SYLVAN LAKE MANAGEMENT PLAN:

A SUMMARY STATEMENT

Prepared by:
Red Deer Regional Planning Commission
Regional Planning and Research Section
February, 1977.

RED DEER REGIONAL PLANNING COMMISSION

4920 - 59 STREET
P.O. BOX 5002

RED DEER, ALBERTA
T4N 5Y5

TELEPHONE: 343-3394

FILE No.

January, 1977

Reeve Duckett and Council
County of Lacombe, No. 14
Lacombe, Alberta

and

Reeve Edgar and Council
County of Red Deer, No. 23
Red Deer, Alberta

Dear Sirs:

Re: Sylvan Lake Management Plan Summary

This report is a summary statement of the Sylvan Lake Management Plan which was prepared by the staff of the Red Deer Regional Planning Commission as a part of their regional work program as requested by the Councils of the Counties of Lacombe and Red Deer. The plan statement is published in summary form so it can be readily distributed for reference and use by numerous individuals and parties.

As agreed by yourselves, this statement has been openly and jointly discussed with the council members of the urban municipalities around Sylvan Lake. While your rural municipalities have the authority to control the majority of the lands around the lake, it was important that the urban municipalities be equally involved. Consequently, copies of this report will be distributed to the council members and municipal authorities of the Town of Sylvan Lake, the Summer Village of Norglenwold and the Summer Village of Birchcliff.

Also, this plan summary will be widely distributed among concerned departments of the Provincial Government in order to solicit their support and action. Other copies will be available for the general public and private interest groups.

Yours truly,

W. H. Jackson
Chairman

R. R. Cundy, M.C.I.P.
Director

dk

FOREWORD

The need for a management plan for Sylvan Lake has been recognized since the mid to late 1960's. With growing pressure for development of Sylvan Lake and the conflicts resulting therefrom, in 1973 the Council of the County of Lacombe formally requested the Red Deer Regional Planning Commission to prepare a management plan. Soon, the Council of the County of Red Deer echoed a similar desire. In reaction to these requests this Commission authorized a major regional lake study which would culminate in the adoption of basic principles for the management of the region's lake resources as an integrated system. Additional authorization was granted to prepare management statements for critically important lakes as a functional part of the regional lake work program.

This document is a summary report of a management plan for Sylvan Lake. It is published in summary form for ease of reference and understanding. Draft copies of the complete statement are available on loan from the Red Deer Regional Planning Commission.

The management plan provides direction, both general and specific, for the control of activities within the immediate environs of Sylvan Lake. This plan is conceptual. Consequently, it is more of a general overview than a detailed site-by-site description or problem-by-problem analysis. Nonetheless, it is a sound approach to the integrated management of this vitally important, provincial and public recreation resource.

At the same time, because the plan is conceptual and thus lacks site detail, the management plan statement is not a rigid plan. Flexibility for future uses, both on specific lands and around the lake in general, is possible such that the plan expounded upon herein is not the ultimate authority. Some of the major aspects of the plan are concepts which deserve exploration, and through their successful adoption with multi-government co-operation will make Sylvan Lake a superior recreation resource. However, final decisions on land and water uses should be weighed against this plan to measure each judgement from a common, overall guide document.

W. G. A. Shaw, M.C.I.P.
Project Planner, and Head
Regional Planning and
Research Section

NOTE

This document is a management plan statement for the valuable recreation resource of Sylvan Lake. It is **not** a legal plan since it has not been adopted as a general plan as outlined in Part 4 of The Planning Act. Nonetheless, it has been reviewed by the Councils of the five municipalities around the lake—the Counties of Lacombe No. 14 and Red Deer No. 23, the Town of Sylvan Lake and the Summer Villages of Norglenwold and Birchcliff. In late summer of 1976, all gave their approval in principle to the plan, two with stated exceptions. The Summer Village of Norglenwold is now actively pursuing to expand cottages southward along the shoreline, which is in opposition to the plan. The Summer Village of Birchcliff strongly opposes the establishment of a public day use beach area at the center of the shoreland. These variances must be worked out over time, as must other conflicts when they arise. However, the plan is flexible such that compromises can be adopted when they are superior to the existing plan.

In summary, this plan statement and map (Figure 2) are not legal and binding entities. However, approval in principle by the five municipalities means that the municipalities are in agreement with goals and objectives for the Sylvan Lake resource area. Consequently, the plan statement represents a common ground for development decisions. Furthermore, it requires equally strong consideration from the Provincial Government. It therefore represents a major step forward in integrated resource planning in the Red Deer Regional Planning Commission area.

W. G. A. Shaw, M.C.I.P.
February, 1977

ACKNOWLEDGEMENTS

Numerous individuals representing many agencies and authorities aided in the production of this document. First, the general support of the members of the Red Deer Regional Planning Commission, chaired by W. H. Jackson, is recognized. Second, each of the municipalities around the Sylvan Lake freely gave their time and information. Most helpful were Reeve G. Duckett and Council of the County of Lacombe and their County Commissioner Roy Robbins, Reeve L. M. Edgar and Council of the County of Red Deer and their Secretary-Treasurer Jim Masson, Mayor R. W. Blick and Council of the Town of Sylvan Lake and their former Secretary-Treasurer Mrs. Edna Fraser, Mayor G. R. Hancock and Council of the Summer Village of Birchcliff and Mayor K. G. Pugh and Council of the Summer Village of Norglenwold and their combined Secretary-Treasurer 'Dee' Raymond. The support of Ross Young of the County of Lacombe and Ed Neis of the County of Red Deer is also noted.

Acting as technical advisors during the many opportunities for consultation with Provincial Government Departments were: Les Hempsey (Transportation), Bob Price (Agriculture), Peter Eligh (Energy and Natural Resources), Mel Kraft, Eldon Bruns and Ted Johnson (Recreation, Parks and Wildlife), and Al McPhail and Fred Schulte (Environment).

Field work was a major part of the program to produce this plan statement. Those who carried out these investigations included Sue Morrow, Robin Moorehead, Linda Moe, Pat Wankiewicz, Debbie Larson and Dave Jorgenson. Technical drafting aspects were dutifully handled by Brian Grosseth and Gert Willems. The respected comments of many of the Commission's planners, including Bob Cundy, Holgar Rasmussen, Rich White, Paul Fenwick and Harry Diemer were most helpful. Secretaries who labored through the many drafts and revisions included Elizabeth Dixon, Ali Deboer, Lorna Cronin and Myrna Wagner.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

GENERAL BACKGROUND

Introduction.

Sylvan Lake is a vitally important recreation resource. Having high natural qualities and a central location within the heavily settled portion of Alberta, the lake receives a considerable amount of use and is one of the most heavily developed in the province. Situated fourteen miles west of Red Deer and midway between Calgary and Edmonton, there are 1.1 million Albertans within a two hour drive of the lake.

Sylvan Lake has a surface area of 10,540 acres or nearly 16.5 square miles. Being nearly two miles wide and eight miles long its shoreline totals 21.85 miles. Lying at a mean elevation of 3,072.7 feet above sea level, the level can fluctuate over two feet in a year depending on weather conditions. The lake has a limited watershed of only 58 square miles, including the lake itself. The lake's water supply is dependent on spring runoff, summer rains and some submerged springs. The natural drainage of the lake is southeast through Sylvan Creek, although outflow only occurs infrequently when high lake levels exist.

Within the watershed most lands are devoted to agricultural uses. Crops are grown on suitable soils and terrain, while pasture exists where slopes are excessive for cultivation. In the immediate vicinity of the lake, higher quality soils are found on the southwestern shorelands while poorer soils are usual on the east and north sides of the lake. Native vegetation is parkland, but little remains due to cultivation. Poplar remains on some hills and poorer soils while spruce are evident in well drained soils or steep slopes around the lake.

Resource Capabilities.

As determined by the Canada Land Inventory, most resource capability ratings are only moderate to low around Sylvan Lake, although recreation and agriculture are the exceptions. Waterfowl ratings are low since the lake has few marshes established on the shallow shoreline areas and because most of the lake is quite deep, reaching a depth of 60 feet. Ungulate capability ratings are only fair since habitat is scarce and food limited. Sport fish ratings also are only fair, although with a consistent stocking program it is possible that Sylvan could become an important family fishing lake.

Recreation capability is moderately high to high. About one-quarter of the shoreline, or 5.65 miles, is rated as Class 2 or 3[1], this being ten percent of the high quality recreation shorelines within the prairie portion of the Red Deer Regional Planning Commission. In areal terms however, high quality recreation lands are scarce since less than five percent of the land within one mile of Sylvan Lake is rated Class 3 or better. Tables 1 and 2 summarize shoreline and shoreland resource ratings respectively.

---

1. The Canada Land Inventory rates resources on a seven point scale with one being the highest. For recreation, classes 1, 2 and 3 are considered to be generally suited for intensive activities.

