIS OF GRAND VALLEY USERS.

Income	Percent of Manitoba Users Residing in Winnipeg	Number of Users Residing in Winnipeg
\$ 0 - \$ 3000	1.7%	4
\$ 3000 - \$ 5999	12.0%	28
\$ 6000 - \$ 7999	26.5%	61
\$ 8000 - \$ 9999	24.8%	57
\$10000 - \$14999	23.9%	55
> \$15000	11.1%	26
		231

Mean Income of Manitoba Users: \$ 9,585

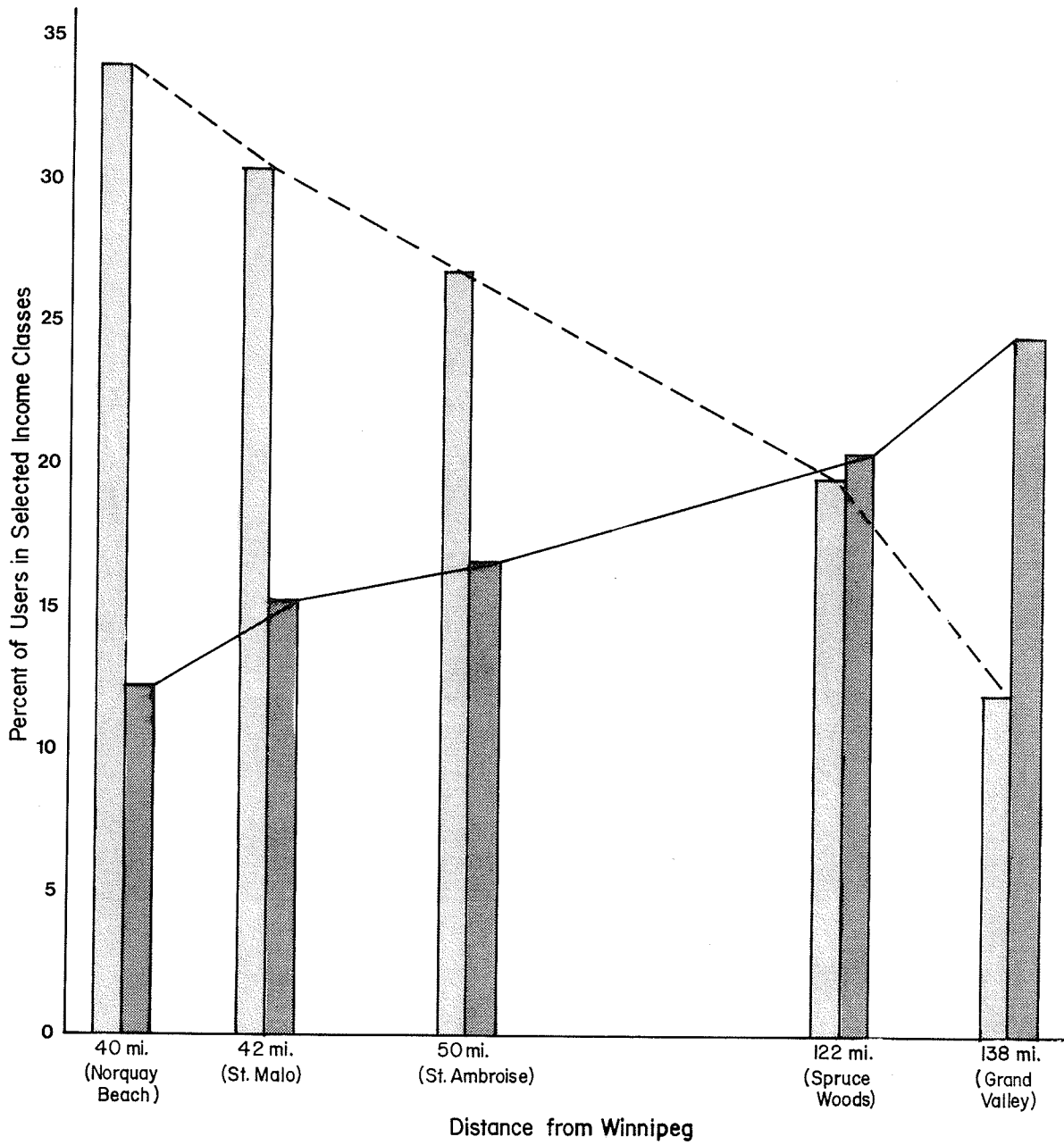
Median Income of Manitoba Users: \$ 8,793

Occupations of Winnipeg Users at Grand Valley:

Professional/Technical	32.4%
Crafts/Foremen	22.8%
Managers/Officials/Proprietors	10.5%
Clerical	7.9%

At Grand Valley 44.8% of Manitoba users had partially or completely finished a secondary education. 40.5% of users had attended University.

⁵ Ibid., pp. 2-9.



Income class of \$3,000-5,999
 Income class of \$8,000-9,999

The review of certain socio-economic attributes of users of Provincial campgrounds brings out a number of points regarding Winnipeg residents. First, as the distance between Winnipeg and campgrounds increases, the median incomes of users increases. Lower income users are progressively fewer at campgrounds more distant from Winnipeg. Three campgrounds - Norquay Beach, St. Malo and St. Ambroise - are located within an hour's drive of Winnipeg. At each, 69.9%, 67.3% and 62.7% of all campground users earned incomes of less than \$7,999 in 1970. Even within this proximity to Winnipeg, lower income use of Norquay Beach is greater than of more distant St. Malo and St. Ambroise. It would appear that where campgrounds are close to Winnipeg, some lower income users will make use of the facilities. By contrast, higher income users are more typical of the Spruce Woods and Grand Valley campgrounds. At Spruce Woods, 48.1% of all campers originating in Manitoba earned over \$8,000.

The occupations of campground users is closely related to educational and income levels. At Norquay Beach, over 10% of users were in "Clerical" occupations. A greater concentration than at any other campground studied. The "Professional/Technical" occupations were represented the least at Norquay Beach and the most at Spruce Woods and Grand Valley. Relating to income and occupational differences, education levels of users were highest at more distant campgrounds.

If ownership of camping equipment is considered, higher income residents of Winnipeg participate in campground experiences more heavily than do lower income residents. This same pattern of participation is typical for a wide range of outdoor activities. In 1971 a survey of Winnipeggers' participation in outdoor recreation⁶ facilities revealed that those earning less than \$6,000 appear as owners of recreation equipment only half as frequently as their occurrence in the population. "In the \$6,000 - \$9,999 income category the respondents show up as owners in proportions which are approximately equal to their percentage of the population. In the over \$10,000 a year bracket, the respondents are

⁶ Winnipeg Recreation and Travel Survey, Op.Cit.

much more frequently owners of recreational equipment, particularly those whose incomes exceed \$15,999 annually".⁷ The average income of the surveyed respondents, which represented a cross-section of the Winnipeg population, was \$7,200.

