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WINTER RECREATION EVALUATION OF



Wildland Recreation
Technical Report

Winter Recreation Evaluation of the West Kootenay Region

28

Development Plan for Winter Recreation at Champion Lakes Provincial Park

April 1977

Compiled by: Rod Howery

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SUMMARY

An evaluation of the current and future winter recreation trends in the West Kootenay region was carried out. The findings of the evaluation demonstrated that there was a need for more controlled areas for both cross-country skiing and snow-mobiling. After careful thought, it was decided that the Champion Lakes Provincial Park area best suited the needs of cross-country skiers, rather than those needed by snow-mobilers.

After the need was established, the natural resources along with the man-made fascilities were inventoried. A cross-country ski trail development plan was then drawn up.

The plan proposes a ski trail network that would offer the cross-country skier a total of 9.25 miles of skiable terrain.

Introduction

The main objective of the project is to evaluate the potential of Champion Lakes Provincial Park as a winter recreation area. In order to do this, one must look not only at the natural environment in detail, but must also look at and evaluate very carefully the need and future trends for any type of winter recreation.

The potential of the natural environment resource to provide certain recreational opportunities must be evaluated, because such an evaluation establishes the range of development that can go on. Certain types of recreation and recreational users can be eliminated from further considerations if the natural resources are not suited for these types of recreation.

Once the area is evaluated, the need for the type of recreation best suited in the area must also be evaluated. Millions of dollars have been spent in building recreational fascilities in B.C. without assessing the need and future trends for that type of recreation.

This report looks first at the evaluation of the need and future trends for certain types of winter recreation. Once the need was established, the Champion Lakes area was evaluated to see if it met this need and also what environmental impacts may occur if any type of winter recreational fascilities were developed. At the end of my report, I have included a section discussing what I feel should be done in the area and how it should be implemented, with regard to costs, extent and type of development and time involved.

Methodology

In order to evaluate the Champion Lakes Provincial Park area as a winter recreation site, I had to, first of all look at the winter recreation presently occuring in the area and also look at the future trends of these winter activities. The information I gathered when researching this evaluation was then used in deciding what type of recreation would be best suited in Champion Lakes Prov. Park.

Once the future recreation trends and needs were established, the natural environment of the park was evaluated, to see if fit the need of the future recreation trends. The flora and fauna were inventoried, the topography was examined, climatic conditions (both winter and summer) were researched and fragile areas (both flora, fauna and historical) were identified.

Once the natural environment was evaluated, constraints were researched and identified. Constraints such as money, access, climatic conditions, and environmental damage were carefully reviewed.

When all of my research was done and I had a relatively good inventory of the area, I arrived at a plan for the area. The plan consists of what I feel should be done in the area and how I feel the Provincial Parks Branch should handle the situation.

Area Description

Champion Lakes Provincial Park is located approximately fifteen miles north-east of Trail, with the surrounding communities being Castlegar, Nelson, Fruitvale, Montrose and Salmo. (see location map, following page)

The park itself is comprised of 3250 acres. It was established to give the local residents a variety of summer outdoor recreational opportunities. The park was established on March 12, 1955. The park now receives visitors from all accross Canada and the north-west United States, as well as the local visitors.

The park contains five lakes, First, Second and Third
Champion Lakes along with Kearns Lake and Bear Lake. The second and third Champion lakes are suitable for non-motorized
boat use, fishing and swimming. The first lake, while not ideally
suited to swimming, is suitable for non-motorized boat use and
fishing. Kearns lake is connected to the third Champion lake
by a steep hiking trail approximately one mile long. This lake
is suitable for non-motorized boat use except that access to the
lake is not suitable for boat transportation. The lake is also
used as a water supply to the campground and therefore the water
quality should be kept at a high level. Bear Lake is not connected
to any of the other lakes by a trail and the only access is by
bush-whacking. Fishing is good in Bear Lake while there are no
fish in Kearns Lake. There are no campsites at either Kearns
of Bear Lake but there is an old miner's cabin at Kearns Lake.

There are eighty-two single and five double overnight campsites in the park along with one sanistation and two sanibuildings, with flush toilets and sinks. Neither of the sanibuildings have showers. On the southern shore of the third lake, there is a man made beach and a beach house for changing. The beach house contains flush toilets, sinks and showers. Above the beach and beach house there is a parking lot, suitable for 180 vehicles.

The vegetation in the park is mainly Alpine Fir, Lodgepole Pine and Western Larch. There are mature stands of Cedar in the park along with some patches of White Pine.

Deer and coyote inhabit the area, along with black bear.

There are no elk or moose in the area, but small rodents such as red-squirrels, townsends chipmunks and white-footed mice are plentiful. (Flora and fauna will be discussed in detail later in the report when the natural resource evaluation is discussed.)

The park was designed and built as a summer park. There are no trails that accommodate any type of winter use although some of the hiking trails may be suited to some type of winter use. The park is used mainly from the months of May to September. Winter use in the park is at a minimum.

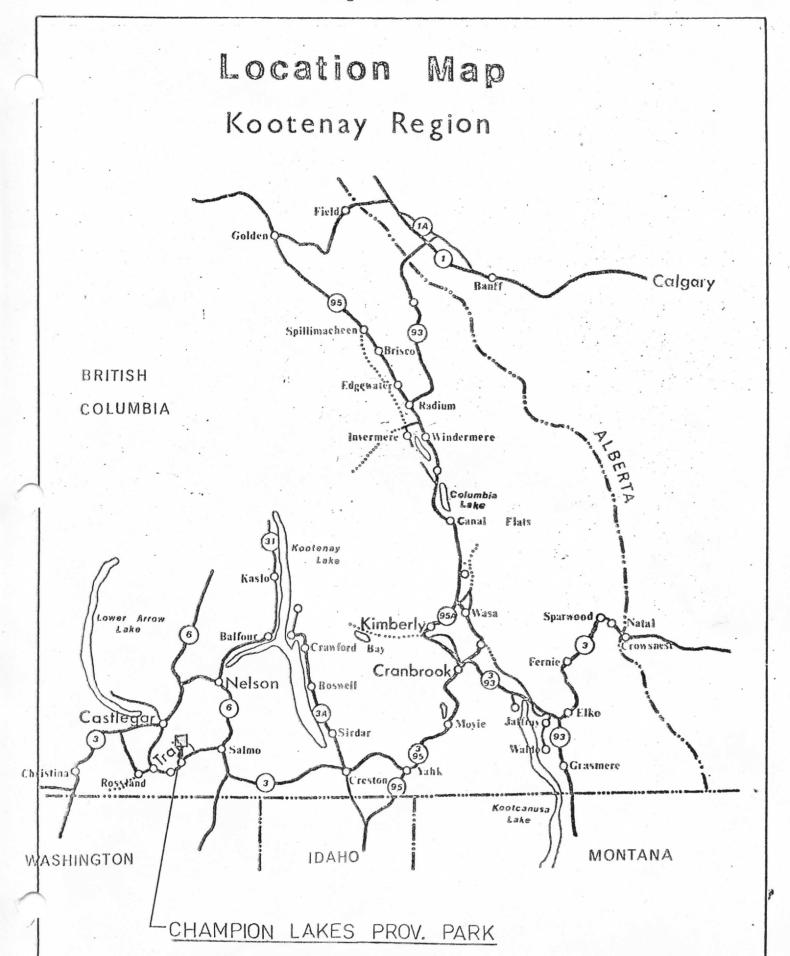
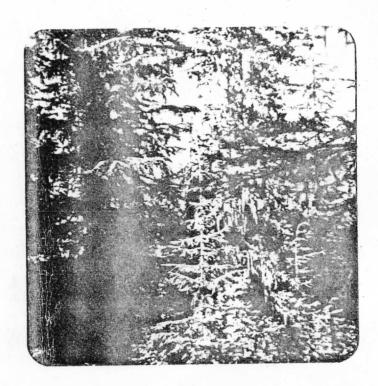


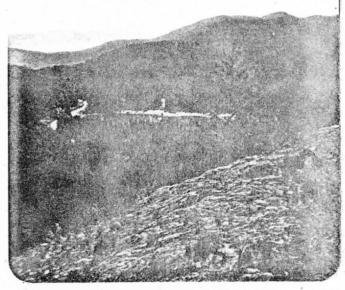
Figure 2 - Vegetation of Park

View of man-made beach on the east and south side of the third lake. Note beach house and parking area behind the beach. Also note paved access at the east end of the lake.



Vegetation north of campsite.

Note dead Alpine Fir trees - due to
the flooding of the swamp by beavers.



Vegetation north of campsite on third lake. Note Alpine Fir regen. and lichens on mature Lodgepole Pine. Also note the thickness of the regen. and understory of the forest.



Winter Recreation of the Kootenays -

Present opportunities and future trends.

i) Present Opportunities

The West Kootenay region of B.C. offers a diversity of winter recreational opportunities.