TABLE 1

SHORELINE RESOURCE CAPABILITY
(in miles)

	1	2	3	4	5	6	7	TOTAL
Recreation		1.95	3.70	13.55	2.65			21.85
Waterfowl						21.85		21.85
Ungulates			21.85					21.85
Agriculture		2.75	8.06		11.04			21.85

Source: Compiled from Canada Land Inventory by Red Deer Regional Planning Commission.

TABLE 2

SHORELAND RESOURCE CAPABILITY
(in acres)

	1	2	3	4	5	6	7	TOTAL
Recreation		311	348	1324	9242	3588	267	15080
Waterfowl					1697	13148	235	15080
Ungulates		405	11342	3333				15080
Soil		2325	7161		5594			15080

Note: Measurements taken to one mile of shoreline
Source: Canada Land Inventory as compiled by Red Deer Regional Planning Commission

Land Use.

Fairly extensive homesteading began around Sylvan Lake in the 1880's. By 1912 the railroad passed south of the lake around which the settlement of Sylvan Lake was established. Being adjacent to the south shore, the area was initiated as a resort area early in the century. In the first decade there were a total of 400 cottage lots subdivided within and outside the village.

At present, recreation developments have spread around the lake as shown on Figure 1. Most notable of these are the extent of cottage subdivisions, which now claim about forty percent of the shoreline. Institutional camps are widely scattered while commercial recreation facilities are limited to the Town of Sylvan Lake area. Now in existence are one provincial park (Jarvis Bay) and two golf courses.

Only a small portion of the shoreland is relatively undisturbed. The most significant of these are the northern shoreland, the west-central peninsula and some

cliffs and rolling backlands on the east side of the lake. Agriculture activities are nearly universal.

Five municipalities exist around the lake. The Town of Sylvan Lake now occupies most of the south shore as shown on Figure 1. The Summer Village of Norglenwold takes the shoreline area immediately northwest of the Town, while the Summer Village of Birchcliff incorporates a lengthy stretch of the east-central shore. The remaining lands are divided between the Counties of Lacombe and Red Deer.

Being an important recreation resource, development over time has created a significant number of recreation units around the lake.[2] As indicated in Table 3, in 1976 there were 2,532 recreation facility units assuming that space for 500 informal units at the main beach are used. Of the formal, or developed, units over one-half are cottage lots, numbering 1,149. Commercial recreation facilities total 480 while institutional facilities total 251. Another 152 sites are available at the provincial park for a total of 2,032 formal units.

TABLE 3

RECREATION UNITS AT SYLVAN LAKE (1976)

Form of Facility		Number of Units
I. Formal		
1. Institutional		251
2. Commercial		480
3. Provincial Park		152
4. Cottage Lots		1,149
	Sub-total	2,032
II. Informal		
1. Main Beach		500
	TOTAL	2,532

Source: Surveys by Red Deer Regional Planning Commission staff.

Access to most of the lakeshore is very good. Primary highways provide excellent access to the southern portion of the lake and a paved country market road gives equally good access to the northern shorelands. Upon leaving pavement, travel over two to six miles of gravel road is required to reach the western and eastern shorelines.

Water Use.

Being a recreation resource, a variety of water oriented activities occur on Sylvan Lake. Swimming and wading are popular activities during warm summer days. The main beach is the most intensively used area, especially by the general public, although other localized spots receive moderate use, usually from cottagers and their visitors. Boating is also common. Power boating is the most popular form, either purely for speed or for

2. A recreation unit is space or provisions for a group of four people.

towing skiers. Sail boats are becoming more common, while the use of canoes is not too popular. Generally, however, boating is somewhat restricted by the scarcity of good launching and docking facilities.

Numerous fishermen enjoy the lake throughout the year. In summer, trollers are evident while in winter numerous fishing huts dot the ice covered surface. Pike and perch comprise the usual catch. Also in winter, the ice cover often provides an excellent skating and snowmobiling surface.

Underwater use is minimal since activities such as scuba diving are enjoyed by only a few, some of whom partake in spear fishing.

Very limited water withdrawal for human use occurs. An old industrial withdrawal licence has never been used, while only one domestic withdrawal system has been noted. Since abundant groundwater yields are present, private wells are the water source for residential and farm uses around the lake.

Land Ownership.

By far the majority of land around Sylvan Lake is in private ownership. The only extensive public sites are Jarvis Bay Provincial Park and the public beach at the south end of the lake, which together comprise only two percent of all lands within a mile of the lake. The only other public areas include road allowances and public reserve parcels gained from subdivision. The latter usually are unusable because of terrain, but even on suitable locations use is mostly restricted to the adjacent cottagers.

PROBLEMS

Underlying the need for a management plan are extant problems with which the plan must deal. With foresight, the plan can also minimize future problems. A very general discussion of problems around Sylvan Lake follows.

A major problem is the predominance of private ownership of shorelands. Although highly acceptable in the past and in many ways the best means of preserving shoreland quality, the high proportion of private shoreland ownership in the future will become costlier, in both economic and social senses, as public pressure mounts on lake shorelands. The desire for public access and use of shorelines will intensify such that governments will be forced to either purchase these high quality, privately owned shorelands or else upgrade lower quality shorelands. Unless politicians are willing to act now, the costs involved in either case will be exceedingly higher than they would be at current prices.

For the last fifteen years, when shoreland cottage subdivisions were approved, public reserve zones were requested as conditions of subdivision. These zones were required for public access and use of shorelines, or for environmental protection. While they are major improvements over the former linear cottage subdivisions where no shoreline reservations were required, even this form of public reserve provision has not proven to be satisfactory. Usually these public reserves are of insufficient size for public enjoyment, especially without disturbing the adjacent cottagers. Some reserve areas are not developed by the municipalities, nor are the public correctly aware of the existence of available reserves and their rights on them.

In the past, the provision of public recreation facilities lagged far behind the development of private cottage resort areas. Without doubt, cottage areas should be provided because the demand for these recreation dwellings is very real and continuing to increase. Regretfully for the general public however, the most suitable areas for public recreation have been lost to cottage developments. Municipal and provincial governments will be forced to buy very expensive or marginally suitable lands in their future attempts to satisfy the wave of demand for public recreation space and activities. With these expanding demands there are imbalances in opportunities for outdoor recreation activities around and on lakes. These must be reasonably corrected in the future if Sylvan Lake is to maximize recreation satisfaction. Lacking are public beaches, overnight facilities, adequate boat launches and marinas.

Around Sylvan Lake there has been a gradual erosion of environmental quality. Certainly, as development occurs the original condition can never be maintained. However, the wise spatial allocation of land and water uses together with the enforcement of necessary environmental standards can effectively minimize the reduction of environmental quality. Some lands are overused and others underused. Certain areas are abused or misused. The adoption and enforcement of a lake management plan, policies and standards would encourage the best use of all parcels of land for the total public good. The value of vegetation must be recognized, unlike the past where the reckless removal of trees and the spoliation of emergent vegetation severely impaired the lake shoreline and shorelands' capacity to support wildlife and to resist erosion. Where development has occurred, rarely is the quality questionable. Luckily, to date most recreation facility areas around Sylvan Lake are of medium or better quality. The use of septic tanks and field systems, even if installed properly, is still questionable especially in concentrated cottage subdivisions. Contamination problems are always possible.

The control of development along the shoreline in the past has been lax. Cottage owners particularly have been allowed to build boat houses, guest cottages and docks with few restrictions. Often the buildings encroach on the shoreline and the multiple duplication of docks add to the general aesthetic degradation of the shoreline environment.

On Sylvan Lake, the control of water surface use is completely neglected. Water surface zoning would not only enhance the use of the lake by increasing the quality of recreation experiences for various lake users, but also greatly improve the safety factor for lake use.

Seasonality is a significant problem at Sylvan Lake, like all Alberta lakes. A strong majority of recreation activities and lake use are concentrated during the summer months. The rush of summer recreators forces a great strain on the infrastructure and administrative capabilities of the Town of Sylvan Lake, although most of the commercial enterprises survive because of this pressure. In the winter, only snowmobiling and ice fishing are popular and usually only for one day excursions, although many cottages are now being used for all-year retreats.

A very important problem is the division of authority around Sylvan Lake. Five municipal governments administer land-use controls around the resource while numerous provincial government departments administer transportation, fish, wildlife, recreation, parks, energy resources, water and the environment. To date, no real attempt has been made to draw the forces together and unite them in a common approach to the management of Sylvan Lake. For example, the Town of Sylvan Lake derives con-

siderable economic activity from the summer tourist and recreation industry. To promote this, it encourages the establishment of commercial facilities to host summer recreators. As well, it develops and maintains public recreation areas, the most important being the highway beach and picnic area. However, these facilities attract as many as 8,000 weekend visitors, thereby increasing the Town's population during peak summer periods by as much as five times above its resident population. This creates tremendous stresses on the Town's services, including sewer, water, policing and health facilities, as well as on maintenance and clean-up staffs, thereby unduly taxing full-time residents.