For comparative purposes, it is useful to compare the incomes of users of Provincial campgrounds with the distribution of income in Winnipeg. Care should, however, be used in comparisons. Income data used in this Practicum are derived from the Winnipeg Recreation and Travel Survey. Though the survey represented a cross-section of Winnipeg society, the survey's income data do not correspond to Statistics Canada data (Table VI). Nevertheless, the proportionate share of income by income groups in the Winnipeg Recreation and Travel Survey are reflected in the distribution of income revealed by Statistics Canada data.

TABLE VI DISTRIBUTION OF INCOME BY FAMILY, WINNIPEG, 1970⁸

Income Class	Number of Families	Percentage of Total Number of Families (rounded)
\$ 0 - \$ 3,000	10,395	8%
\$ 3,000 - \$ 5,999	20,975	15%
\$ 6,000 - \$ 7,999	22,145	17%
\$ 8,000 - \$ 9,999	24,755	18%
\$10,000 - \$14,999	36,510	29%
>\$15,000	17,750	13%
TOTALS	132,540	100%

⁷ Ibid., p. 52.

⁸ Census of Canada, Families: Incomes of Families, Family Heads and Non-Family Persons, Catalogue 93-724, Vol. II, Part 2, 1971, Table 85.

2. VISITORS TO WILDLIFE LANDS:

In the absence of data outlining the number of users of wildlife management areas, it is difficult to define the socio-economic characteristics of those users. Some data, however, has been collected on the number and characteristics of hunters. From 1965 to 1973 the total number of hunters in Manitoba who bought big game licenses increased from 30,130 to 55,659 and the number of hunters hunting in the Southwest sub-region of Department of Mines, Resources and Environmental Management's Western Region increased from 16,325 to 23,941.⁹

Certain socio-economic characteristics of Winnipeg hunters have been described in a survey of the outdoor recreation habits of Winnipeggers. Owners, (aged 18 years and over and living in Winnipeg) of hunting equipment tend to reside in any of six districts of Winnipeg - St. James-Assiniboia, Fort Garry, St. Vital, Transcona, Lord Selkirk and St. Johns Community Committee areas. Hunting equipment owned by persons living in Winnipeg's lower income core area is one of very few items - the others are tents, motorcycles and tent trailers - in which ratio of owners to population is greater than the City of Winnipeg as a whole.¹⁰

Over half(57.1%) of the owners of hunting equipment in 1970 earned less than \$9,999. With an average family income of \$7,200, one-fifth (20.3%) of owners of hunting equipment earned less than \$5,999. Fully 76.6% of the owners earned less than \$15,999 in 1970.¹¹

⁹ Wildlife Planning Task Force, Manitoba Department of Mines, Resources and Environmental Management, Draft of Manitoba Deer and Waterfowl Plans, 1972, p. 24.

¹⁰ Winnipeg Recreation and Travel Survey, Op. cit. p. 37.

¹¹ Ibid., p. 51. In 1970, 48.7% of the respondents to the Winnipeg Recreation and Travel Survey earned less than \$5,000 per year. This high percentage is reduced to 29.8% after students and housewives (18.5%) of the respondents are subtracted. Ibid. p. 7.

Ownership of hunting equipment does not of itself indicate the degree to which owners participate in hunting. The survey indicated that 56.9% of waterfowl hunters who hunted earned from \$6,000 to \$9,999 while another 15.4% of participating hunters earned from \$3,000 to \$5,999. Upland game and big game hunters predominantly (66.7%) earned from \$6,000 - \$9,999 while 10.7% earned from \$3,000 to \$5,999.¹²

The occupations of owners of hunting equipment further suggest that hunting is a middle income and to some extent a lower income recreational activity. One quarter (25.0%) of the owners were described in the survey as "blue collar" - Craftsmen-Foremen; 19.7% of owners fell into the "white-collar" - Clerical-Sales-Military classification; a further 15.1% of owners of hunting equipment were described as laborers.¹³ "Professional and Technical" and "Managers/Proprietors" together accounted for 22% of the owners of hunting equipment.¹⁴ It is also noteworthy that in 1970, 44.5% of the owners of hunting equipment fell in the 35 to 54 year age brackets. Owners aged 20 to 34 owned 35.5% of hunting equipment.¹⁵

Information on the socio-economic characteristics of non-consumptive users of wildlife is not available. If membership in the Manitoba Naturalist Society is any indication, it can only be said that the numbers of non-consumptive users is increasing.¹⁶

Wildlife lands are, however, being used by schools as suitable areas in which school children may learn a variety of experiences. In part, Crown lands designated as Wildlife Management Areas provide sites for field trips for geography and biology classes. More important, however, appears to be the use of Crown lands as areas in which children

¹² Ibid., p. 28.

¹³ Ibid. p. 55.

¹⁴ Ibid.

¹⁵ Ibid. p. 45. Hunting equipment owners aged 35 to 54 comprised 37.0% of Winnipeg's population in 1970. Owners aged 20 to 34 comprised 33.0% of Winnipeg's population.

¹⁶ Draft of Manitoba Deer and Waterfowl Plans, Op. Cit. p. 104. Also D.L. Allen, "The future of Wildlife Resources", Journal of Soil and Water Conservation, (Nov.-Dec., 1972, Vol. 27, No. 6), p. 245. Allen notes that in the United States the demand for hunting is increasing more slowly than in the past and appears to be about to level off.

are taught some of the rudiments of living in and appreciating an outdoor, natural environment.¹⁷ "Orienteering" programs developed at individual schools but sponsored by the Manitoba Department of Education, teach basics in canoeing and boating, teach various techniques of surviving in a natural environment, and encourage study of plant, water and wildlife relationships which may serve to further an awareness of man and his environment. "Orienteering" programs represent a new departure for the Department of Education and the programs appear to be immensely popular with children.

Wildlife lands known to be used frequently for such programs include Oak Hammock Marsh, Mantagao, Souris Bend and the Lauder Sandhills Wildlife Management Areas. In the autumn of 1975, the Lauder Sandhills Wildlife Management Area provided the locale for the Provincial championships of survival courses conducted under the "Orienteering" program. Over one thousand students from across the Province attended.¹⁸ If the Department of Education's outdoor education programs are as successful as they appear to be, they offer profound implications for future outdoor recreation policies and programs.¹⁹

¹⁷ Interview with L.J. Bidlake, Regional Biologist, Western Region, Manitoba Department of Mines, Resources and Environmental Management, November 17, 1975.