Probably the most obvious winter recreational opportunity is that of downhill skiing. There are four ski hills in the West Kootenays, the largest being Red Mountain at Rossland. The skihill at Red Mountain contains three chairlifts, a poma, a T-bar and a rope tow. The next largest skihill is located at Ymir mountain, 12 miles north-east of Nelson. Whitewater, as it is known contains two chairlifts. There is an area at Whitewater that is cleared for a T-bar and installation of the tow will probably occur in the near future. The other two skihills are located at Bluett and Salmo. These are small hills and contain only one lift apiece. They cater to the beginner more than the expert as the skihills at Rossland and Ymir Mountain cater more to the expert and high intermediate. The West Kootenay region of B.C. is probably the best equipped in all of B.C. for downhill skiing.

Snow-mobiling has caught on in the Kootenays in the last few years, but as yet there are no controlled areas for the sport.

(By controlled areas, I mean that there are no areas that are developed especially for snow-mobiling.)

Snow-mobiling is a type of winter recreation that utilizes large areas of snow covered terrain. There are many areas in this

region that are frequented by snowmobilers. The snowmobilers tend to use old logging roads and clearcuts more than the forest itself. Snowmobilers tend to be gregarious and when this occurs damage also seems to occur. The snowmobile has been criticized severely for the mechanical damage it causes to young trees and the understory vegetation. It is also known that the snowmobile compacts the snow and a severe temperature change occurs when this happens.

There is a snowmobile club in Salmo as well as Rossland. The snowmobilers use the logged areas and logging roads in the area and generally stay out of the higher elevation regions. (see map, page 10)

Snow-shoeing is another winter sport that is pursued in the W. Kootenays. Although it ranks below snowmobiling and downhill skiing in popularity, some considerations to the sport must be given. Generally, snow-shoeing is thought to be, not as much of a sport, but more of a means of travel for the fisherman, logger and hunter. The means of travel for the hunter and logger and trapper is rapidly catching on as a winter sport.

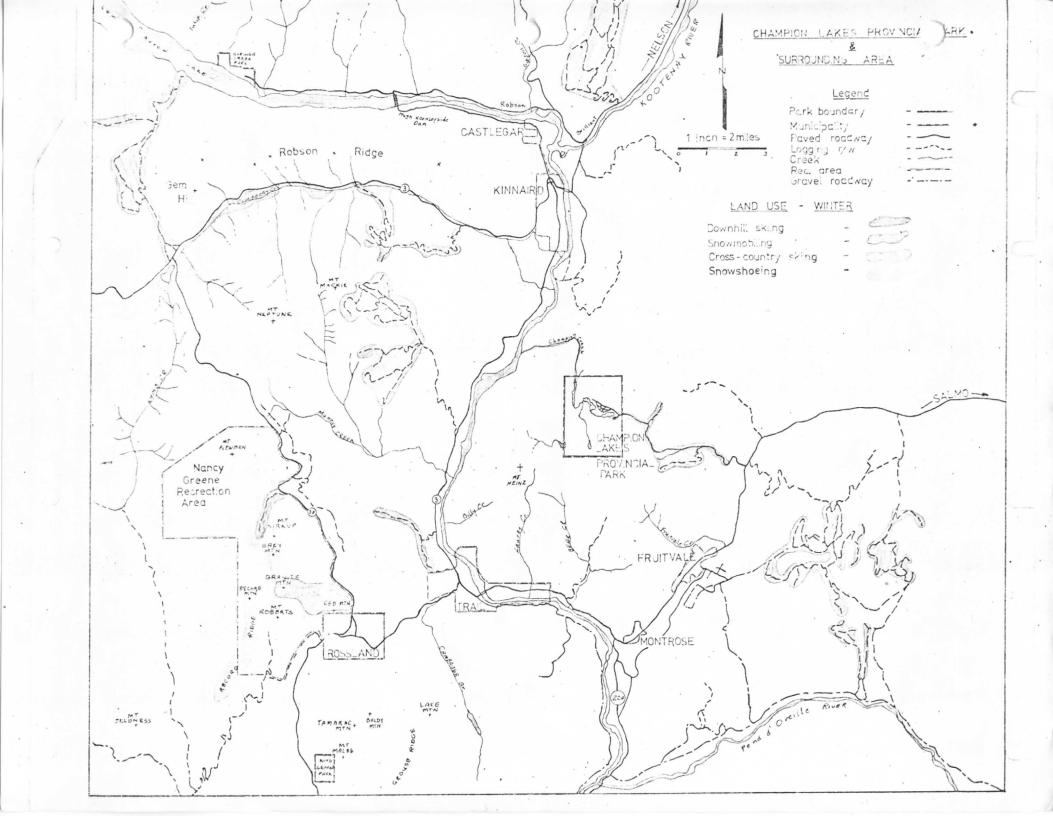
The snowshoer does not need any predesignated trail or clearing, as the downhill skier and the snowmobiler need, or prefer. All the snow-shoer needs is snow and areas to go to.

The main areas in this region that the snow-shoer congregates is the area north of Rossland, in the Nancy Greene Recreation Area, and the area surrounding the Nancy Greene Lake. (see map, page)

Cross-country skiing has caught on rapidly in the past few years in the W. Kootenays, and many other areas of B.C. as well.

The cross-country skier is in a class much like the snowshoer. The cross-country skier doesn't need special cleared out
ares and groomed hills, however the best suited areas for the
cross-country skier are areas that have designated trails.
Unlike the downhill skier, who likes and needs steep slopes,
the cross-country skier needs areas that have relatively flat to
rolling terrain. Only minimum trail fascilities are needed for
the cross-country skier. ie: a parking lot and comfort stations.

There are very few areas in this region that are highly suited to cross-country skiing. The areas that are most used in the region are the areas in the Nancy Greene Recreation Area and the areas around Nancy Greene Lake. Snow-shoers and cross-country skiers tend to congregate in these areas because there is easy access and the noise level is relatively low, compared to other areas used by downhill skiers and snow-mobilers. (for locations of areas used by cross-country skiers, see map on page 10.)



ii.) Future Winter Recreation Trends

In the past fifteen to twenty years, participation in outdoor winter recreation has surged. More and more Canadians have turned to different types of winter activities.

One of sports that has enjoyed a great increase in popularity is downhill skiing. The increase in popularity of downhill skiing began after the war, due to war-surplus ski equipment and also due to the publicity the ski soldiers of the U.S. and Austria got. 1

The popularity of downhill skiing continued to grow at a steady pace of about 8 percent per year until the late 1950's and early 1960's. In the western U.S., for example, there were 1.4 million skiers in 1955 compared to 4.3 million in 1963.² It is also noted that attendance increased in many of the resorts in Canada and the U.S. by 20 percent each year.

In Canada, and especially B.C., the increase has been relatively the same. In some later figures, the number of skiers in Canada has increased by an overall 5 percent per year from 1967 to 1972. In the period between 1967 and 1969, the increase in Canadian skiers was 16 percent. This dropped to 2.9 percent between the period of 1969 and 1972, but at present is increasing at a steady rate of about 8.3 percent per year. 3

I feel that the increases outlined above are even greater in this region. One only has to look at the new ski hills that have

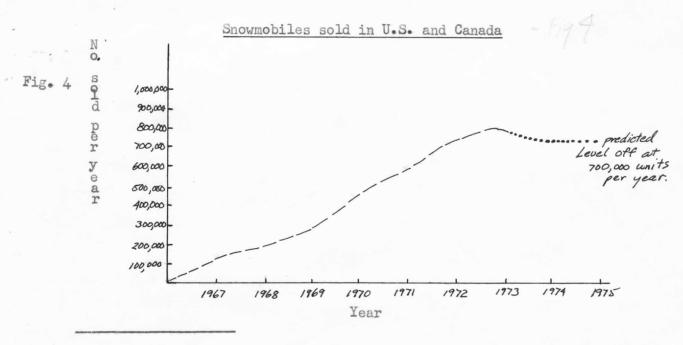
^{- 1.} Ski Down the Years, John Joy, Universal Publishing and Dist. Corporation., Copyright 1966.

^{- 2.} Jubanville, Alan., Outdoor Recreation Planning. Philadelphia, W. B. Saunders Corporation, 1976.

^{-3.} C.O.R.D., Canadian Participation in Outdoor Recreation,
-Toronto, (1970) (1972) (1976) publication.

been developed and the full parking lots in these areas and you can see that there has been great increases in skiers in this area over the past three to four years. This increase will equal or surpass the present rate of 8.3 percent that is now occuring accross Canada.