On the other hand, the Summer Villages tend to take a much more parochial attitude toward recreators. They seem to be primarily interested in preserving the environment of summer resort areas for local cottage owners, who form the government of these villages. Often, very few provisions are made for the recreational satisfaction of the general public in these areas.

Meanwhile, the counties are rural forms of government dedicated to agrarian policies and provisions. Around major provincially important lakes such as Sylvan, counties derive limited benefits from non-commercial summer resort developments. Although their tax base is increased, the taxes gained from cottage developments hardly support the cost of providing and maintaining rural services. The withdrawal of these areas from counties as a result of the creation of summer villages further frustrates county administrators and residents.

At the same time, depending upon their own realm of interests and expertise, the Departments of Environment, Agriculture, Transportation, and Recreation, Parks and Wildlife may not agree upon a "sound" site development plan for a proposed facility. At times, various divisions within departments cannot agree.

Consequently, the proposed Sylvan Lake management plan approach must do a number of things. It must draw together and unite a multiplicity of agencies and municipalities in a common approach to the management of Sylvan Lake as a whole, and its many specific resources in particular. Also, it must solve existing problems. Furthermore, it must attempt to minimize future problems through the establishment of review procedures and amendments in response to new recreational demands, technologies and political requirements.

REGIONAL LAKE PHILOSOPHY

In their management of lakes, the members of the Red Deer Regional Planning Commission have adopted the following philosophy as the fundamental basis for managing lakes:

> "Lakes are a public resource and consequently they should be planned and managed for the total public good as part of a regional open space and recreation area system, but this system must reflect the need for conservation, economics and private demands where compatible with the total public good, now and in the future."

This philosophy indicates that the priorities for managing lakes are: (1) protect the resource, (2) plan and act for future public needs, and (3) where possible allow private

interests to be pursued.[3] Since Sylvan Lake lies within the bounds of the Commission and the municipalities around the lake are members,[4] this philosophy must provide the base upon which any plan for Sylvan Lake is devised.

LAKE CLASSIFICATION

Within the *Regional Lake Perspective: Inventory and Policy Directions,* Sylvan Lake is classed as a Provincial Development lake.[5] Within the regional lake classification system, which helps to identify the function of each lake within the regional lake system, provincial development status indicates the highest order of intensified use should be planned for Sylvan Lake, yet diversity should also be encouraged. As written in the lake perspective document, the policy guidelines for Provincial Development lakes are:

Plans: Management plan required for lake management, including detailed indications of development extent and intensity.

Overriding principle: diverse and numerous recreation developments permitted but use restricted to maintain acceptable levels of environmental quality.

Primary role: diverse recreation experiences.

Secondary role: where possible and necessary, wildlife conservation.

Land ownership: In Green Area public; In White Area as much public shoreland ownership as possible although private recreation developments and cottage areas are compatible with the lake's function. However, as much class 1 and 2 recreation shorelines as possible should be purchased by the Crown for public use, the amount dependent upon individual lakes.

Vegetation: no removal of natural vegetation within 300 feet of shoreline, or within 300 feet of the upper break of slope of an embankment adjacent to the shoreline except where soil classes are 1 to 3 for agriculture and except in designated development zones and access rights of-way or by permit but in no instance should vegetation removal occur within 50 feet except for intensive activities.

Land use: farm uses set back from lake, while most shoreline uses to be suggested by plan. Large variety of uses possible, but maintenance of natural shorelines is still important. Fairly extensive commercial developments permitted while large cottage subdivisions are permissible in certain areas. Encourage the expansion of public shorelands for wildlands and campgrounds. Variety is emphasized on some lakes, while homogenous areas indicated for others.

Subdivision: extent and limitation determined by plan.

---

3. "Interim Lake Report and Lake Philosophy Statement", Red Deer Regional Planning Commission, Red Deer, April 1974.

4. Technically, only the Counties of Red Deer and Lacombe and the Town of Sylvan Lake are members recognized by Orders-in-Council, although the Commission generally treats other municipalities as equal members.

5. Red Deer Regional Planning Commission, *Regional Lake Perspective: Inventory and Policy Directions,* April 1976, which officially endorsed the lake philosophy statement.

Access: to be determined by plan.

Fish and Wildlife: application of conservation principles and preservation of wildland areas.

Water use: various use with zones designated by plan.

Boating: access facilities and type determined by plan.

Evident from these is a need for a guiding management plan.

MANAGEMENT PLAN APPROACH

In order to design a management plan for Sylvan Lake it is necessary to understand the development capacity of the lake. In addition, it is equally necessary to determine what forms development should take.

Possible Development Potential.

Generally, a lake's carrying capacity is the upper limit at which activity or use will lead to undesirable changes in the lake. Although exceedingly difficult to determine objectively, the concept of carrying capacity must be engrained within the management plan for Sylvan Lake if the plan is to be framed by an ultimate point or goal. For ease of technical generation and subsequent understanding, carrying capacity is expressed by the number of recreation units around the lake.

The approach used to determine the development capacity for Sylvan Lake is given in Table 4. Development capacity is used instead of carrying capacity since it more correctly indicates the total development that may occur before the accumulated use which is generated exceeds the carrying capacity of the resource. This methodology concentrates on the lake water surface since it is the water surface which is the prime limiting factor to recreation use, unless water quality is problematic. This approach is generally appropriate to all lakes. It produces, based on a series of factors and assumptions the total development potential of the lake as determined by its surface capacity.

Although qualified in the footnotes of Table 4, it must be pointed out that the approach used is basically conservative. It is conservative since it employs some development criteria which are lower than those necessarily needed, and therefore the employed method restricts potential development to a total which is lower than if other development criteria had been used. The development capacity method and total for Sylvan is as follows:

Allocation of Development Forms.

Table 4 indicates that Sylvan Lake, based on its surface water capacity for boating, can support nearly 7,650 recreation units. As an integral part of the method, it was determined that of all units 1,092 should be cottage units. Cottages therefore would comprise almost fifteen percent of recreation units around the lake. This relatively small proportion is in keeping with the Commission's philosophy that lakes are

TABLE 4

SYLVAN LAKE DEVELOPMENT CAPACITY

A. Allowable lake surface for boating:
Sylvan Lake has 10,540 acres
Shoreline protection zone has 1,440 acres[1]
Therefore, boatable surface is 9,100 acres

B. Water surface capacity for boating
Maximum boat density in boating zone to be 1 boat per 10 acres[2] (9,100 ÷ 10 = 910 boats)
Therefore, maximum number of boats on lake at any one time is 910 boats.

C. Disposition of boats (on water surface)
Assume 20 percent of boats to be cottage boats[3]
Therefore, 182 boats are from cottages and 728 boats are from other units.[4]

D. Total boat potential: (in vicinity of lake)
Assume 1 cottage boat in 6 on lake at any one time[5]
Assume 1 other boat in 3 on lake at any one time[6]
Therefore, total boats are (182 x 6) + (728 x 3)
1096 + 2184 = 3276

E. Total units[7] around lake: (based on water surface capacity for boating)
Assume 1 boat per cottage[8]
Assume 1 boat per 3 other units[9]
Therefore, 1092 cottage boats from 1092 cottages
2184 other boats from 6552 other units
Consequently, total development potential = 7,644 units.

1. However, the shoreline protection zone also includes boat corridors for power take offs and return from launch and mooring sites as well as a narrow zone for canoeing.

2. This is the most common standard in North American recreation literature, although recommendations do range from 3 to 40 acres. It is the recommended standard in this Commission's *Regional Lake Perspective* document.

3. With the Commission's philosophy that lakes are a public resource, of all recreation units established around Sylvan Lake it is felt appropriate that twenty percent are private cottages. It is noted that although much lower than twenty percent of Alberta's households own cottages, the strongest pressure in the past for recreation units has been for cottage lots and this pressure will continue. Consequently, the twenty percent figure is a compromise between private pressures and overall public needs.

4. Other units include public and commercial tenting, holiday vehicle, motel units, cabins, institutional dormitories, etc.

5. References (particularly from Wisconsin—see Jaakson) indicate that North American research shows that usually only 1 cottage boat in 10 around a lake are in use at any one time.

6. The assumed figure of 1 in 3 on the lake at any one time reflects the fact that day or weekend users of the lake will tend to use their boats more than cottagers usually would since the people in camping, motel and institutional units have made special efforts to get their boats to the lake on that day or weekend.

7. A recreation unit is space or provisions for a group of four people.

8. This is the most common North American norm.

9. This is not substantiated but it is very likely high, which builds an environmental safeguard into the methodology.

Source: Methodology from Red Deer Regional Planning Commission

a public resource since an inordinate number of cottages surrounding the lake tends to exclude the general public from lake and lakeshore activities.