¹⁸ Ibid.

¹⁹ B.L. Driver and S. Ross Tacher, in describing implications of psychology on recreation activities, noted that "prior learning determines the relative attractiveness of the perceived value of the activity." B.L. Driver and S. Ross Tacher, "Towards a Behavioral Interpretation of Recreational Engagements, with Implications for Planning," in P.R. Fischer et.al., (ed.), Land and Leisure: Concepts and Methods in Outdoor Recreation. Chicago, Maaroufa Press, 1974, p. 98. Peter Murphy and Lorne Rosenblood discovered that in a study of first-time tourists to the City of Vancouver and to Vancouver Island, "...search pattern is closely related to their prior mental image and motivations." Although Murphy and Rosenblood examined a small sample of first-time tourists, they concluded that "there is sufficient correspondence between these [the study's] results and the cognitive theories of learning to suggest that an individual's motivations and inter-trial learning do influence the spatial search process." Peter E. Murphy and Lorne Rosenblood, "Tourism: An Exercise in Spatial Search," The Canadian Geographer (Autumn, 1974, Vol. 18, No. 3), pp. 208-209.

Outdoor education programs offered by the Manitoba Association of Foresters suggest also that the perceived educational value of outdoor experiences is increasing. The Association operates an educational facility in the Sandilands Provincial Forest. The purpose of the Association's program is specifically to increase awareness of man and his natural environment. Open only during the summer, the facility is available to organized groups of school children and adults. Since the Association adopted the program in 1957, over 9,000 students and adults have visited the centre each year. The Secretary of the Association indicated that the number of visitors is limited only because the facility operates through volunteer labour.²⁰

²⁰ Interview with Allan Bevin, Manager, Manitoba Forestry Association, November, 1965.

3. TREND PROJECTIONS OF USE

One technique of estimating future use of recreation areas is to analyze past use to define certain trends. Once defined, trends may be extrapolated from the past and be used to estimate future use. Trend analysis assumes that characteristics that established past trends will be present in the future to continue the same trends. Because of this assumption, trend analysis should be used to project use only into the immediate future. Trends in recreation use have traditionally been based upon the factors of income, mobility, leisure time available, and population. Other unperceived factors may affect trends in use, for example, the manner in which a particular activity or recreation area is perceived. Trend analysis is most useful where use has increased (or decreased) at a fairly constant rate. As such, then, trend analysis is a useful tool for projecting use into the immediate future, or until about 1980.²¹

Limitations to data on the use of recreation areas in Manitoba are such that trend analysis may, under the circumstances, provide the most reliable indication of future use of Manitoba's recreation areas. Data appropriate for trend analysis is available on vehicle attendance at recreation areas, sales of campground permits, and campground unit-day sales. Only with vehicle attendance are records of sufficient duration (8 years) to define a reliable trend. Campground permit sales data are available for years since 1969, but unit-day sales data is available only since 1971.

²¹ Marion Clawson and Jack L. Knetsch, Economics of Outdoor Recreation. Baltimore, Johns Hopkins Press, 1966, p. 121.

TREND PROJECTIONS, 1975 - 1980

TABLE VII WESTERN REGION: VEHICLE ATTENDANCE

Vehicle attendance projection based on an average annual rate of increase of 15.1%, as computed from Appendix I, Table I.

Projection from 1974 base of 233,957 vehicles.

1975	+35,328	=	269,285
1976	+40,662	=	309,947
1977	+46,802	=	356,749
1978	+53,869	=	410,618
1979	+62,003	=	472,621
1980	+71,366	=	543,987