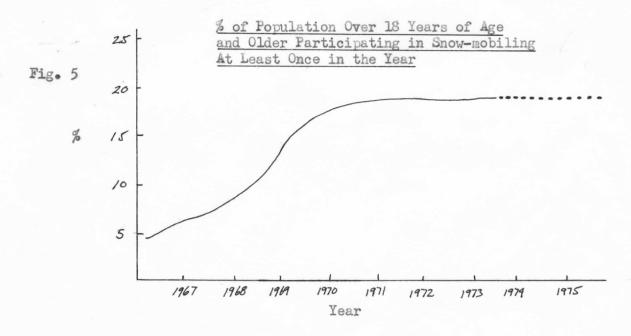
The use of snow-mobiles as recreation vehicles has increased rapidly over the last decade and a half. Snow-mobiles, as we know them today only came into existance in the late 1950's and early 1960's. Since that time, the snow-mobile has gained great popularity in both a working vehicle and recreational vehicle. In 1960, for example, sales of the snowmobile were less than 500 vehicles. In 1969-1970, the figure had reached 445,000 units sold in one year. General predictions are that snowmobile sales will level off at approximately 700,000 units per season for new sales in the U.S. and Canada.



- 1. Snow-mobiles., U.S. Dept. of Commerce, Business and Defence Services Administration., Sept. 1972.

The number of people that participate in snow-mobiling in Canada is quite remarkable. For example, in 1972, 3.7 million people, over the age of 10 years, participated in snow-mobiling. In 1975, that number had reached 4.1 million, about 20 percent of the population. It is estimated that by 1985, 4.4 million people will participate in this sport each year. (see graph, table, page.) The average rate of growth(estimated) will be 1.4 percent annually.

Another interesting statistic is that in 1972, 17.8 percent of the population, 18 years and over, participated in snowmobiling at least once. Between the years of 1967 and 1969, there was a 50 percent increase in the percentage of participants. ie: In 1967, only 7 percent of the population participated in the sport. In 1969, 14 percent of the population participated in the sport.



^{- 1.} Bureau of Management Consultants, <u>Projections of Participation</u> in Outdoor Recreation, Ottawa, 1976, P. iii

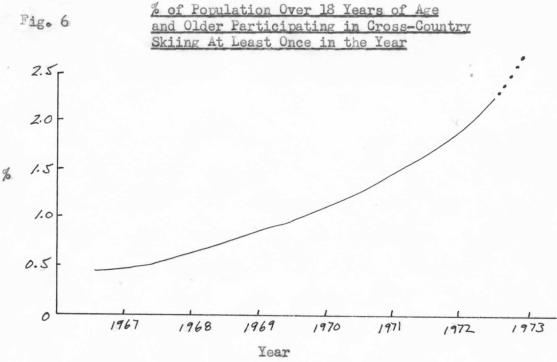
The figures that I have presented point to the fact snowmobiling will increase at an average rate of between 1 and 2 percent per year. I feel that the same will be true in the W. Kootenay
region, and that snow-mobiling will increase at a rate of between
1 and 2 percent in the area.

Cross-country skiing has enjoyed a rapid increase in popularity in the last few years. More people are turning to cross-country skiing in order to obtain relaxation and to get away from the noisy crowds at the ski hills. Cross-country skiers can enjoy the outdoors in an atmosphere much unlike the ski hills or on a noisy snow-mobile. Only the cross-country skier knows what it is like to quietly ski through snow covered trees and appreciate the quiet white splendor of winter.

In the past few years, the numbers of people that have taken up the sport is tremendous. In 1967 there were less than one percent of the population of Canada (18 years and older) participating in cross-country skiing. Between 1967 and 1969, the number increased slightly to about 0.9 percent of the population. By 1972 the number had increased to 1.9 percent of the population. This is an increase of over 100 percent. In 1972, there were approximately five hundred thousand Canadians across Canada participating in cross-country skiing. 1

In the period between 1967 and 1972, the numbers of Canadians participating in cross-country skiing had increased from approximately one hundred and twenty thousand to five hundred thousand.

^{- 1.} C.O.R.D., Canadian Participation in Outdoor Recreation, Toronto. (1970, 1972) pub.



In another study done on the growth projection of cross-country skiing, the data presented showed that in 1972 there were five hundred thousand people cross-country skiing in Canada. (over the age of ten) By 1975, this number had jumped to 1 million people, a 100 percent increase in three years. The study also projected that cross-country skiing would continue to grow in popularity at this alarming rate until 1980, when 2 million people would be participating in the sport. By 1985, the number is projected at 2.2 million. This represents an increase of 1.2 million people, participating in the sport, from 1975 to 1985. This projected figure means that one hundred and twenty thousand people will take up the sport each year for the next ten years. 1

The figures I have presented are nationwide. However, I feel the increases (percentage wise) will be equaled in the W. Kootenay region, if not more so. There are no figures for the number of

^{-1.} Bureau of Management Consultants, <u>Projections of Participation</u> in Outdoor Recreation, Ottawa, 1976., piii.

people that participate in cross-country skiing in the W. Kootenays, but more and more people are taking up the sport.

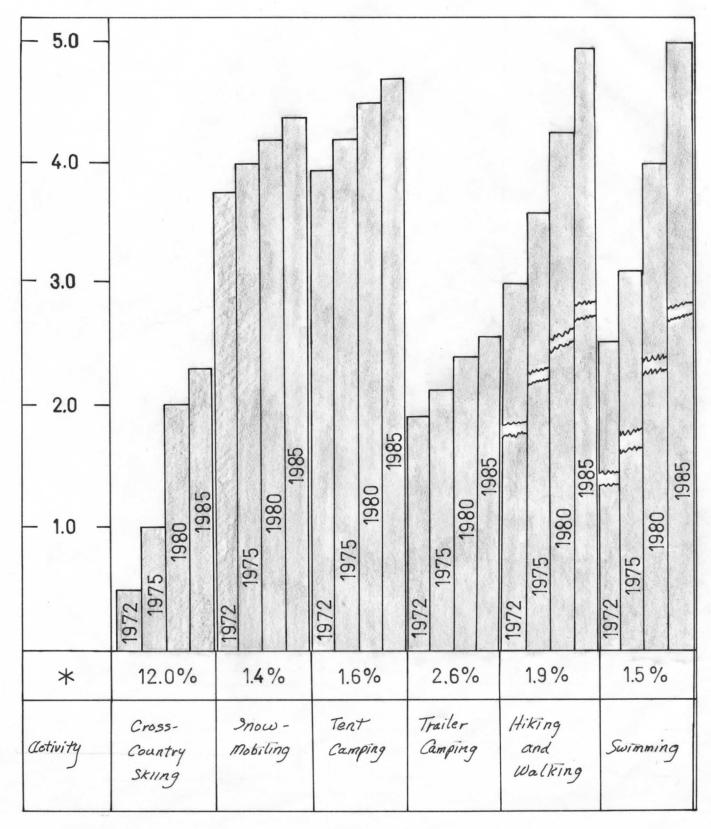
There are no areas that have been designed to accommodate only the cross-country skier. Most of the areas in the W. Kootenays that accommodate cross-country skiers are there because of some other reason, such as logging or trails designed for the hiker. The region lacks in designated and controlled cross-country ski areas.

(graph illustrating the increase and projected increases in both snow-mobiling and cross-country skiing, page /7.)

PROJECTED GROWTH IN NUMBER OF PARTICIPANTS

10 YEARS OF AGE AND OVER IN SELECTED ACTIVITIES

(Millions) Canada-wide



^{*} Average rate of growth (percent) from socio-economic effects.

iii.) Conclusion

The West Kootenay region of B.C. offers winter users a diversity of different recreational opportunities. Rapid expansion in all forms of winter recreation have led to the development of certain areas for these types of recreation. Future trends of these forms of recreation, as I have outlined previously, call for more development of winter recreational fascilities.

Downhill skiing has enjoyed a relatively good period of increased popularity. This increased popularity has been the major reason that new ski hills have been developed. Ski hills in Nelson, Salmo and Bluett have all been developed fairly recently and plans are underway to continue development in some of these areas.

To say that is possible to develop the Champion Lakes Area as a downhill ski area would be simply erroneous. The topography doesn't lend itself to the type of landscape that is needed by a downhill ski area and the B.C. Parks Branch wouldn't consider building a ski area in the park, because of the close proximity of the ski hills in Rossland and Salmo.

I feel that because of the four ski hills in the W. Kootenay region, there is no need to further develop any new areas in the region, and to discuss the feasibility of developing a ski area at Champion Lakes would be a waste of time.

The evaluation of snow-mobiling and cross-country skiing areas in the W. Kootenayshas made it clear that both these forms of winter recreation lack areas that have been especially designed and developed for these types of recreation.

Looking at snow-mobiling, I found out that there are no snow-mobiling trails in the W.Kootenays that were especially designed for the users. Also, I found that there weren't any cross-country ski trails in the region that were developed especially for cross-country skiing.

Champion Lakes Provincial Park offers suitable terrain for the development of either cross-country skirtzails, or snow-mobile trails.