Assuming that 1,092 cottages for Sylvan Lake is an acceptable total, this leaves 6,552 units for other forms of recreation including day activities and overnight accommodations. Depending on the capacity of the shorelands to support this total number of units, which is examined later in this report, the remaining 6,500 units must be allocated between areas for day activities (sun bathing, picnicking, swimming) and zones for night accommodation units.

Currently, Sylvan Lake supports 2,032 overnight and cottage units and around 500 day units. Therefore, if potential development capacity is realized another 5,112 recreation units could be provided around Sylvan Lake. Leaving 2,500 units for daytime activities, Table 5 indicates the development potential for the various classes of recreation units. The table shows that using the above methodology cottages are overdeveloped by 57 lots while another 3,169 other overnight units, such as tent sites, holiday vehicle parking units, institutional accommodations and motels, could be developed. Daytime only users peak at 500 recreation groups at the main beach. Consequently, there is a need for areas to support another 2,000 day-use groups for picnicking, sunbathing and boating as shown in Table 5.

TABLE 5

SYLVAN LAKE: POSSIBLE ADDITIONAL DEVELOPMENT

	Existing Development [2]	Potential Capacity	Possible Additions
Cottage lots	1,149 [1]	1,092	– 57
Other overnight units	883	4,052	3,169
Day units	500	2,500 [3]	2,000
TOTAL	2,532	7,644	5,112

1. Includes country residential parcels.
2. These figures were obtained from 1976 summer recreation surveys of Sylvan Lake.
3. This figure allows one-third of the units around Sylvan Lake to be day use units only.

In summary, it appears that Sylvan Lake can support another 5,112 recreation units. Of this total, 2,000 should be formal and informal day use space while 3,169 should be devoted to overnight units. Cottages, already developed past their recognized share, should not expand in number.

While the above numbers are meant to be rigid at this time to guide decision-making, future reassessments of the plan's details may determine that some changes in the structure of acceptable numbers of each development form be revised. While changes may not hinder the overall performance of the plan, it is strongly advised that revisions be contemplated only as an integral part of the periodic reassessment of the entire management plan, and not for each development application. In this way, the plan will have flexibility, yet still retain continuity.

MANAGEMENT PLAN

A conceptual management plan for Sylvan Lake is displayed on Figure 2. It shows a preferred land use pattern, development distribution, major transportation routes and water access and use controls. It must be emphasized that this plan acts only as a guideline for management decisions since it has received only approval in principle from the rural municipalities who control the non-urban, agricultural lands around the lake. This plan statement has not been adopted as a general plan under Part 4 of The Planning Act.

Land Use.

This management plan encourages diverse and numerous recreation activities around Sylvan Lake. To achieve higher use it is necessary to allocate activities evenly around the whole lake, thereby reducing concentrated pressure points where conflicts and problems are more apt to occur. Figure 2 divides the shoreland into eighteen sub-areas. Although not totally distinct from each other, each area differs from its neighbours due to its own combination of physical characteristics, land uses and recreation potential. The preferred land use groupings—urban commercial, cottage residential, private commercial, natural enhancement, public day use, camping and integrated recreation—are assigned to specific areas because of their existing uses, natural qualities and potentials as part of an overall, integrated management scheme which is designed to maximize the use of the lake environs yet still maintain diverse landscapes and recreation opportunities.

Tables 4 and 5 dictate the amount and type of recreation development to be permitted around Sylvan Lake. Based upon the preferred land use pattern, Table 6 shows the recommended distribution and intensity of development. While Table 6 indicates that the shorelands could support a total of 10,316 recreation units, this figure is misleading since the full potential of each sub-unit for intensive use is not explored. Instead, the potential to meet the designated use, even if non-intensive, is examined. Table 6 shows that shoreland development potential far exceeds the capacity of the water surface. Consequently, in most zones full development is not recommended.

By this management plan statement, cottage development is severely restricted. While existing cottage subdivision areas are recognized, no further lateral expansion of cottage lots along the shoreline is recommended. Already, 57 more cottage lots have been created than desired under the development methodology. In addition, if the plan is to be fully realized, 70 cottage lots in time should be transferred to other uses. As a means of compromise, the plan guidelines recommend 1,119 lots or 27 more than desired by the methodology. Through time critical cottage areas should be changed into required parking (Area B), intensive recreation (Area F) and a public day beach (Area N).[6] Replacement cottage areas can be created in Areas J, M, P and R as the other areas are eliminated.

Institutional camps are recommended to continue, usually in their present locations. However, if the sites are abandoned through new zoning only non-cottage recreation activities should replace them.

6. While this conceptual management plan has been approved in principle by the Council of the Summer Village of Birchcliff, at the same time they register one variance, it being a strong objection to the creation of the Area N public day use beach.

TABLE 6

RECOMMENDED DEVELOPMENT DISTRIBUTION

	Day—Only			Cottage				Other Overnight				Total		
Area	Existing	Potential	Recommended	Existing	Proposed Loss	Potential	Recommended	Existing	Proposed Loss	Potential	Recommended	Existing	Potential	Recommended
A	500	600	600	0	0	0	0	0	0	0	0	500	600	600
B	0	0	0	300	20	280	280	480	48	640	640	780	920	920
C	0	0	0	151	0	201	151	0	0	0	0	151	201	151
D	0	750	550	1	1	0	0	55	55	1280	1280	56	2030	1830
E	0	0	0	69	0	69	69	0	0	0	0	69	69	69
F	0	750	500	8	8	0	0	46	46	920	920	54	1670	1420
G	0	0	0	40	0	96	40	85	0	85	85	125	181	125
H	0	0	0	0	0	20	0	0	0	0	0	0	20	0
I	0	0	0	3	3	0	0	0	0	1560	0	3	1560	0
J	0	0	0	279	0	410	290	0	0	0	0	279	410	290
K	0	0	0	2	2	20	0	0	0	0	0	2	20	0
L	0	0	0	0	0	0	0	0	0	10	10	0	10	10
M	0	0	0	58	0	68	68	0	0	0	0	58	68	68
N	0	1180	850	36	36	0	0	0	0	0	0	36	1180	850
O	0	0	0	0	0	0	0	0	0	800	780	0	800	780
P	0	0	0	121	0	160	127	37	0	73	60	158	233	187
Q	0	0	0	0	0	0	0	180	0	250	250	180	250	250
R	0	0	0	81	0	94	94	0	0	0	0	81	94	94
TOTAL	500	3280	2500	1149	70	1418	1119	883	149	5618	4025	2532	10316	7644

Source: Red Deer Regional Planning Commission

Major, intensive recreation complexes are recommended for a number of strategic zones around the lake. Diverse facilities should be expanded in the Town of Sylvan Lake and established in Areas D and F. The latter two areas could support major provincial parks or integrated public and private recreation developments based around a publicily owned shoreline and backshore. Figure 3 conceptualizes such a scheme. Areas L, O, and Q can support various intensities of camping.

Natural, near wild-like areas are promoted within the plan statement. Since they best lend themselves to natural-like areas, although some enhancement of the environment likely is necessary, Areas H, I, K and part of D have been designated natural enhancement areas. Currently cleared areas for farming are recognized, but existing woodlands are recommended for conservation with limited, but functional uses being permitted. Where publicly owned, nature hikes and environmental study-observation would be allowed, while in privately owned areas residential uses with carefully controlled garden-agriculture activities would be permitted.

Two major public day use beaches are promoted under the plan. The south shore main beach currently exists and is heavily used, although not quite to capacity. The capacity of the area would increase significantly and conflicting activities reduced if the through highway (Lakeshore Drive-Highway 11) could be relocated from its current alignment adjacent to the beach. While other public beach areas are promoted as part of the integrated recreation areas, the second public-use day beach area designated within the management plan is Area N, which currently consists of a number of private cottages and some institutional camp cabins. While objections to the designation of this area have been received from the Council of the Summer Village of Birchcliff, it is felt that if the full recreation potential of the east shore of Sylvan Lake is to be realized, such that the valuable backlands from the east-central shore can be utilized as campground areas, then a day-use beach at Area N is a must. Area N was selected because it has the best natural beach qualities along the entire east shore.

Non-intensive agriculture activities, when not usurped by intensive recreation developments over time, are allowed to continue where now practiced. Intensive farm uses, such as feedlots, are encouraged not to locate near the lake or near to existing or future intensive recreation areas.

Transportation.

In order to facilitate the desired land use pattern, an appropriate transportation network is necessary. Comprised of various standards, the road network must promote travel to desired areas, accommodate vehicles when the destination is reached and discourage trip destinations to unwanted locations. The road network displayed on Figure 2 promotes these objectives. However, it must be noted that the road alignments portrayed on Figure 2 and discussed here are only conceptual at this time.