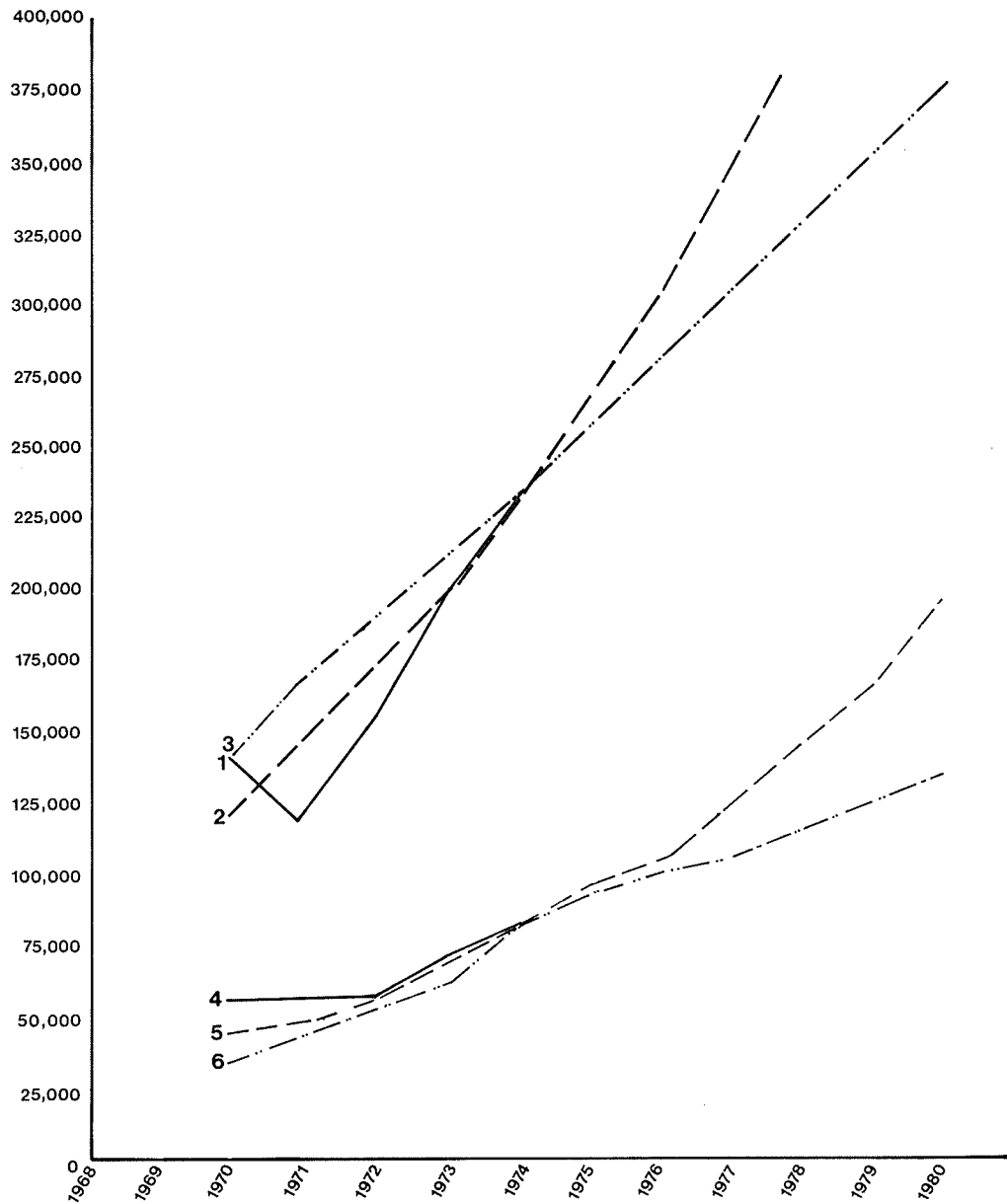
WESTERN REGION: VEHICLE ATTENDANCE

Vehicle attendance projection based on average annual increase of 23,419 vehicles, as computed from Appendix I, Table I.

Projection from 1974 base of 233,957

1975	257,376
1976	280,795
1977	304,214
1978	327,633
1979	351,419
1980	374,471

Western Region Trend Projection of Vehicle Attendance



- 1 Actual vehicle attendance, Western Region, 1970-1974
- 2 Proportion of vehicles entries, 1974-1980, based on average annual growth of 15.1%
- 3 Proportion of vehicle entries, 1974-1980, based on average annual growth of 23,419 vehicle entries
- 4 Actual vehicle attendance, Assiniboine Recreation Areas, 1970-1974
- 5 Projected at 15.3%
- 6 Projected at 9,218 vehicle increase per annum

TREND PROJECTIONS, 1975 - 1980

TABLE VIII ASSINIBOINE RIVER RECREATION AREAS: VEHICLE ATTENDANCE

Vehicle attendance projection based on an average annual rate of increase of 15.3%, as computed from Appendix I, Table I.

Projection from 1974 base of 81,709 vehicles.

1975	+12,501	=	94,210
1976	+14,414	=	108,624
1977	+16,619	=	125,243
1978	+19,162	=	144,405
1979	+22,094	=	166,499
1980	+25,474	=	191,974

ASSINIBOINE RIVER RECREATION AREAS: VEHICLE ATTENDANCE

Vehicle attendance projection based on average annual increase of 9,218 vehicles, as computed from Appendix I, Table I.

Projection from 1974 base of 81,709 vehicles.

1975	90,927
1976	100,145
1977	109,363
1978	118,581
1979	127,799
1980	137,017

TREND PROJECTIONS, 1975 - 1980

TABLE IX WESTERN REGION: PROJECTION OF CAMPGROUND PERMIT SALES

Projection of campground permit sales based on five-year (1969-1974) average annual rate of increase of 17.9%, as computed from Appendix I, Table III.

Projection from 1974 base of 34,504 campground permit sales.

1975	+ 6,176	=	40,680
1976	+ 7,282	=	47,962
1977	+ 8,585	=	56,547
1978	+10,122	=	66,669
1979	+11,934	=	78,603
1980	+14,070	=	92,673

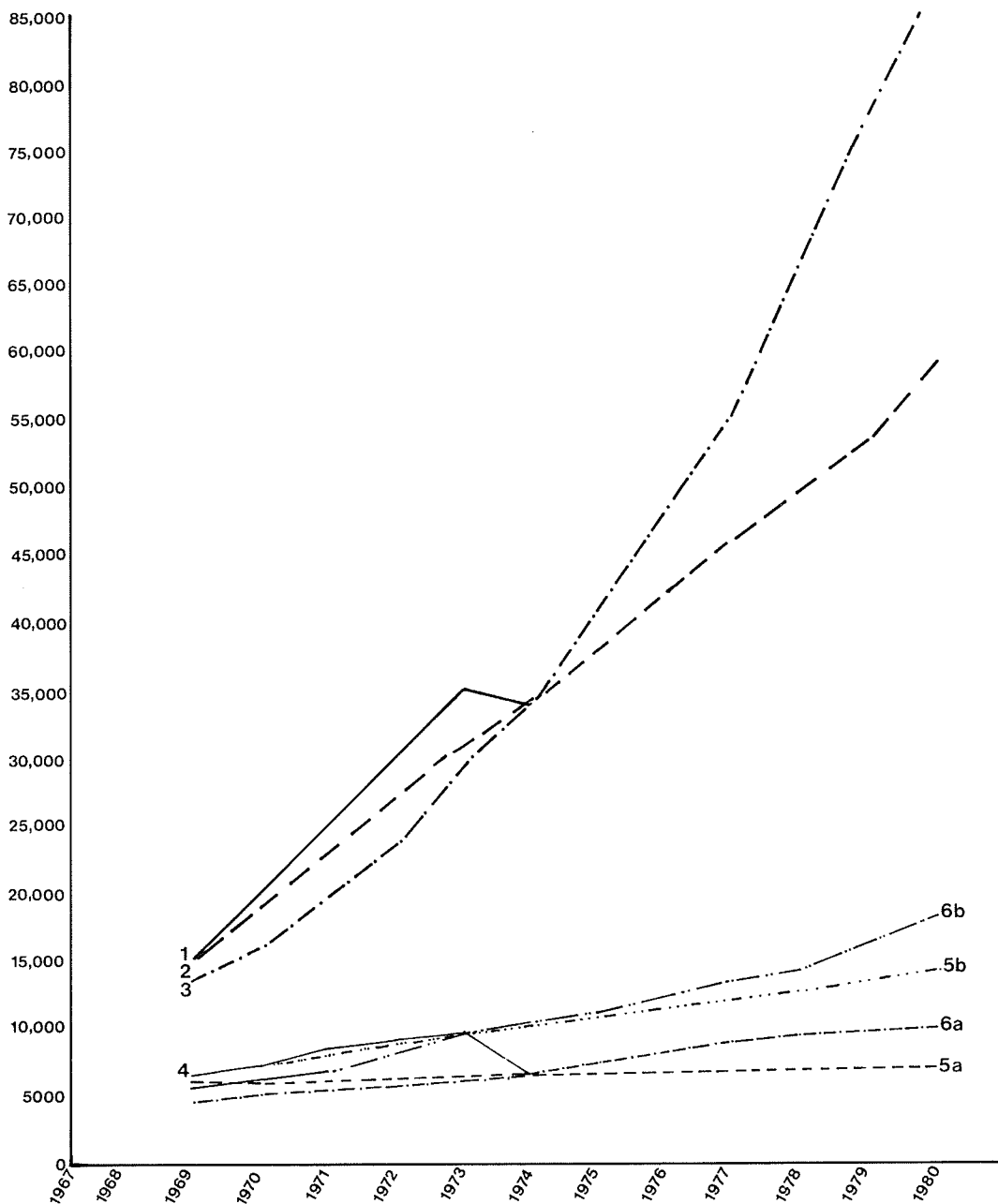
WESTERN REGION: PROJECTION OF CAMPGROUND PERMIT SALES

Projection of campground permit sales based on five-year (1969-1974) average annual increase of 3,874 permit sales from Appendix I, Table I.