Although the terrain is suitable for both types of winter recreation, I feel that there is only room for one of these types in the park. The reason I say that cross-country ski trails and snow-mobile trails can't be developed in the same area is because of the conflicts that would occur. To begin with, the snow-mobile makes a lot of noise. This is especially distracting to cross-country skiers, who like quiet and serene areas. Another reason why conflicts would occur, is because of the smell of the snow-molies when large numbers of them congegrate. This isn't as much of a problem as the noise, but exhaust fumes do smell and the cross-country skier would be unattracted to this as well. One easy way to overcome these conflicts would be to section off areas in the park for the seperate users. The park, however, is not large enough to do this.

It is plain to see that the development of trails for one or the other type of recreation in the area is feasible, but not both. However, I feel that the development of Cross-country ski trails in the park is more logical than that of developing snow-mobile trails.

To begin with, the area is rather small to accomodate snow-mobiles. It is estimated that the average snow-mobiler travels a distance of forty-five to fifty miles a day, each day he uses his snow-mobile. In order to accomodate the distance an average snow-mobiler travels in a day, on would have to build at least forty miles of trail in the park. This is not feasible, because the park only measures two miles by two and three quarter miles. (160 chains X 220 chains)

Another reason I feel that the area shouldn't be developed to accomodate snow-mobiles is because of the damage that occurs from the vehicle. Snow-mobilers, as any type of recreational vehicle users, tend to be gregarious. When large groups of these snow-mobiles occur, damage also occurs. Snow-mobiles have been critized severly for the damage they do to young trees and shrubs. It is also a known fact that the snow-mobile compacts the snow and a severe temperature change occurs in the soils. This is harmful to vegetation because freezing of the stems occurs and once the stems freeze, the plant usually dies. Once the vegetation dies, the soils loose their stability and erosion may occur. This may be useful in hydro cuts but is detrimental to the flora, consequently aesthetics are depreciated.

Another reason that snow-mobiles shouldn't be accommodated in the park is that of pollution. Undoubtfully, the snow-mobilers will use the lakes. Oil spills, if they did happen, would be harmful to the water and flora and fauna of the lakes. The lakes are used a lot in the summer, and patches of oil that would remain

^{-1.} O.R.R.V., Off Road Recreation Vehicles, Washington, Dept. of the Interior, U.S. Gov't., 1971.

until the summer would be detrimental to the summer user, be he a swimmer or fisherman.

These are the reasons I would not develop the area to accomadate snow-mobiles. The area should be developed for cross-country skiers because of these reasons.

One is that the length of trails needed by cross-country skiers is much less than that needed by the snow-mobiler. In is estimated that the average cross-country skier travels a distance of between three and four miles in an outing. To construct the trail length to accommodate this need is feasible in the park.

Another reason I feel that cross-country ski trails should be developed in the park is that very little damage occurs from cross-country skiers. The only environmental damage that cross-country skiers do is that of their fascilities. ie: the cut trails and sani-stations.

Unlike snow-mobile trails, which need to be quite wide, the cross-country ski trail doesn't need to be very wide. This is beneficial because if designed properly, the trails can be used in both winter and summer.

On the basis of the future recreation trends in the W. Kootenay region, the existing development and the size of Champion Lakes Provincial Park, I feel that cross-country ski trail development is feasible and should occur in the park.

Environment Evaluation

When planning for any type of trail development, be it summer or winter use, the natural resources of the area must be studied in detail and inventoried. When the inventory of the natural resources is complete, only then is it possible to plan the correct trail locations.

I have looked at existing fascilities, vegetation, topography, soils, historical areas, fragile areas, areas used extensively by wildlife in the park and climatic conditions. Following is a description of the natural and man-made environment of Champion Lakes Provincial Park.

i.) Existing Fascilities

There are 82 single and 4 double camping sites on the north side of the third lake. Seventy-four of these campsites have picnic tables. There are two sani-buildings in the overnight camping area, and these contain flush toilets and sinks. There is one sani-station located just east of the overnight campsite.

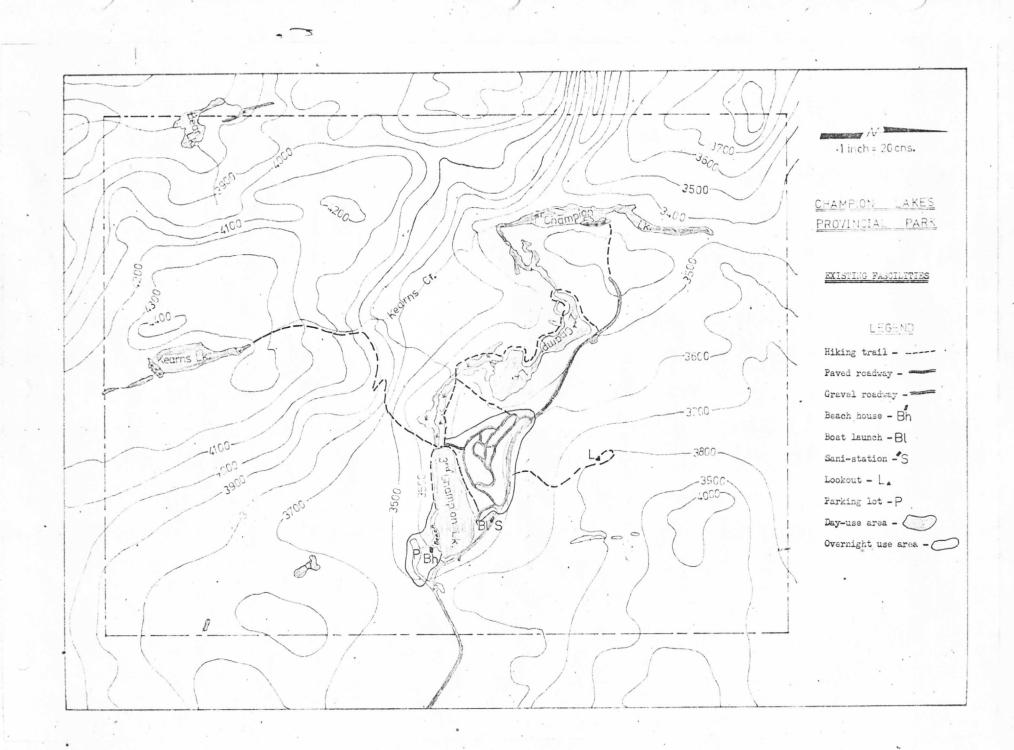
On the south side of third lake, there is a man-made beach and beach house. Located behind the beach house there is a parking lot large enough to accommodate one hundred and eighty cars. The beach house also contains sinks and flush toilets.

The park also contains one boat launch, located on the north side of the third lake.

There are 1.2 miles of paved road in the park and 1.7 miles of gravel road. There are approximately 3 miles of hiking trails in the park. The trails connect the camping area and the day-use area to Kearn's Lake and also to a lookout, stationed north of the third lake on a rock bluff. The trails also provide the summer hiker access to the first and second lakes.

The trails are of quite high quality and some portions of them could be used by the cross-country skier during the winter.

(for map of existing fascilities, see page 24.)



ii.) Vegetation

Champion Lakes Provincial Park is located within the Interior Western Hemlock biogeoclimatic zone. (dry subzone) The vegetation in the park is characteristic of vegetation in the I.W.H. Biogeoclimatic zone. The under and over-story of the park is found on moderately to well drained sites. Little vegetation, other than mosses and lichens, is found in the rocky areas. Swamp grasses and hedges are found in the poorly drained areas, generally occuring around the lakes.

a.) Overstory

Pioneer species, such as Western Larch (Larix occidentalis) and Lodgepole Pine (Pinus contorta) are dominant throughout the area, probably due to a fire history. Small stands of these species occur in the pure stand catagory, but generally they are found mixed with Douglas Fir (Psuedotsuga manzeseii), White Pine (Pinus monticola) and Western Red Cedar (Thuja plicata). The trees that exist in the park are mainly immature, being in the age class of 80-100 years old. There are a few pockets of mature Cedar and Hemlock and Balsam (Alpine Fir) in the morth-east and south-east corners of the park, and also on the south-west corner of the third lake.

Regeneration and advanced regeneration species were predominantly Cedar and Hemlock in the lower, more poorly drained areas, while Douglas Fir was the predominant regeneration species in the well to moderately-well drained areas.

Logging took place in the east section of the park and east of the boundary. This area was logged in 1956 and 1958 and is now

SELKIRK COLLEGE LIBRARY CASTLEGAR, B. C.