Four levels of roads are advanced, ranging from primary highways to country roads. For the immediate future it is envisioned that primary highways can remain as they currently exist, although some upgrading is soon required. Highways 11 and 20 provide good service to the south and east shorelands. While Highway 20 appears adequate for future needs, Highway 11 east of Sylvan Lake likely will require doubling and possibly a new alignment to support anticipated greater traffic volumes. The Lakeshore Drive portion of Highway 11 through the Town of Sylvan Lake should be relocated.

Three provincial secondary roads are foreseen. The existing Secondary Road 781 from the south into the Town serves a useful function, and possibly may require upgrading to primary status in the future if the capacity of Highway 11 from the east is not increased. A major north-south secondary road is required on the west side of the lake. It would connect Highway 11 to the proposed third secondary road which runs past the northeast corner of the lake in an east to west direction. This road currently is a major county market road and could become the alignment of a future primary highway which connects Highway 2 with the David Thompson bridge over the North Saskatchewan River.

A new form of secondary road is also advocated. Called Recreation Access roads, these roads are designed to carry traffic from the primary and secondary roads to intensive use areas along the shoreland. As shown on the management plan it is envisioned that four are required. A recreation access loop road serves the west shore. Another serves the eastern shoreland, while two linear recreation roads provide access to cottage developments at either end of the east shore. The fourth level of roads, being county roads, will continue as they currently exist.

Direct vehicular access to the lakeshore must be provided at numerous locations around the lake. With full development at 7,644 units, it is felt that 55 boat launch lanes will be required, with adequate complementary parking. Figure 2 conceptualizes where launching facilities should be, although detailed site investigations are required to finalize these. Moorage facilities also will be required, either in the form of docks or marinas and must be supplied by both public and private funds.

In the future it is possible that the existing CNR line which dissects the Town of Sylvan Lake should be relocated. The abandoned right-of-way could be used to relocate Lakeshore Drive and to provide needed parking. The rail line could be shifted south by means of two connections to the existing CPR right-of-way which is under consideration for abandonment.

Water Use.

As a large lake, it is only right that the management plan recognize the need for a variety of water surface uses. In order to maximize the efficient use of the water surface and to help insure the safety of the recreator, the management plan proposes a water surface zoning system as permitted under The Canada Shipping Act—Boating Surface Regulations. It is felt that ultimately at least three zones will be required. One protects good bathing beaches by not permitting any boats. Another restricts motor power vessels to eight miles per hour, and therefore favours a non-power boating area for vessels such as sail boats. All shorelines are so protected, except where no vessels are allowed. The third zone permits free movement of all boats. From boat launches and marinas, power boat egress corridors would be permitted where felt to be compatible with adjacent water uses. Water zoning is conceptualized in Figure 2.

Docking facilities must be considered as part of the water uses. This plan strongly recommends against the continued allowance of private, individual docks which excessively duplicate each other and in the process degrade the appearance of the shoreline. All major cottage subdivisions should be required to develop a common dock or marina for the use of cottage lot owners. In addition, local and provincial governments must construct public docking facilities as required.

Environmental Protection.

An important aspect of this management plan is to maintain the quality of environment of Sylvan Lake. In this regard a number of actions are necessary. The removal of vegetation, especially woodlands, must be carefully controlled. In this way fragile banks, erodable slopes and wildlife habitat could be protected for the overall benefit of the lake environment. Also, water quality studies should establish baseline data and regularly scheduled water tests should measure the performance of quality as the development and use of the lake continues. The fish resource should be protected. If possible, stocking should be pursued to increase the family fishing potential of the lake. While water level fluctuations have proven problematic in the past, they do not detract significantly from recreation satisfaction or environmental appearance. Nonetheless, a stabilized non-winter level may have significant benefits and should be explored.

Control.

While this management plan guides decisions, means of development control must be adopted. New rural land use zones must be created and existing zones altered in the County zoning by-laws if many of the objectives of the plan are to be achieved. A recreation facility zone is needed to promote the intensive recreation use of lands with suitable potential. Conservation area zones are desirable for publicly owned areas which require preservation. The creation of an agricultural amenity zone, in which no intensive farm activities are allowed, is also desirable. All lakeshore zones should contain control provisions for vegetation removal. In addition, institutional zones should be pure institution areas in which cottages are not recognized uses.

Development control also must be strict. The location of all buildings and their quality must be carefully scrutinized, particularly the location of buildings and stairways on public reserves. Servicing standards must meet rigid provisions to be determined by the municipalities and the Department of Environment.

The enforcement of water surface zones is also necessary. Increased police staffs and equipment to patrol water surfaces are required. Public education on boating safety should be a major part of their duties. In this regard, a local R.C.M.P. detachment for the Town of Sylvan Lake and its surrounding area would be desirable.

Municipal Authority.

Without doubt, the greater the number of municipalities involved in planning, the harder it is to achieve common directions. This plan recognizes that five municipalities currently exist around Sylvan Lake—two counties, one town and two summer villages. This number is considered sufficient to provide adequate administration of authority around the lake. No additional summer village incorporations are recommended since this form of municipality is exceedingly parochial in outlook.

Since it is desired that a common approach to the management of Sylvan Lake be adopted, it is recommended that this management plan be jointly adopted by all municipal authorities around the lake. Changes to the plan and its review should only be through a regional lake committee, established by the Red Deer Regional Planning Commission. Review of the plan and development performance should be annual.

NECESSARY CONSIDERATIONS

Numerous important considerations for debate and action are required at three levels of administration if the Sylvan Lake management plan directions, as proposed in this document, are to be successful. These are summarized below.

Municipal.

1. To favourably consider all aspects of the management plan as it relates to both land and water use;
2. To jointly approve in principle a management plan;
3. To consider rezoning as necessary to carry out the management plan; [7]
4. To recommend related, required Provincial Government action;
5. To allow public debate and consider recommended alterations to the plan as strongly recommended by the public;
6. To co-operate with Provincial Government departments in the provision of public boat launches and dock areas.

Regional.

1. To support in principle the management plan as part of the Regional Lake system;
2. To promote further lake studies regarding lake use, lake demands and development capacities;
3. To encourage municipal and provincial governments to undertake the required action to render the management plan a success;
4. To establish a Lakes Committee to guide the conservation and development of shorelands throughout the region;
5. To direct cottage development to the shorelands of other lakes and rivers in recognizing that cottage lot demands will continue.

Provincial.

1. To organize a study team to make final recommendations on development capacities of water resources and their shoreland within an Alberta context;
2. To fully consider the purchase of extensive shorelands around Sylvan Lake; [8]
3. To consider that adequate funds and manpower are available to the appropriate government departments to develop required facilities around Sylvan Lake, and to maintain them, for the benefit of all Albertans and their visitors.
4. To institute and carry out water surface zoning and policing through the appropriate government departments;
5. To co-operate with municipal governments in the provision of boat launches, docks and marinas, and to aid private associations in the development of common marina and dock facilities through the provision of technical expertise and low-interest loans;

---

7. The Counties of Lacombe and Red Deer undertook rezoning in the Summer of 1976 as a result of management plan discussions. Appendix A shows the adopted zones.

8. Appendix B recommends lands for purchase by the Provincial Government.

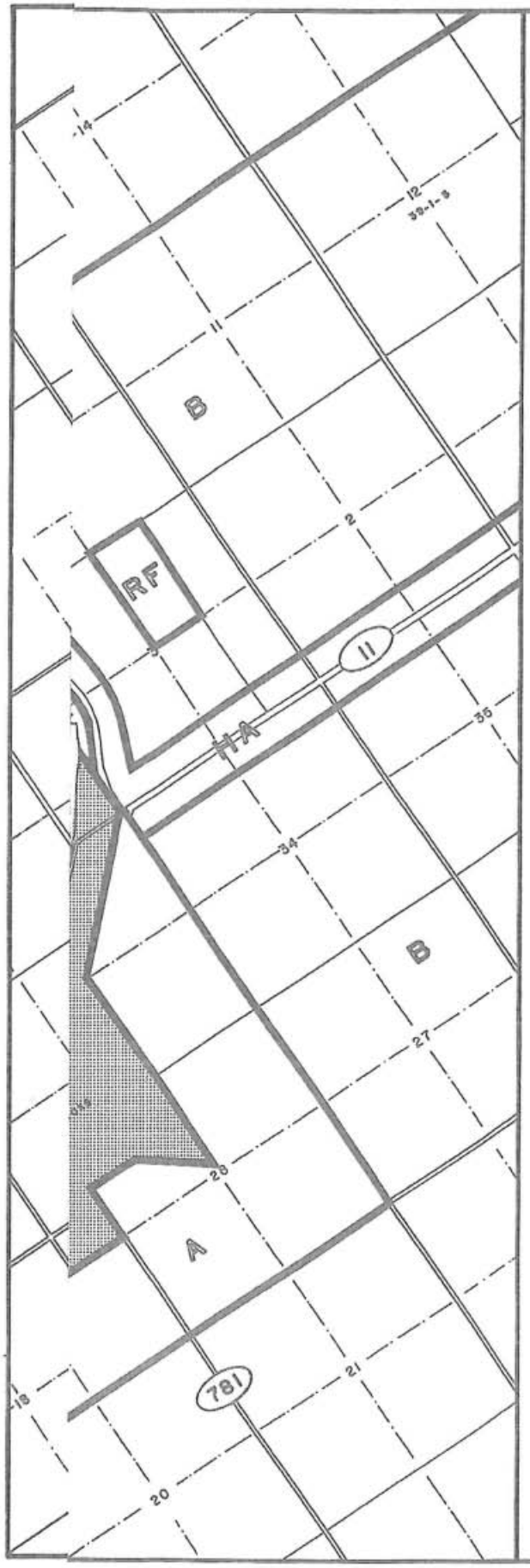
6. To consider the concept of Recreation Access roads, and to enter active debate with the necessary municipalities and the Red Deer Regional Planning Commission regarding the location, timing, construction, maintenance and funding arrangements for these roads;
7. To provide more funds and power to Fish and Wildlife officers in policing lake environments both land and water, to encourage the R.C.M.P. to increase their lake patrols.