Projection from 1974 base of 34,504

1975	38,378
1976	42,252
1977	46,126
1978	50,000
1979	53,874
1980	57,748

Western Region Trend Projection of Campground Permit Sales



- 1 Actual use, 1969-1974
- 2 Projected use, 1975-1980, basis of increase of 3874 permits per annum
- 3 Projected use, 1975-1980, basis of increase of 17.9% per annum
- 4 Norquay Beach, actual permit sales, 1969-1974
- 5a Increase at 157 permits per annum - 1969-1974
- 5b Increase at 668 permits per annum - 1969-1973
- 6a Increase at 3.8% per annum - 1969-1974
- 6b Increase at 9.9% per annum - 1969-1973

TREND PROJECTIONS, 1975 - 1980

TABLE X NORQUAY BEACH: PROJECTION OF CAMPGROUND PERMIT SALES

Projections of campground permit sales based on five-year (1969-1974) and four-year (1969-1973) average annual rates of increase of 3.8% and 9.9% respectively, as computed from Appendix I, Table X.

Five-year projection from 1974 base of 7,223

1975	+	274	=	7,497
1976	+	285	=	7,782
1977	+	296	=	8,076
1978	+	307	=	8,393
1979	+	319	=	8,712
1980	+	331	=	9,043

Four-year projection from 1973 base of 9,107

1974	+	902	=	10,009
1975	+	991	=	11,000
1976	+	1089	=	12,089
1977	+	1197	=	13,256
1978	+	1315	=	14,571
1979	+	1443	=	16,014
1980	+	1585	=	17,599

NORQUAY BEACH: PROJECTION OF CAMPGROUND PERMIT SALES

Projections of campground permit sales based on five-year (1969-1974) and four-year (1969-1973) average annual increases of 157 vehicles and 668 vehicles, respectively, as computed from Appendix I, Table X.

Five-year projection from 1974 base of 7,223

1975		7,380
1976		7,537
1977		7,694
1978		7,851
1979		8,008
1980		8,165

Four-year projection from 1973 base of 9,107

1974		9,775
1975		10,443
1976		11,111
1977		11,779
1978		12,447
1979		13,115
1980		13,783

TREND PROJECTIONS, 1975 - 1980

TABLE XI KICHE MANITOU: PROJECTION OF CAMPGROUND PERMIT SALES

Projection of campground permit sales based on the five-year period (1970-1974) at an average annual rate of increase of 27.6%, as computed from Appendix I, Table XVIX

Projection from 1974 base of 4,632 campground permit sales

1975	+	1278	=	5,910
1976	+	1631	=	7,541
1977	+	2081	=	9,622
1978	+	2656	=	12,278
1979	+	3389	=	15,667
1980	+	4324	=	19,991

KICHE MANITOU: PROJECTION OF CAMPGROUND PERMIT SALES

Projection of campground permit sales based on five-year period (1970-1974) at an average annual increase of 658 permit sales, as computed from Appendix I, Table XVIX.

Projection from 1974 base of 4,632 campground permit sales.

1975	5,290
1976	5,948
1977	6,606
1978	7,264
1979	7,922
1980	8,580

TREND PROJECTIONS, 1975 - 1980

TABLE XII GRAND VALLEY: PROJECTION OF CAMPGROUND PERMIT SALES

Projection of campground permit sales based on the six-year period (1969-1974) at an average annual rate of increase of 3.6%, as computed from Appendix I, Table XXVIII.

Projection from 1974 base of 4,325 campground permit sales

1975	+	156	=	4,481
1976	+	161	=	4,642
1977	+	167	=	4,809
1978	+	173	=	4,982
1979	+	179	=	5,161
1980	+	186	=	5,347

GRAND VALLEY: PROJECTION OF CAMPGROUND PERMIT SALES

Projection of campground permit sales based on the six-year period (1969-1974) at an average annual increase of 138 campground permit sales, as computed from Appendix I, Table XXVIII.

Projection from 1974 base of 4,325 campground permit sales.

1975	4,463
1976	4,601
1977	4,739
1978	4,877
1979	5,015
1980	5,153

TREND PROJECTIONS, 1975 - 1980

TABLE XIII WESTERN REGION: PROJECTION OF UNIT-DAY SALES

Projection of unit-day sales based on the four-year period 1971-1974 at an average annual rate of increase of 15.0%, as computed from Appendix I, Table V.

Projection from 1974 base of 68,594 unit-day sales.

1975	+10,289	=	78,883
1976	+11,832	=	90,715
1977	+13,607	=	104,322
1978	+15,648	=	119,970
1979	+17,996	=	137,966
1980	+20,695	=	158,661

WESTERN REGION: PROJECTION OF UNIT-DAY SALES

Projection of unit-day sales based on the four-year period 1971-1974 at an average annual increase of 3,566 unit-day sales as computed from Appendix I, Table V.

Projection from 1974 base of 68,594 unit-day sales.

1975	72,160
1976	75,726
1977	79,292
1978	82,858
1979	86,424
1980	89,990

TREND PROJECTIONS, 1975 - 1980

TABLE XIV KICHE MANITOU, SPRUCE WOODS PROVINCIAL RECREATION AREA:
PROJECTION OF UNIT-DAY SALES

Projection of unit-day sales based on the four-year period 1971-1974 at an average annual rate of increase of 22.1%, as computed from Appendix I, Table XXII.

Projection from 1974 base of 7,726 unit-day sales

1975	+ 1,707	=	9,433
1976	+ 2,085	=	11,518
1977	+ 2,545	=	14,063
1978	+ 3,108	=	17,171
1979	+ 3,795	=	20,966
1980	+ 4,633	=	25,599

KICHE MANITOU, SPRUCE WOODS PROVINCIAL RECREATION AREA:
PROJECTION OF UNIT-DAY SALES

Projection of unit-day sales based on the four-year period 1971 - 1974 at an average annual increase of 1,001 unit-days, as computed from Appendix I, Table XXII.