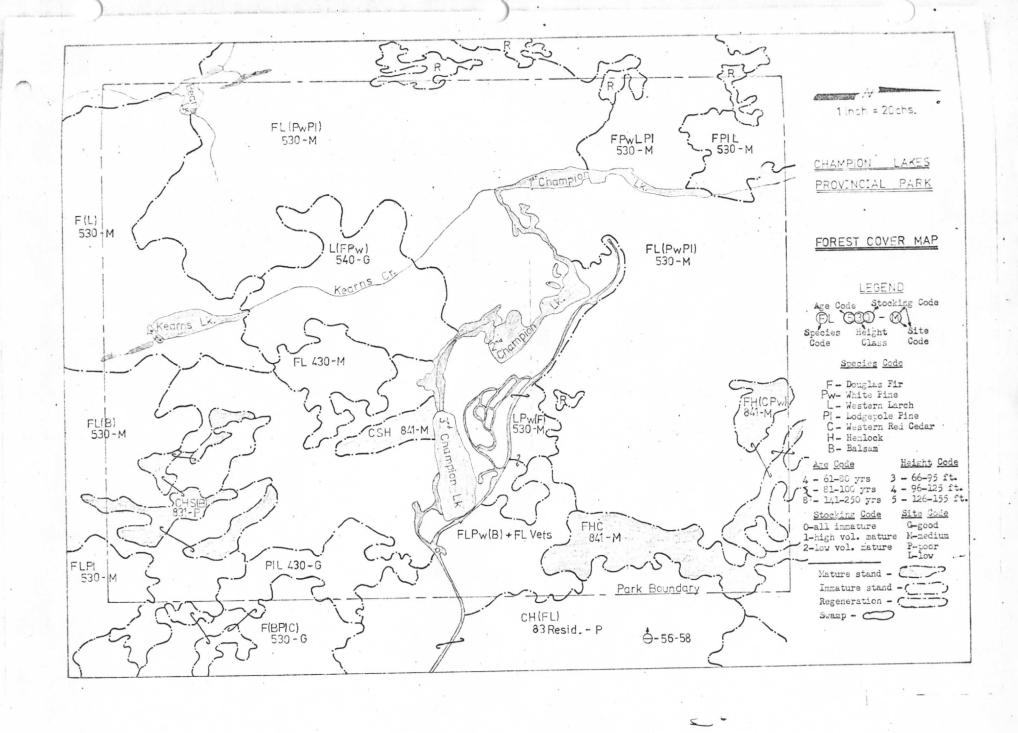
stocked with residuals and twenty year old regeneration. The regeneration is mainly Douglas Fir, Cedar and Hemlock in this area.

(for forest cover map, see map page 27)

b.) Understory

The understory of the park consists of the common species found in the I.W.H. zone. There are small areas of devils club around poorly drained areas. The other well drained areas are vegetated with willow, huckleberry, kinnikinik, oregon grape, falsebox and different types of flowers. The huckleberry, a very important food of the black bear, consists in large numbers on the north side of the third lake and west of the first lake.

There are no unique areas of understory in the park that should be preserved or avoided when developing a trail, be it a hiking trail or cross-country ski trail.



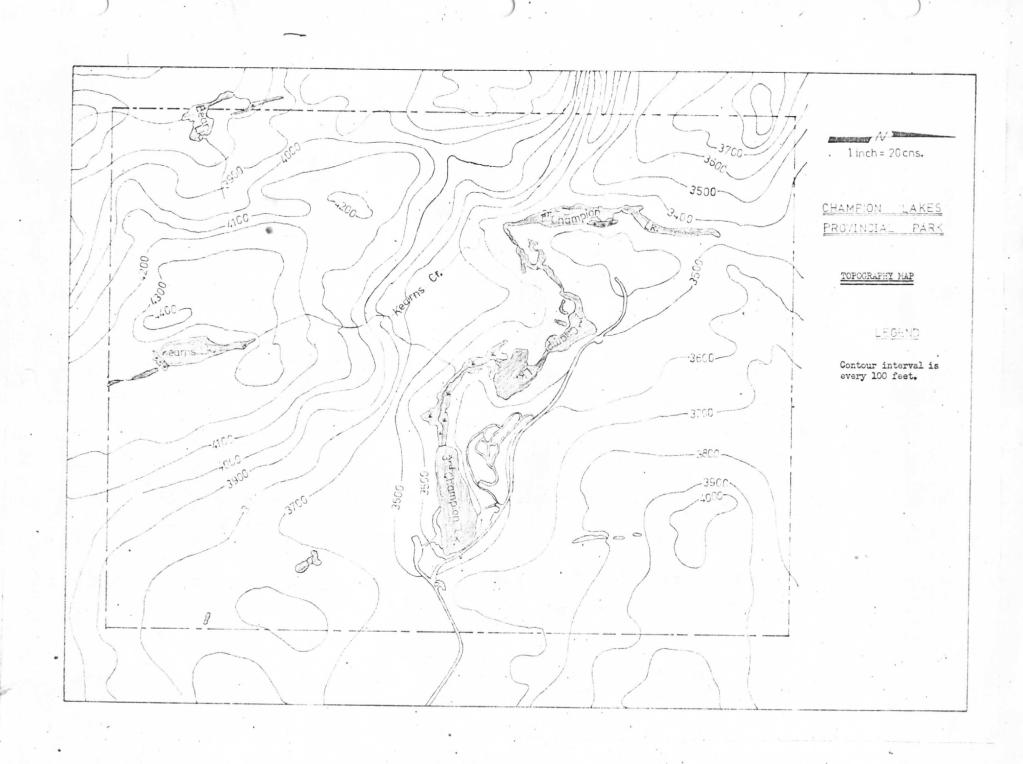
iii.) Topography

The topography of Champion Lakes Provincial Park is varied from rolling hills to steep rock bluffs.

The three main lakes are located in a basin that is relatively flat. Kearn's Lake is at a much higher elevation than the three main lakes, and the shoreline of the lake is steep. There is a rock bluff on the west side of the lake. Bear Lake is also situated at a higher elevation than the three main lakes and is surrounded by steep to rolling terrain.

The first lake has rock bluffs on the east side of it but generally has a relatively flat shoreline. The shoreline around the second and third lakes is generally flat with rolling hills adjacent to the shoreline. The shorelines around the three main lakes would pose no problem to the development of cross-country ski trails.

(for topography map, see page .)



iv.) Soils

The soils in Champion Lakes Provincial Park are quite complex.

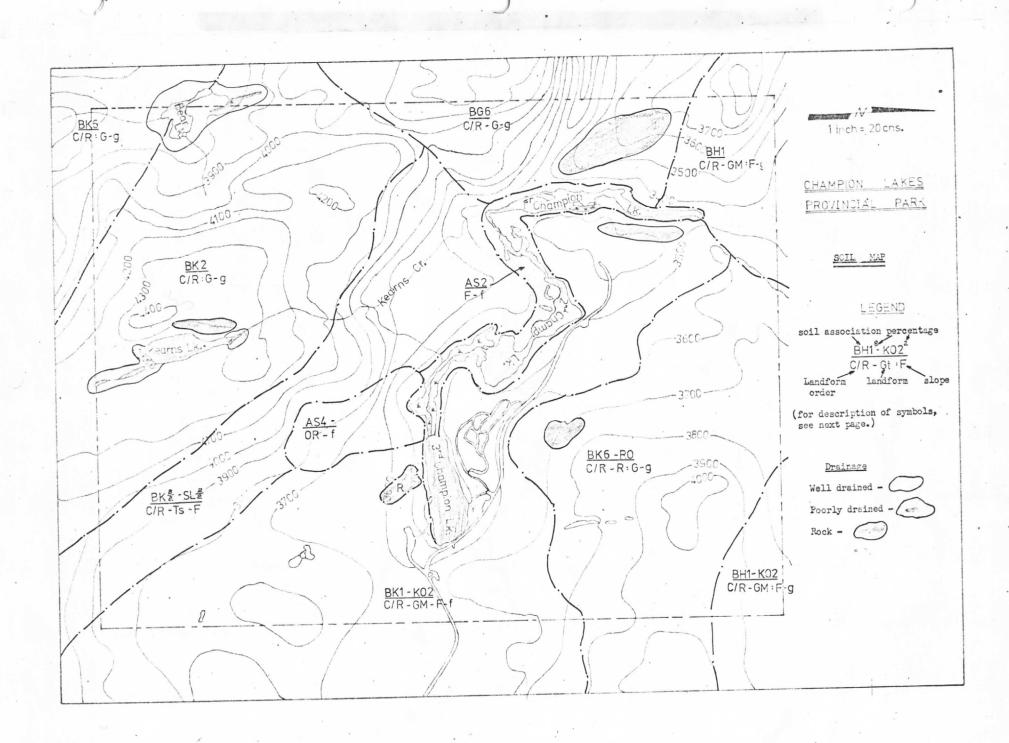
They consist of rocky, sandy soils which are well drained, to poorly drained organic soils.

The main areas of poorly drained organic soil are those areas adjacent to the lakes. These are of organic nature and are moist to wet throughout the year.

The other soils in the park are colluvial in origin and are relatively well drained. Other areas in the park, although few, are bare bedrock, with little or no soil covering them.

Generally, the soils in the park are well drained colluvial soils. The organic soils that are poorly drained occur in the valley bottoms and ravine bottoms. The well drained soils occur on the side hills and the bedrock areas occur at the tops of hills.

(for soils map, see page 31.)