Concluding Remarks.

This Sylvan Lake Management Plan Statement was prepared for the Councils' of the Counties of Red Deer and Lacombe by the staff of the Red Deer Regional Planning Commission during 1974 through 1976. During the plan preparation period many of the considerations suggested above for municipal and regional action were deliberated and partly or wholly pursued by the Commission and Council. The publication of this document launches efforts to gain more public reaction and the support of various provincial government departments.

APPENDICES


COUNTY OF LACOMBE
COUNTY OF RED DEER
S.V. of Birchcliff
S.V. of Morghanwold
SRES
SRES
SRES
SRES
SR
SR
SR
SR
RF
RF
RF
RF
P
P
P
P
AA
A
B
CR I
20



SYLVAN LAKE

ENACTED ZONING

COUNTY OF LACOMBE August 12, 1976

A	AGRICULTURAL
AA	AGRICULTURAL AMENITY
H	HIGHWAY AGRICULTURAL
CR1	COUNTRY RESIDENCE
P	INSTITUTIONAL
RF	RECREATION FACILITY
SR	SEASONAL RESIDENCE

COUNTY OF RED DEER August 19, 1976

A, B	AGRICULTURAL
AA	AGRICULTURAL AMENITY
HA	HIGHWAY AGRICULTURAL
P	INSTITUTIONAL
RF	RECREATIONAL FACILITY
SRES	SEASONAL RESIDENCE

Scale: 0 .25 .5 .75 1 mi

Appendix A

RED DEER REGIONAL PLANNING COMMISSION jan. 77

APPENDIX B

RECOMMENDED LAND PURCHASES BY PROVINCIAL GOVERNMENT

SUB-UNIT	POTENTIAL UNIT	PURCHASE AREA (ACRES)	PURCHASE SHORE-LINE (MILES)
D	Intensive Recreation	650	2.09
F	Intensive Recreation	360	2.04
H	Natural Enhancement Area	250	1.62
I	Natural Enhancement Area	100	0.84
K	Natural Enhancement Area	95	1.41
L	Primitive Camping	140	0.00
N	Day Use Beach	100	0.54
O	Camping	320	0.00
TOTAL		2,015	8.54

Certainly, it is not recommended that these areas be purchased all at one time, nor immediately. However, the Provincial Government is strongly encouraged to consider Sylvan Lake as a high priority purchase area, and that programs be implemented or followed to continually pick up lands around the lake when funds are allocated for such purchases. Only approximate acreages are listed.

SELECTED BIBLIOGRAPHY

Alberta Lands and Forests, *A Provincial Parks Policy for Alberta,* Position Paper No. 13, Edmonton, 1973.

Alberta Lands and Forests, *Boating in Alberta: A Summary of Boating Restrictions Regulations.* Alberta Lands and Forests, Edmonton, 1974, 23 pp.

Bohlin, Karl M. and R. G. Ironside, *The Spatial and Economic Impact of Recreation Expenditures and Sales in the Pigeon Lake Area of Alberta,* Alberta Environmental Research Trust, Edmonton, November 1974, 164 pp.

Buechner, Robert D. (ed.), *National Park, Recreation and Open Space Standards,* National Recreation and Park Association, Washington, June 1971, 51 pp.

Bureau of Outdoor Recreation, *Outdoor Recreation Space Standards,* Department of the Interior, Washington, March 1970, 67 pp.

Canada Land Inventory, *Soil Capability Classification for Agriculture* and related maps, Department of Regional Economic Expansion, Ottawa, 1969-1973.

Canada Land Inventory, *Land Capability Classification for Outdoor Recreation* and related maps, Department of Regional Economic Expansion, Ottawa, 1970-1973.

Canada Land Inventory, *Land Capability Classification for Wildlife,* including Waterfowl and Ungulates and related maps, Department of Regional Economic Expansion, Ottawa, 1970-1973.

Community Planning Branch, *Lakeshore Capacity: Bibliography,* Ontario Municipal Affairs, Toronto, 1971, 35 pp.

Community Planning Branch, *Lakeshore Capacity: Data Sources and Study Design,* Ontario Municipal Affairs, Toronto, 1971, 136 pp.

Edmonton and Battle River Regional Planning Commissions, *The Pigeon Lake Study,* Wetaskiwin, May 1975, 98 pp.

Godschalk, David R., Francis Parker and Thomas Knoche, *Carrying Capacity: A Basis for Coastal Planning,* University of North Carolina, Chapel Hill, June 1974, 146 pp. plus appendices.

Jaakson, Reiner, "Planning for the Capacity of Lakes to Accommodate Water-Oriented Recreation", *Plan Canada,* Canadian Institute of Planners, Vol. 10, No. 3, (June 1970), pp. 29-39.

Jaakson, Reiner, *Shoreline Recreation Planning: A Systems View,* Faculty of Environmental Studies, University of Waterloo, Waterloo, 1973.

Local Affairs and Development, *Recreation Site Evaluation Development Series,* Department of Local Affairs and Development, Madison, Wisconsin, 1968.

Manitoba Department of Urban Development and Municipal Affairs, *Shoreland Recreation: An Environmental Approach to Development,* Winnipeg, March 1971, 48 pp.

Parlby, G. B. H., *Recreation Characteristics of Four Central Alberta Lakes,* Alberta Department of Agriculture, Edmonton, 1968, 57 pp.

Peace River Regional Planning Commission, *Peace Region Lakes Perspective,* Grande Prairie, March 1975, 43 pp.

Peters, T. W. and W. E. Bowser, *Soil Survey of Rocky Mountain House Sheet,* Alberta Soil Survey Report No. 19, University of Alberta, Edmonton, 51 pp.

Red Deer Regional Planning Commission, *Regional Lake Perspective: Inventory and Policy Directions,* Red Deer, April 1976, 85 pp.

Shaw, W. G. A., *Regional Lake Study: Red Deer Area,* Alberta Department of Environment, Edmonton, July 1974, 117 pp.

Siefried Anke, *Lake Capacity: Literature Survey and Review,* Alberta Environment, Edmonton, December 1973.

Technical Committee on Lakes and Lake Shorelands, *Use of Our Lakes and Lake Shorelands,* Alberta Land Use Forum, Technical Report No. 12, Edmonton 1974, 252 pp.

Tokarsky, O., *Hydrogeology of the Rocky Mountain House Area,* Report 71-3, Alberta Research Council, Edmonton, 1971, 15 pp.

Vallentyne, John R., *The Algal Bowl: Lakes and Man,* Environment Canada, Ottawa 1974, 186 pp.

Water Resources Division, *Lake Classification,* Alberta Department of the Environment, Edmonton, March 1972, 23 pp. plus appendices.