Projection from 1974 base of 7,726 unit-day sales.

1975	8,727
1976	9,728
1977	10,729
1978	11,730
1979	12,731
1980	13,732

TREND PROJECTIONS, 1975 - 1980

TABLE XV GRAND VALLEY: PROJECTION OF UNIT-DAY SALES.

Projection of unit-day sales based on the four-year period 1971 - 1974 at an average annual rate of increase of 3.5%, as computed from Appendix I, Table XXX.

Projection from 1974 base of 4,564 unit-day sales.

1975	+160	=	4,724
1976	+165	=	4,889
1977	+171	=	5,060
1978	+177	=	5,237
1979	+183	=	5,420
1980	+190	=	5,610

GRAND VALLEY: PROJECTION OF UNIT-DAY SALES

Projection of unit-day sales based on the four-year period 1971 - 1974 at an average annual increase of 146 unit-days, as computed from Appendix I, Table XXX.

Projection from 1974 base of 4,564 unit-day sales.

1975	4,756
1976	4,902
1977	5,048
1978	5,194
1979	5,340
1980	5,486

4. USERS OF URBAN OUTDOOR RECREATION OPPORTUNITIES (WINNIPEG)

A) USERS OF PARKS:

Although information on traffic counts entering Assiniboine, Crescent Drive, Kildonan, La Barriere, and St. Vital Parks is available, little survey information on the use of the major Winnipeg Parks is available. One informal survey of the users of Assiniboine Park was conducted during 1970-1971 and does provide some tentative information on the characteristics of the users of major park lands.

On the basis of the survey, it was discovered that 88.5% of June visitors, 87.8% of the August, and 90.2% of February visitors drove to Assiniboine Park²² Given the location of other major parks in Winnipeg, it can be assumed that the automobile would carry similar (90%) or higher percentages of users to those parks.

Approximately one-third (33.9% and 33.2%) of visitors to Assiniboine Park in June and August earn incomes ranging from \$6,000 to \$9,999. Less than 10% of the users earned incomes less than \$3,000 and from 13.5% to 18.9% of visitors in June and February earned incomes ranging from \$3,000 to \$5,999. Almost a fifth of the users of the Park in June (19.2% and February (18.7%) earned incomes ranging from \$10,000 to \$14,999. The survey pointed out that over half of all visitors to Assiniboine Park earned family incomes in excess of \$6,000.²³

The survey also determined that a very small percentage of users arrived alone. At Assiniboine Park, only 5.9% of June visitors, 3.6% of August users, and 5.2% of February visitors arrived alone. Couples, families with children and groups of friends accounted for more than 75% of all users of Assiniboine Park. At Assiniboine Park, it was

²² Church, August Survey, Op. Cit. n.p.

²³ Ibid. In their study of six State parks in and near the City of Seattle, Washington, Ben Twight and Wm. Catton noted that all parks attracted middle and upper income persons in excess of their proportion in the normal population. See Ben W. Twight and Wm. R. Catton, Jr., "The Politics of Images: Forest Managers and Recreation Publics," Natural Resources Journal, (April 1975, Vol. 15, No. 2). p. 303.

revealed that 34.1% of June visitors had at least partially completed University, while 27.6% of users had completed a secondary school education. The education levels of February visitors was not noticeably different. In view of the educational background of the users, it is not surprising to find that 23.7% of June visitors and 20.3% of February visitors were classed in "Professional" occupations. Persons classed as "Manager/Proprietor/Sales/Military" comprised 14.9% of total June visits and 19.6% of total February visits. Craftsmen accounted for 21% of June visits and 16.6% of February visits. From 48% to 50% of all users of Assiniboine Park were between the ages of 20 and 39 years of age. Approximately 25% of all visitors were between 40 and 59 years of age. Those over 60 years of age accounted for between 10 and 15% of Assiniboine Park visitors.²⁴

Assiniboine Park is most heavily used by people living within four miles of the Park. In June 63.3%, and in February 66.9% of users lived within four miles of the Park. Visitors living within three miles of the Park accounted for 38.2% of August visitors, 41.9% of June visitors and nearly half (49.2%) of February visitors.²⁵ Assuming that the travel-distance relationship evident at Assiniboine Park is valid for other major parklands in the City of Winnipeg, it becomes apparent that suburban Winnipeg is well supplied with parkland and that the core population comprised of the Centennial, St. Johns and Lord Selkirk Community Committee Areas - makes little use of major suburban parklands.

B) USE OF MUNICIPAL GOLF COURSES:

In 1970, approximately 62,900 persons in Winnipeg owned golf clubs and a further 16,700 persons had access to the use of golf clubs. For the population of the Winnipeg region, approximately 14.69% were able to golf; approximately 18.2% of Winnipeggers over the age of 18

²⁴ Church, August Survey, Op. Cit. n.p.

²⁵ Ibid. A 1969 survey of park users in Winnipeg appears to substantiate Church's survey results. See Metropolitan Winnipeg Park Systems and Standards Study: Appendix II, p. 94.

owned or had access to golf clubs and can be considered as having the ability if not the inclination or willingness to golf.

Approximately two-thirds (66.8%) of golf equipment owners and users in 1970 were in the 20 to 54 year age brackets. A further 14.3% of owners and users were under 17 years of age, but only 8.1% of golfers owning golf equipment were under 17 years of age. Over 70% (71.3%) of owners of golf equipment were in the 20 to 54 year age brackets.²⁶

In 1970, when the average family income for male Winnipeggers over 18 years of age was \$7,200, the average income of the male owners of golf clubs was \$9,000. 34.5% of the owners (18 years and older) of golf clubs earned from \$6,000 to \$9,999 and a further 15% earned from \$10,000 to \$15,999. Nevertheless, 18.6% of the owners of golf equipment earned less than \$6,000. Many of this income class who owned golf clubs appear to have been students. 12.4% of the owners of golf clubs were classed as students.²⁷ Male labourers, service workers, and retirees owned respectively 5.3%, 1.8% and 2.6% of golf equipment. Professional/Technical/Manager/Proprietor, and the White Collar/Clerical/Sales/Military occupation classes owned 62.8% of the golf equipment.

The geographic distribution of the owners of golf equipment is extremely pronounced. St. James-Assiniboia and Fort Rouge Community Committee Areas respectively contribute 21.4% and 17.1% of the owners of golf equipment; 38.5% of the owners of golf equipment live in two different parts of Winnipeg. Assiniboine Park Community Committee Area ranks third as the residence of golf equipment owners with 9.1%. Winnipeg's core Community Committee Areas of Centennial, St. Johns, and Lord Selkirk are home to few golfers. Respectively, only 1.7%, 2.0% and 4.8% of golf equipment owners live in the three areas.²⁸

²⁶ Winnipeg Recreation and Travel Survey, Op. Cit., p. 49.