TABLE/Z. Soils Symbols Fig. 12

i.Soil Association

Parent Material

BK2 (Bohan) Orthic Humo-Ferric Podzol

Colluvium over bedrock

BK6 (Bohan) Orthic Humo-Ferric Podzol

BG3 (Bonnington) Orthic Humo-Ferric Podzol Colluvial till over bedrock

BH1 (Buhl) Lithic Humo-Ferric Podzol

Shallow colluvium over bedrock

AS2 & AS4 (Avis) Gleyed Orthic Regisol

Coarse alluvium

ii. Landform Order

C - Colluvium

R - Bedrock

0 - Organic

F - Fluvial

G - Glacial Fluvial

L - Lacusterne

iii. Landform

t - terrace

b - blanket

f - fan

k - kame

h - hummocky

b - beach

d - delta

iv. Slope

	Simple		Complex	2
B - V C - g D - m E - s F - s	depressional to level very gently sloping gently sloping moderately sloping strongly sloping steeply sloping very steeply sloping extremely sloping	b c d e f g	nearly level gently undulating undulating gently rolling moderately rolling strongly rolling hilly very hilly	0-0.5 0.5-2 2-5 5-9 9-15 15-30 30-60 over 60

v.) Historical Areas

Champion Lakes Provincial Park was used in the 1900's by the animal inhabitants and a few miners. Mine shafts occur on the west side of Kearn's Lake and also south of the third lake. The only historical feature in the park is a miners cabin and barn on the west side of Kearn's Lake, on the towering rock bluff. They are run down and are rotting away but I feel they are of some significance to the area because they are the only real evidence of past users.

These wouldn't be of much significance in the winter, because they would be buried in the snow, but they still exist. No other historical sites occur within the parks boundaries.

(for map of historical area, see page 3.6)

vi. Wildlife

a. Mammals

Whitetail deer are common in the park but mule deer tend to avoid the area. The park has suitable habitat for deer in the summer, but during the winter, the deer generally move to a lower elevation. The only areas in the park that are deer wintering areas, is the area in the north-west corner of the park.

Black bear are common in the park also and there are important feeding areas (huckleberry bushes) just north of the campsite and the third lake. Black bears also hibernate in the park in the area north-west of the first lake. This area should be avoided when developing any type of trail.

Snowshoe harea are abundant in the park and many new tracks were sighted each time I visited the area in the last two winters.

I have also sighted four different animals when skiing in the area.

The Fish and Wildlife did a study in 1974 and reported that porcupines were also abundant in the park. No animals were sighted by myself when doing the study, but many signs were noticed.

Squirrels and chipmunks were also sighted in the park in the spring and fall months and these are reported to be very common. No squirrels or chipmunks were sighted by myself in the winter months as they were all hibernating. Other mammals that are present in the park are coyotes, bats, mice, shrews and weasels. These were reported by the Fish and Wildlife but other than the mice, no evidence was seen by myself of the other mammals.

Begver also exist in the park, living in the first and second lakes. I did not do a study on the beavers in the area, but from the evidence I have seen, I estimate there are two pairs of beavers in the area. Old signs were noted at Kearn's Lake and the third lake and new evidence (cuttings) were sighted at the first and second lake.

b. Birds

Fish and Wildlife estimate that there have been thirty-five species of birds sighted in the park, and that probably most of them nest there. During the winter months, very few birds were seen by myself. The birds which were seen in the park usually leave when winter comes. The lakes are unimportant to waterfowl, although they are used during migration periods.

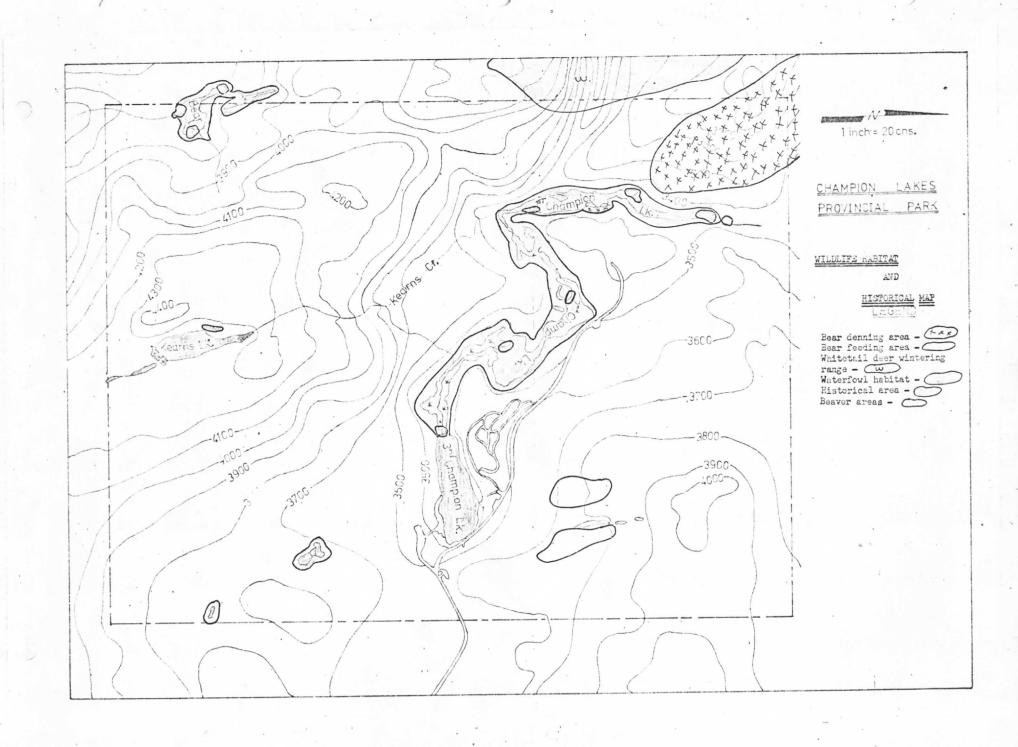
c. Fish

All three Champion Lakes have been stocked with rainbow trout in recent years. The first lake is suitable for ice-fishing and

fishing is good during the winter months. The second and third lakes also contain rainbow trout but the angle would have his greatest luck in the first lake. Other species of fish in all the three lakes consist of suckers(both longnose and largescale) and redside shiners.

Fish spawn in the narrow channel between the third lake and the second lake but this area is generally frozen in the winter months and wouldn't be a constraint to cross-country ski trail development.

(for wildlife habitat map, see page 36)

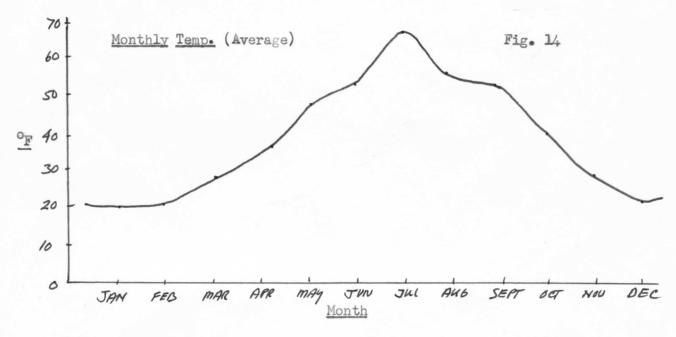


vi.) Climatic Conditions

The climatic conditions of Champion Lake Provincial Park are almost parallel to those of Rossland. The easiest way to describe the climatic conditions of the park is through graphs.

The park receives about 225 inches of snow yearly. This year, however, the park received only about 50 inches of snow.

The temperatures of the park are below freezing (average) five months out of the year.



The snowfall the park receives and the temperatures that occur are suitable for the cross-country skier. There are five months out of each year that could be used by the skiers. The snowfall is quite high each year, but would present very few problems to the cross-country skiers.

Discussion

Afetr evaluating and inventorying the natural resources of Champion Lakes Provincial Park, I have chosen areas that I feel cross-country ski trails should be developed. When choosing these areas, I tok into account the constraints the natural environment had.

The understory of the park is mainly Douglas Fir, Western Larch, White Pine and Lodgepole Pine. There are patches of mature Western Red Cedar, Hemlock and Spruce in the park and I felt the trail should go through one of these areas. The only feasible area would be the area just south of the third lake.

The soils in the park are mainly well drained soils and any trail development that takes place, should take place on these type of soils. There are areas of poorly drained organic soils and these areas shouldn't be developed. The marshes and wetland areas could be used by winter users during the winter once they are frozen. No detrimental effects to these areas would occur once they are frozen and covered with snow.

The one historical site in the park would be covered with snow during the winter and would be unbeneficial to try and use it as some form of interpretation for the cross-country skier.

The areas of winter habitat of Whitetail Deer ahould be avoided when developing any type of trail, along with the bear denning areas. The marsh wildlife wouldn't be affected by any type of use during the winter months.

Some of the existing trails in the park could be used by crosscountry skiers but would have to be upgraded and leveled out somewhat.

The areas in the park best suited for cross-country skiers are situated near and around the three lakes in the centre of the park. Very little disturbance to both wildlife and vegetation, along with the soils would occur in these areas.