20
S.V.
of
Birchcliff
COUNTY OF LACOMBE
COUNTY OF RED DEER
S.V.
of
Norglenwold

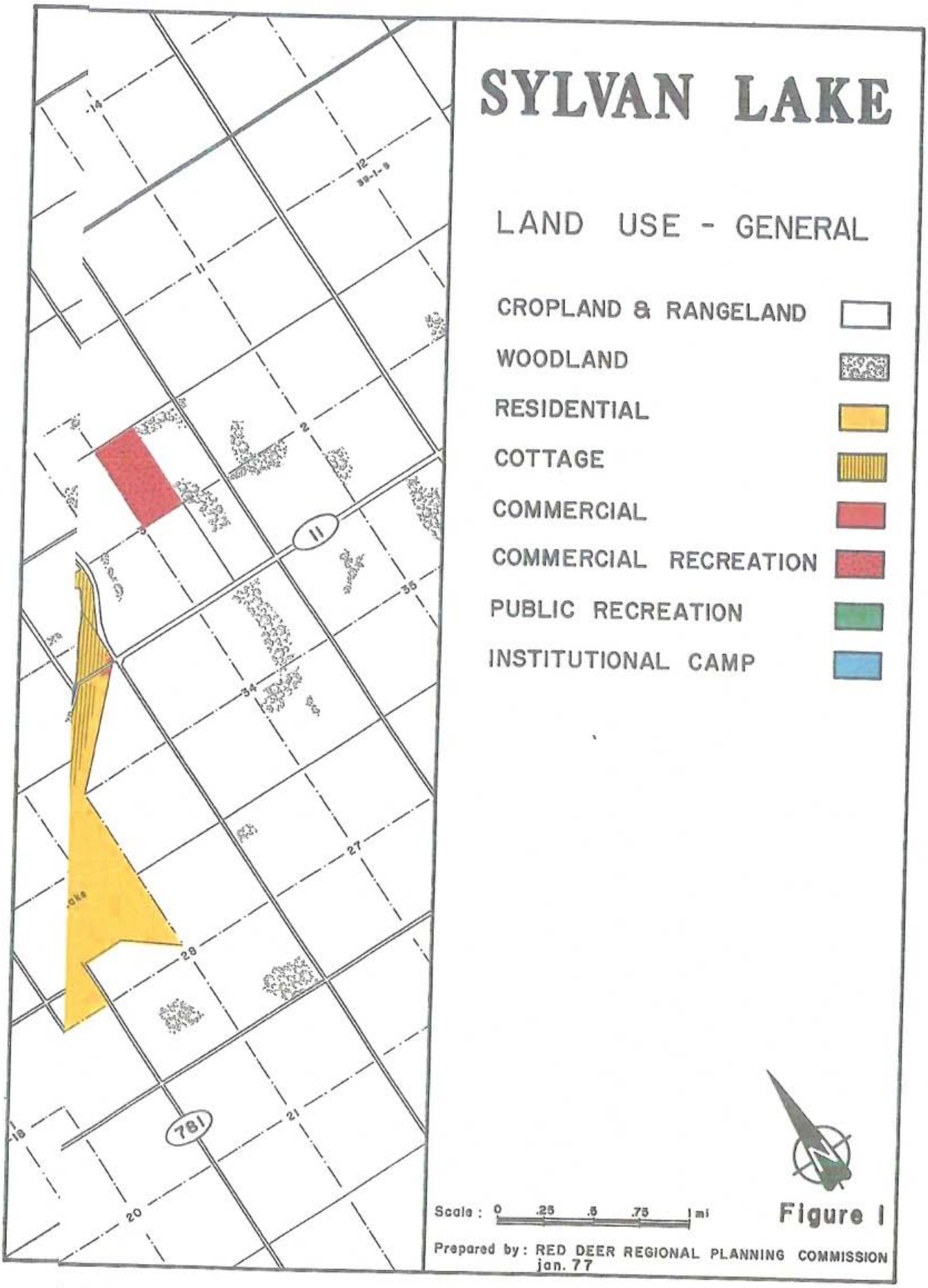
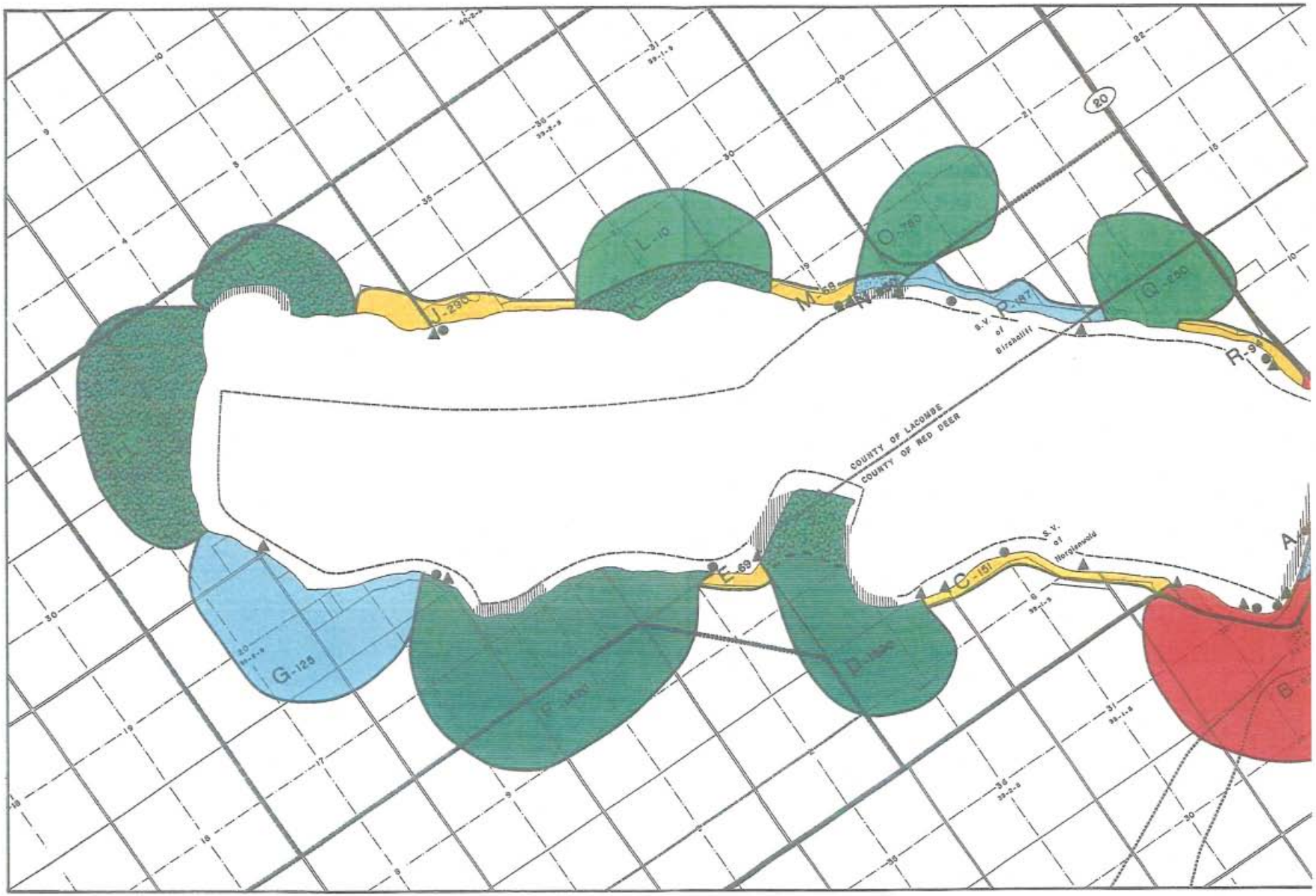
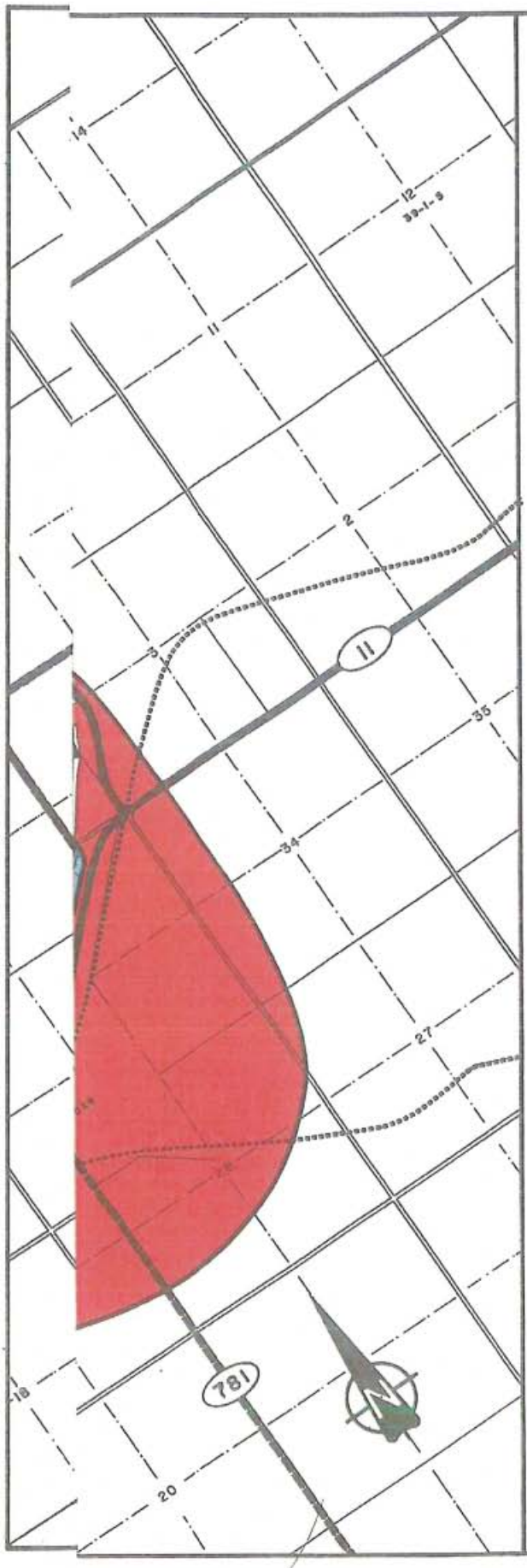