²⁷ Ibid., p. 55

²⁸ Ibid., p. 57.

SELECTED BIBLIOGRAPHY

1. Allen, Durward L. "The Future of Wildlife Resources," Journal of Soil and Water Conservation 27 (November-December 1972):244-249.
2. Alterman, Rachel. "The Intervention of Values in the Planning Process". M.A. Thesis, University of Manitoba, 1970.
3. Bossenmaier, E.F. and Vogel, C.G., Wildlife and Wildlife Habitat in the Winnipeg Region. Winnipeg: Resource Planning, Manitoba Department of Mines, Resources and Environmental Management, (1974).
4. Brandon, City of, Ten Year Master Plan for Recreation Resource Development, (1975).
5. Brinser, Ayers, Recreation: An Analysis of Objectives, ed. P. Nickel and M. Wallace. Winnipeg, Natural Resource Institute, 1974.
6. Canada. Department of Industry, Trade and Commerce, Travel, Tourism and Outdoor Recreation: 1973-1974. Ottawa, Information Canada, 1975.
7. _____ . Department of Indian Affairs and Northern Development, National and Historic Parks Branch, Canadian Participation in Outdoor Recreation. Ottawa, Queens Printer, 1970.
8. _____ .Department of Regional Economic Expansion and Manitoba Department of Mines, Resources and Environmental Management, Canada Land Inventory, Resource Capability Map Series.
9. Charron, J.E. Groundwater Resources of Fannystelle Area, Manitoba. Ottawa: Canada Department of Mines and Technical Surveys, Geological Survey of Canada, Bulletin 98, (1964).
10. _____ . Groundwater Resources of Winnipeg Area, Manitoba. Ottawa: Canada Department of Mines and Technical Surveys, Geological Survey of Canada, Paper 64-23, (1965).
11. Church, Glenn R. "Assiniboine Park Winter Survey." report to City of Winnipeg, Parks and Protection Division, 1971. (typewritten).
12. _____ . "Initial Analysis of August Survey of Assiniboine Park Visitors." report to City of Winnipeg, Parks and Protection Division, 1971. (typewritten).

13. Clawson, Marion. "Conflicts and Strategies in Forest Land Management." Journal of Soil and Water Conservation 30 (March-April 1975):63-67.
14. Clawson, Marion and Knetsch, Jack L. Economics of Outdoor Recreation. Baltimore: Johns Hopkins Press, 1966.
15. _____. "Outdoor Recreation Research: Some Concepts and Suggested Areas of Study." Natural Resources Journal 3 (October 1963): 250-275.
16. Davis, Robert K. "Recreation Planning as an Economic Problem." Natural Resources Journal 3. (October 1963):239-249.
17. Driver, B.L., and Tacher, S. Ross. "Towards a Behavioral Interpretation of Recreational Engagements, with Implications for Planning," ed. D.R. Fischer, J.E. Lewis and G.B. Priddle, Land and Leisure: Concepts and Methods in Outdoor Recreation. Chicago: Maaroufa Press, 1974:91-111.
18. Echelberger, Herbert E., Deiss, Daniel H., and Morrison, Douglas. "Overuse of Unique Recreation Areas. A look at the Social Problems." Journal of Soil and Water Conservation 29 (July-August 1974):173-176.
19. Erlich, W.A., Poyser, E.A., and Pratt, L.E. Report of Reconnaissance Soil Survey of Carberry Mapsheet Area. Canada Department of Agriculture and Manitoba Department of Agriculture and Immigration, Manitoba Soil Survey, Soils Report No. 7 (1957).
20. Erlich, W.A., Poyser, E.A., Pratt, L.E., and Edis, J.H. Report of Reconnaissance Soil Survey of Winnipeg and Morris Mapsheet Areas. Canada Department of Agriculture and Manitoba Department of Agriculture, Manitoba Soil Survey, Soils Report No. 5, (1953).
21. Erlich, W.A., Pratt, L.E., and Leclaire, F.P. Report of Reconnaissance Soil Survey of Grandview Mapsheet Area. Canada Department of Agriculture and Manitoba Department of Agriculture and Conservation, Manitoba Soil Survey, Soils Report No. 9, (1959).
22. Erlich, W.A., Pratt, L.E., and Poyser, E.A. Report of Reconnaissance Soil Survey of Rossburn and Virden Mapsheet Areas. Canada Department of Agriculture and Manitoba Department of Agriculture, Manitoba Soil Survey, Soils Report No. 6, (1956).
23. Fischer, D.R., Lewis, J.E., and Priddle, G.B. ed. Land and Leisure: Concepts and Methods in Outdoor Recreation. Chicago: Maaroufa Press, 1974.
24. Fisher, Anthony C. and Krutilla, John V. "Determination of Optimal Capacity of Resource-Based Recreation Facilities." Natural Resources Journal 12 (July 1972):417-444.

25. Gad, Gunter. "'Crowding' and 'Pathologies': Some Critical Remarks." The Canadian Geographer 17 (Winter 1973):373-390.
26. Gans, Herbert J. "Outdoor Recreation and Mental Health." ed. P.R. Fischer, J.E. Lewis and G.B. Priddle; Land and Leisure: Concepts and Methods in Outdoor Recreation. Chicago: Maaroufu Press, 1974:15-24.
27. Godschalk, David R. and Parker, Francis H. "Carrying Capacity: A Key to Environmental Planning." Journal of Soil and Water Conservation 30 (July-August 1975):160-165.
28. Good, Trent L. "A Planning Analysis of Outdoor Recreation in the Winnipeg Region." M.A. Thesis, University of Manitoba, 1970.
29. Guggenheim, Elinor C. Planning for Parks and Recreation Needs in Urban Areas. New York: Twayne Publishers, Inc., 1969.
30. Halstead, E.C. Ground-Water Resources of the Brandon Map-Area, Manitoba. Ottawa: Canada Department of Mines and Technical Surveys, Geological Survey of Canada, Memoir 300, (1959).
31. Hendee, John C. and Burdge, Rabel J. "The Substitutability Concept: Implications for Recreation Research and Management." Journal of Leisure Research 6 (Spring 1974):157-162.
32. Kaplan, Max. Leisure: Theory and Policy. New York: John Wiley and Sons, 1975.
33. Kirsh, Carol; Dixon, Brian; and Bond, Michael. A Leisure Study: Canada 1972. Ottawa: Canada Department of the Secretary of State, 1973.
34. Krutilla, John V. "Conservation Reconsidered." American Economic Review. Reprint 67 (September 1967):777-786.
35. LaPage, W.F., and Ragain, D.P. "Family Camping Trends - An Eight Year Panel Study." Journal of Leisure Research 6 (Spring 1974): 101-112.
36. Larche, Ronald A. "Wildlife Lands Recommended for Acquisition Under Resources For Tomorrow Program. "Winnipeg: Manitoba Department of Mines, Resources and Environmental Management, Resources Planning, 1973. (typewritten).
37. Leitch, Donald A. "The Environmental Impact and Regulation of Recreational All-Terrain Vehicles in Manitoba." MNRM Practicum, University of Manitoba, 1975.
38. LaRoi, George H. and Babb, Thomas A., ed. Canadian National Directory of IBP Areas, 1968-1974. Edmonton: University of Alberta Printing Services, 1974.