Development Plan

The area in Champion Lakes Provincial Park that I have chosen for the development of cross-country ski trails is the area directly around and north of the three main Champion Lakes. Existing trails and fascilities were included in the development plan because these are suitable for winter use as well as summer use.

I have proposed seven trails in the park, three of which are currently used hiking trails. The hiking trails, with a bit of upgrading could be excellent terrain for the cross-country skier. I have also identified a location for another set of pit toilets, which I feel are needed.

I have identified areas that are suitable terrain for crosscountry skiers and that could only be used by them in the winter, and could not be used during the summer as hiking trails. No work is needed in these areas, but they play an important part of the trail network.

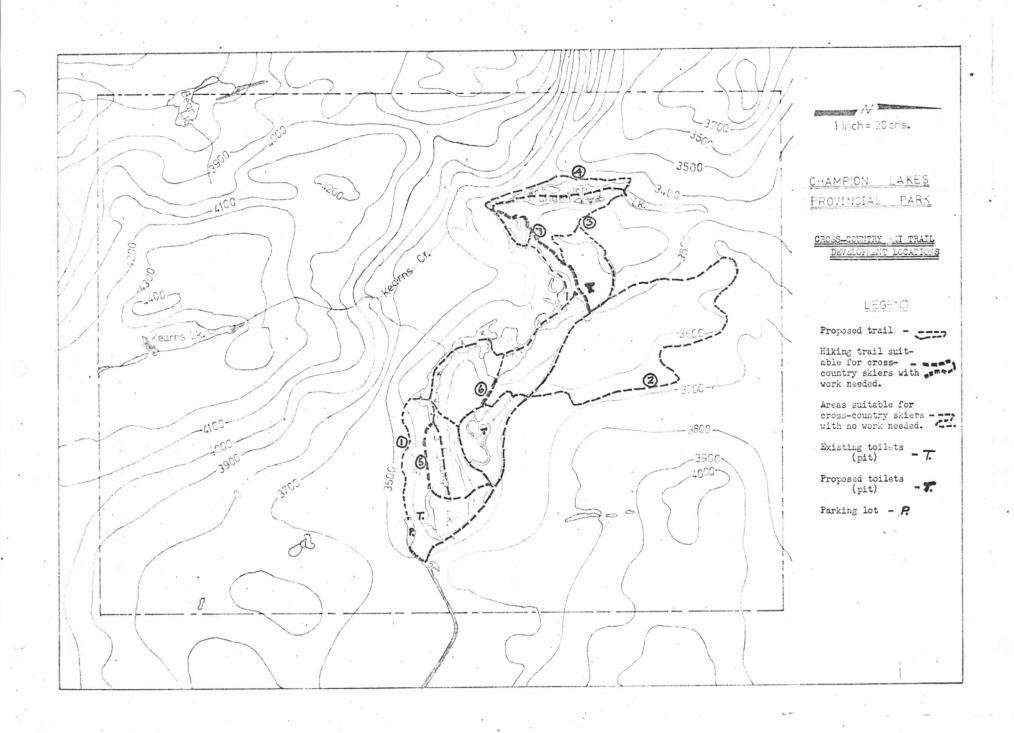
When planning and field checking the locations of the trails, I tried to get a variety of terrain and vegetation along the trail routes. I also tried to find areas, that once developed, would be beneficial to summer use.

The trails are all circular and lead back to the parking lot.

This eliminates the skiers using only one trail to go and return

on.

If the proposed trails wer developed and the existing ones upgraded, there would be 7.25 miles of cross-country ski trails in the park. There are also 2 miles of lakes that, once frozen, couls be used by the skiers. This would make a total of 9.25 miles of cross-country ski terrain.



Trail Descriptions

Trail #1.

This trail is approximately one half mile long. It was located in its position because of the mature Cedar, Hemlock and Spruce which occur just south of the third lake. It is located on well drained soils and would present very few problems in construction. There are no fragile areas or unique areas along this trail and wildlife habitat wouldn't be altered to any great degree.

Trail #2.

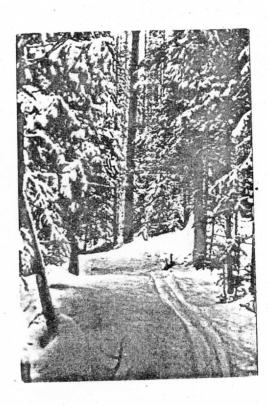
This trail is approximately one and a half miles in length and is located on well drained soils. Wildlife habitat wouldn't be affected by the trail and there aren't any fragile or delicate areas near the trail. The trail location was chosen because it offered the skiers an alternate route to the second lake from the first. It is also different from the other trails because it runs through immature Douglas Fir, Western Larch and White Pine and Lodgepole Fine.



An example of the type of vegetation that is found along the proposed location of trail # 2. (Note open type of stand.)

Trail #3.

Trail #3 was chosen because it offers a short route from the second to the third lake. It also takes advantage of a gravel road that leads towards the first lake. The trail is located on well-drained soils and wildlife habitat is not affected by this trail. The proposed trail is approximately five eights of a mile long and runs through the same immature forest that the second trail did.



An example of the vegetation found along trail #3. (Note low snowfall.)

Trail #4.

Trail #4 is located west of the first lake and is approximately three quarters of a mile long. The trail location doesn't affect wildlife habitat to a great degree, or fragile areas and unique areas. The proposed trail is located on well to moderately well drained soils. It offers the skier another means to get to the first lake.

Trail #5.

Trail #5 is located south of the third lake. It is now a hiking trail but with some upgrading, it could serve both the cross-country skier and the summer hiker. The users of the trail have access to the third lake all along the trail. It also offers a circular route, when coupled to trail #1, to and from the parking lot. This would be beneficial to the skiers who prefer shorter, faster routes, such as older peaple and younger people. The trail is also very close to the pit toilets located near the parking lot.

A small bridge over a creek draining into the third lake. Suitable to both winter and summer users.





The bridge at the west end of third lake, and the end of trail #5.

Trail #6.

Trail #6 is located east of the second lake. The trail is presently a summer hiking trail but with a bit of upgrading, could become an excellent cross-sountry ski trail. The reason I have chosen this trail to be upgraded, is that this trail would give the skier access to the second lake from the campsite.

Trail #7.

Trail #7 is an existing summer hiking trail that would be a suitable trail for cross-country skiers, if some upgrading occured. It provides access from the second lake to the first lake and doesn't affect wildlife habitat or fragile areas. I have proposed that a pit toilet be erected at the head of this trail. There is a need for this toilet fascility because of the distance a skier would have to go to use the toilet fascilities in the campsite and near the parking lot. This toilet would be quite centrally located in the trail network and would pose no problems in the way off pollution to the second lake, due to the well drained soils in the area.

Trail #7 is approximately three quarters of a mile in length.



A small creek near the trail that flows between the second and third lakes.

A portion of the existing hiking trail. (Note the closed type of overstory.)

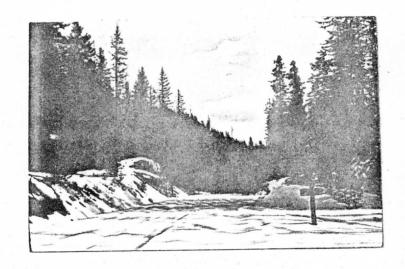


The other areas suitable for the cross-country skier are the lake areas and the camping areas. Once the lakes freeze and get covered in snow, they make excellent cross-cross country skiing terrain. The campsite area could be used by the skiers, both for camping and skiing. Firewood would have to be supplied because damage would occur to the surrounding trees if it wasn't.

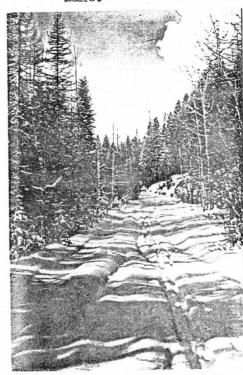
The trail network originates at the parking lot and connects the three main lakes to both the campsite area and the parking lot. The lakes are an important part of the network and they would offer not only skiable terrain, but ice-fishing.



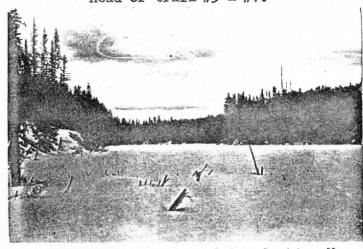
View of the parking lot just south of third lake. (Note large size.)



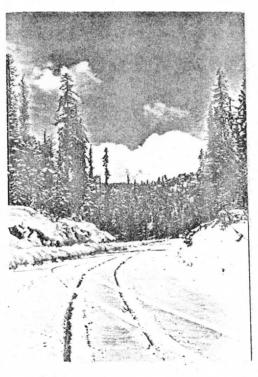
Campsite area, N. of third lake.