SYLVAN LAKE
LAND USE - GENERAL
CROPLAND & RANGELAND
WOODLAND
RESIDENTIAL
COTTAGE
COMMERCIAL
COMMERCIAL RECREATION
PUBLIC RECREATION
INSTITUTIONAL CAMP
Scale : 0 .25 .5 .75 1 mi
Prepared by : RED DEER REGIONAL PLANNING COMMISSION
jan. 77
14
12
11
2
3
11
35
34
27
26
21
20
19
781

Figure 1


20
L-10
J-290
M-58
O-750
P-187
Q-290
R-9
S.V. of Birchcliff
COUNTY OF LACOMBE
COUNTY OF RED DEER
E-69
C-151
S.V. of Horglenwold
G-125
A
B



SYLVAN LAKE

MANAGEMENT PLAN

LAND

- URBAN COMMERCIAL
- COTTAGE RESIDENCE
- PRIVATE INSTITUTION
- DAY USE
- NATURAL ENHANCEMENT
- CAMPING
- INTEGRATED RECREATION
- RECREATION UNITS 920

WATER

- NO BOATS
- POWER BOAT RESTRICTION (8 mph)
- BOAT LAUNCH
- MARINA

TRANSPORTATION

- HIGHWAYS
- SECONDARY ROADS
- RECREATION ACCESS ROAD
- RAILROAD

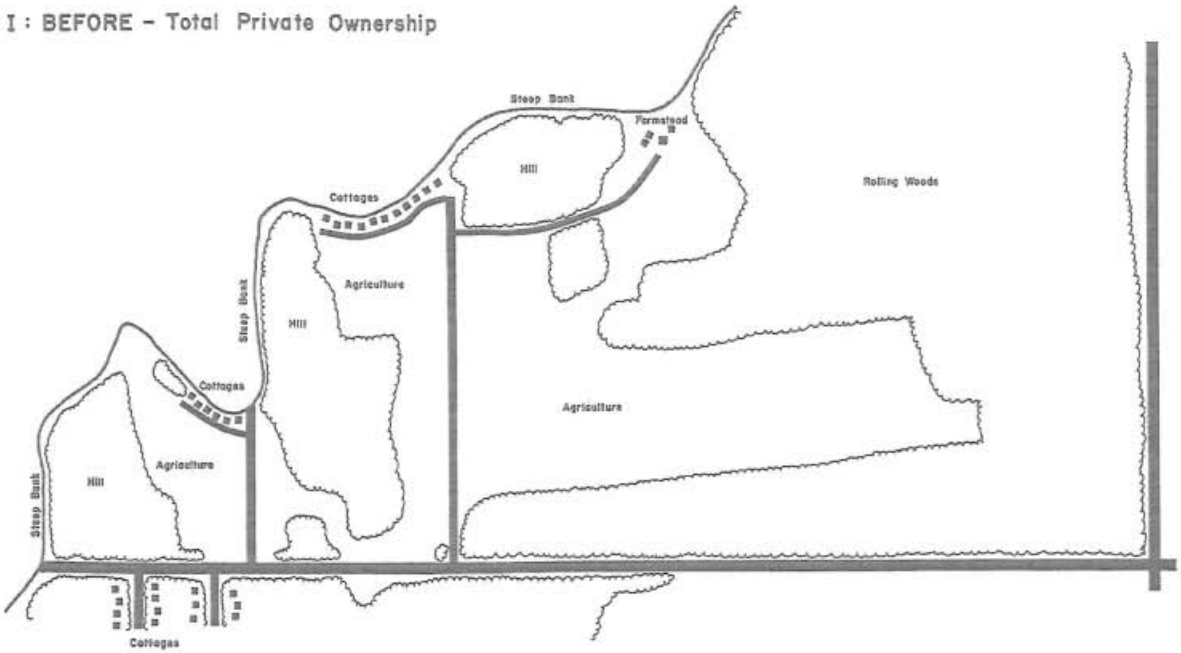
NOTE : Area Boundaries Are Conceptual Only. This Plan Has No Legal Sanction And Represents Only A Guideline For Management Decisions.

Scale : 0 .25 .5 .75 1 mi

Figure 2

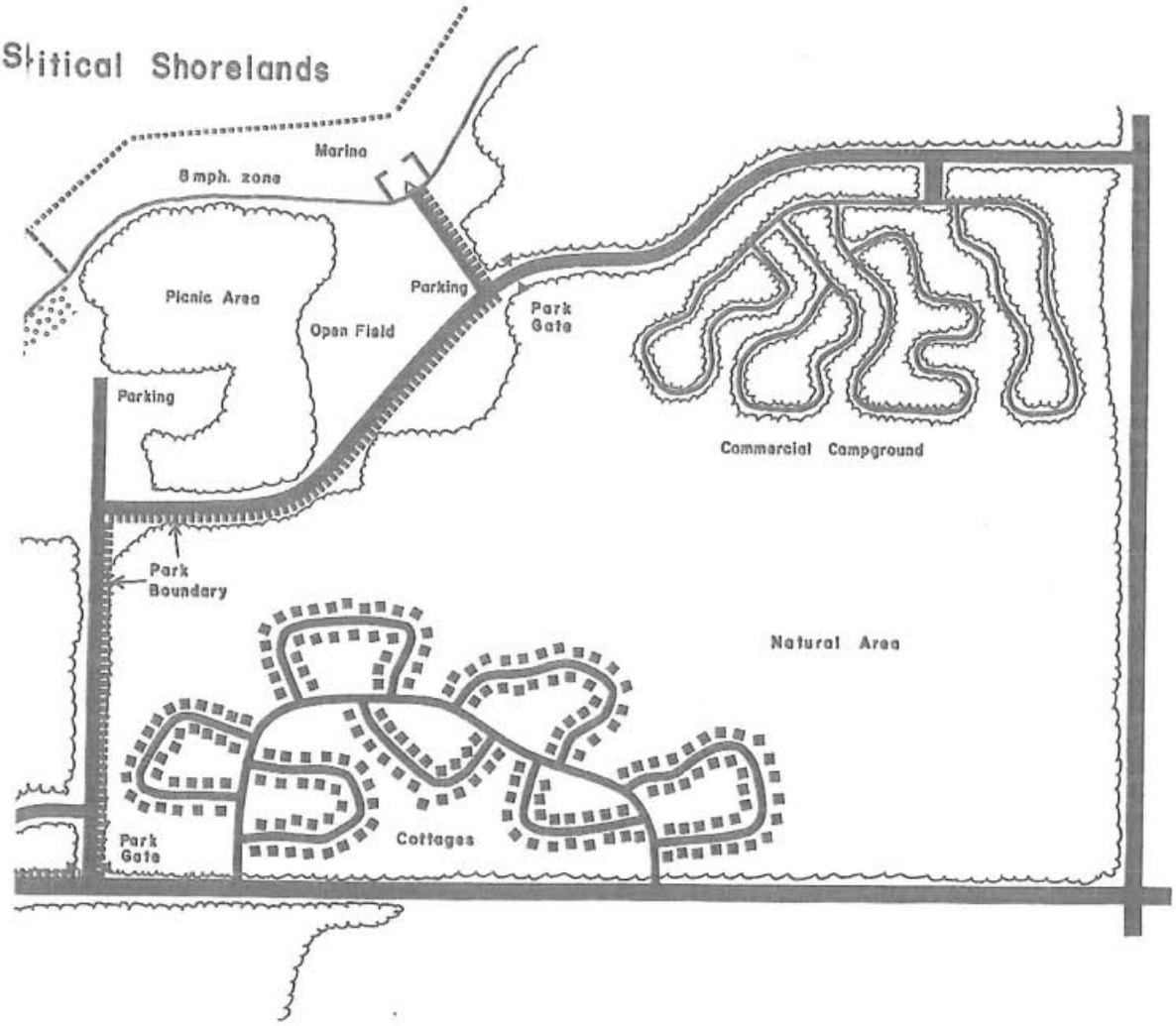
RED DEER REGIONAL PLANNING COMMISSION Jan. 77

CASE I : BEFORE - Total Private Ownership



Case II: AFTER - Public Ownership of (

RED DEER REGIONAL PLANNING COMMISSION jan. 77


CASitical Shorelands
Marina
8 mph. zone
Picnic Area
Parking
Open Field
Park Gate
Parking
Commercial Campground
Park Boundary
Natural Area
Cottages
Park Gate

RED [

Figure 3