39. Lindsay, John J. and Ogle, Richard A. "Socio-Economic Patterns of Outdoor Recreation Use Near Urban Areas." Journal of Leisure Research 4 (Winter 1972):19-24.
40. Manitoba Crop Insurance Corporation. "Province of Manitoba Crop Insurance Risk Areas." 1975 (Mimeographed).
41. Manitoba, Department of Agriculture and Conservation. "Productivity Indices and Soil Capability Ratings for Manitoba Soils." Manitoba Agricultural Land Inventory Manual. Winnipeg: Manitoba Department of Agriculture and Conservation, Soils and Crops Branch, 1965.
42. Manitoba Department of Municipal Affairs, Municipal Planning Branch. Planning Scheme for the Rural Municipality of St. Francois-Xavier, 1973.
43. _____. The Cypress District Planning Scheme, 1971.
44. _____. Planning Scheme for the Rural Municipality of Cartier, 1966.
45. Manitoba, Department of Tourism, Recreation and Cultural Affairs. Research and Planning Branch. Manitoba Park Statistics: 1972. Report No. 125, 1973.
46. _____. Manitoba Park Statistics: 1973. Report No. 151, 1974.
47. _____. Manitoba Park Statistics: 1974. Report No. 166, 1975.
48. _____. 1974 Traffic Attendance in Campgrounds, Provincial Parks and Recreation Areas, 1975.
49. _____. The Winnipeg Recreation and Travel Survey, 1972. (mimeographed).
50. Mattyazovsky, E. "Recreation Area Planning: Some Physical and Ecological Requirements," ed. D.R. Fischer, J.E. Lewis and G.B. Priddle, Land and Leisure: Concepts and Methods of Outdoor Recreation. Chicago: Maaroufa Press, 1974: 221-236.
51. McAllister, Donald M. "Planning and Urban Recreation System: A Systematic Approach," Natural Resources Journal 15 (July 1975): 567-580.
52. Medd, Ken. "An Investigation of Easements." Winnipeg: Planning and Priorities Committee of Cabinet, Manitoba, 1975.
53. Murphy, Peter E. and Rosenblood, Lorne, "Tourism: An Exercise in Spatial Search." The Canadian Geographer 17 (Autumn 1974): 201-209.
54. The National Soil Survey Committee of Canada and Canada Land Inventory, ARDA. "Outline of the Canadian Soil Capability Classification for Agriculture." 1965. (typewritten).

55. Noe, Francis P. "The Political and Social Ideology of the Leisure Class." Journal of Leisure Research 5 (Summer 1973):49-59.
56. O'Rourke, Barry. "Travel in the Recreational Experience - A Literature Review." Journal of Leisure Research 6 (Spring 1974): 140-156.
57. Problem Research Ltd. Metropolitan Winnipeg Park System and Standards Study, 1969.
58. RPC, Ltd. An Historic and Present Land Use and Open Space Inventory of the Winnipeg Region, prepared for the Winnipeg Region Study group, Manitoba Department of Municipal Affairs. 1975.
59. Schellenberg, Herbert D. "Identification, Measurement and Incorporation of Environmental Quality Objectives in Natural Resources Development." Ph.D. dissertation, Iowa State University, 1973.
60. Schellenberg, Herbert D.; Oetting, Robert; and Schmidt, Ray. "A Recommended Program for Management of Privately Owned Land Resources in Manitoba." Manitoba Department of Mines, Resources and Environmental Management, Resource Projects, 1974. (type-written).
61. Schiff, Ashley L. "Outdoor Recreation Values in the Public Decision Process," ed. Dennis L. Thompson, Politics, Policy and Natural Resources. New York: The Free Press, 1972: 227-241.
62. Slavson, S.R. Recreation and the Total Personality. New York: Associated Press, 1948.
63. Sofranko, Andrew J. and Nolan, Michael F. "Early-Life Experiences and Adult Sports Participation." Journal of Leisure Research 4 (Winter 1972):6-18.
64. Statistics Canada. 1971 Census of Canada - Families: Incomes of Families, Family Heads and Non-Family Persons. Catalogue 93-724, Vol. II, Part 2.
65. Taylor, Gordon D. and Thomson, C.W. "Proposed Methodology for an Inventory and Classification of Land for Recreational Use," ed. D.R. Fischer, J.E. Lewis and G.B. Priddle, Land and Leisure: Concepts and Methods in Outdoor Recreation. Chicago: Maaroufa Press, 1974:258-265.
66. Thompson, Bryan, "Recreational Travel: A Review and Pilot Study," ed. D.R. Fisher, J.E. Lewis and G.B. Priddle, Land and Leisure: Concepts and Methods in Outdoor Recreation. Chicago: Maaroufa Press, 1974:47-59.
67. Twight, Ben W. and Catton, William R. Jr. "The Politics of Images: Forest Managers vs. Recreation Publics." Natural Resources Journal 15 (April 1975):297-306.

68. Wennergren, E. Boyd and Fullerton, Herbert H. "Estimating Quality and Location Values of Recreation Resources." Journal of Leisure Research 4 (Summer 1972):170-183.
69. Wildlife Planning Task Force. "Draft of Manitoba Deer and Waterfowl Plans." Winnipeg, Manitoba Department of Mines, Resources and Environmental Management, Resources Planning, 1972.
70. Winnipeg; City of. [Untitled statistical sheet on the use of Parks] Parks and Protection Division, 1969-1974.
71. Yoesting, Dean R. and Burkhead, Dan L. "The Significance of Childhood Recreation Experience on Adult Leisure Behaviour: An Exploratory Analysis," Journal of Leisure Research 5 (Winter 1973):25-36.