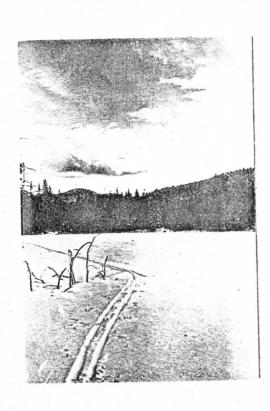
Gravel road (trail) to head of trail #3 & #7.



View of first lake, looking N.



Access road, E. of third lake.



View of second lake from trail #7.

Trail Standards

The sizes of cross-country ski trails vary from large cuts to small, narrow cuts. The type of cross-country ski trail that is best suited for Champion Lakes Provincial Park is a narrow type trail that could be used during the summer by hikers, as well as the cross-country skiers during the winter months.

The width of trail I recommend is between three to four feet wide. The trails should be constructed in the summer months, as large stumps would occur if construction took place in the winter. The trails would be used in the summer as well, and the stumps would be detrimental to the summer use.

The overstory should be left over the trail and the height of open area should be about seven feet above the snow. Therefore, limbs and branches should be removed so that the cross-country skier has enough headroom. The height I recommend that the branches be removed is between twelve and fourteen feet. This may look unpleasing to the summer user, but is a must for the skier.

Marking of the trails is very important and I would recomend that signs be placed at the head of each trail. These signs should tell the skier how long the trail is, how long it usually takes, what the skier will see and where it goes.

There should also be a large sign constructed at the parking lot that shows the total cross-country ski trail network. This sign could also show what type of terrain is available to the user, as well as telling him or her how long the trail is. Fascilities could also be identified on the sign as well.

Constraints

There are a number of constraints to the plan, but these can be overcome quite easily.

The biggest constraint is the access. The snowfall is quite heavy in an average year and the six mile access road would have to be plowed quite regularily. The parking lot would have to be cleared quite often, too, along with the areas around the pit toilets. I recommend that the B.C. Parks Branch work out an agreement with the Dep't. of Highways to keep the roadway open. I also recommend that the Parks Branch hire a person to keep the users supplied with firewood and also to keep the areas around the pit toilets open. This could be done, not on a daily basis, but possibly on a weekly basis.

The carrying capacity of the natural environment is another constraint, but I feel a very small one. The only damage to the environment would be the trails themselves. These would be hardly noticable. I have located the proposed trails in areas that are the least susceptible to damage. There are no important wildlife areas where the proposed trails are located and this holds true for the fragile areas and unique areas.

People impacts, such as those created when people run out of firewood, could be overcome if firewood was supplied to them. People tend to strip the branches off of trees if the firewood runs out.

It is very important that the pit toilets be kept open because if they weren't accessable, pollution problems may occur when the spring thaw occurs.

Discussion and Recommendations

The development plan I have proposed has taken into account the overall natural environment. I have located the proposed trails on the map using aerial photographs and through field checks, but before any development takes place, these locations should be rechecked. I have looked at erosion of the trails as the biggest problem that may occur, but with proper construction, these problems will be minimal.

I have not attempted to place a cost estimate on the proposal, as I feel it is beyond my knowledge. I can say, however, that the trail lengths that need to be constructed are approximately three and three eights miles and the length of trail that needs to be upgraded, is approximately one and one eight miles. Field checks in the exact trail locations could tell the developer what type of work needs to be done and where the problems may occur. This will give the developer an idea how long it will take, and only then can a cost be put on the development plan.

I feel that the phasing of the proposal is important. The first phase that should occur, should be the upgrading of trails # 5, 6, and 7. Once this is done, trail number 1 should be constructed. After trail #1 is completed, trails # 2, 3, and 4 should be constructed.

As I don't know the time span it would take to complete the plan,
I can't estimate the development costs. I feel it should be completed
in the phasing I have outlined above.

Conclusion

The area around the three main Champion Lakes is best suited for cross-country skiing. This area, if developed like I have proposed, would receive little impact to the flora and fauna.

The total trail length of the proposal is 7.25 miles. 4.5 of this distance would have to be construced or upgraded. The other 2.75 miles is roadway. The lakes make up the other two miles of terrain so that altogether there would be 9.25 miles of skiable terrain.

Existing fascilities in the dayuse and camping areas could be used in the winter months with only minor maintenance. Firewood should be supplied at the campsites and the toilets kept accessable.

If proper construction was carried out, the trails could be used both in the winter and summer months.

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- 2. Jubanville, Alan. Outdoor Recreation Planning, Philadelphia., W. B. Saunders Corporation, 1976.
- 3. C.O.R.D., <u>Ganadian Participation in Outdoor Recreation</u>, Toronto, (1970) (1972) (1976) Publication.
- 4. U.S. Dept. of Commerce, Business and Defence Services Administration, Snowmobiles, September 1972.
- 5. Bureau of Management Consultants, <u>Projections of Participation in Outdoor Recreation</u>, Ottawa, 1976
 Publication iii.
- 6. Dept't of the Interior, U.S. Gov't., Off Road Recreation Vehicles, Washington., 1971.

Appendix

- 1. Aerial Photographs # 268 to 272, # 27, and # 164 to 166, B.C. 7463, B.C. 7464.
- 2. Interim Policy Statement, for Champion Lakes Provincial Park, Second Draft, April 7, 1976.

INTERIM POLICY STATEMENT

for

CHAMPION LAKES PARK

Second Draft

April 7, 1976

Group Members

- M. Johnston, Chairman (Central Planning Section)
- P. Whitfield, (Regional Planner)
- G. McAdams (Planning Technician)
- R. Russell (Kokanee District Superintendent)
- G. Price (Kokanee Assistant District Superintendent)
- R. Kerr (Kokanee Park Assistant)

P. Whitfield, Regional Planner

M.E. Goddard, Regional Manager

Note

This Statement Not Approved

by the Director

ant

February 25, 1976. M. JOHNSTON.

INTERIM POLICY STATEMENT CHAMPION LAKES

OUTLINE I.

- The primary role of Champion Lakes Park is to provide diverse recreational opportunities in the form of camping, picnicking, hiking, swimming, non-motorized boating, fishing and nature study.
- The role of Champion Lakes Park in the regional park system is to B. provide recreational opportunities for the resident and transient population of the Salmo-Fruitvale-Trail-Rossland area. Champion Lakes Park offers one of the few warm water beaches in the area and is therefore the major day use outlet of this region. Champion Lakes Park represents some of the characteristics of the interior western Hemlock zone of the Columbia Maunicins Natural Region. Seiner Mourans Physicanome Suge vision of the Coungin Mourains

II. CLASSIFICATION AND ZONING

- Class Park A.
- Category Recreation B.
- Land Type Zones Recreation, NATURAL FEATURES C.
- Use Zones (see map) D.
 - 1.) Accommodation
 - 2.) Interpretation

Identified as areas of interpretive potential or interpretive preservation.

- Day Use 3.)
- Service 4.)
- 5.) Natural
- 6.) Special Use

Winter overlay for snowmobiles on Lakes (subject to research).

III. MANAGEMENT POLICIES

- NATURAL RESOURCES . A.
 - Alienations
 - (a) Watersheds -

Commitment - There is one drainage system in Champion Lakes Park, composed of the three Champion Lakes, Kearns Lake

and Landis Creek. Kearns Lake is utilized by the Parks Branch as a supply of domestic water. Downstream use of Champion Lakes water exists.

<u>Policy</u> - No alienations of water within Champion Lakes Park will be made and water quality will be maintained for downstream users.

(b) Land and Minerals -

<u>Commitment</u> - No land or minerals within Champion Lakes Park are committed.

<u>Policy</u> - No alienations of land will be considered in accordance with the Park Act.

(c) Wildlife and Fish -

Commitment - Champion Lakes Park is situated within the trapline trap-him area (details of the license have been requested), area of J. Kazakoff of Fruitvale, who has been advised by F & W Branch that any traps in the Park must Policy - Champion Lakes Park will be excluded from the trap-line area.

P. U. Parmit

(d) Forests -

Commitment - none

<u>Policy</u> - No alienation of forest resources will be considered in accordance with the Park Act.

(e) Agriculture -

Commitment - none

Policy - not applicable

(f) Historic and Cultural -

Commitment - No investigations have been made to date.

<u>Policy</u> - Any historic and archaeological sites will be protected in accordance with the Archaeological and Historic Sites Protection Act.

2.) Management

(a) Watersheds -

Kearns Lake is the domestic water supply for the Park and water quality will be/to Health Department standards.

maintained

Water quality will be maintained in the three Champion Lakes to assure preservation of existing recreational values. Water quality in Third Lake in particular will be maintained at a standard suitable for swimming.

(b) Lands -

A review of existing geometric boundaries will be made to evaluate the merit of incorporating a complete topographic unit within the park.

A corridor reserve to assure preservation of the visual resource about the main access to the park will be sought.

(c) Wildlife and Fish -

Use of firearms is prohibited within the park in accordance with the provisions of Schedule A of the Park Act Regulations 1539.

Management of Fish and Wildlife will be co-ordinated with the Fish and Wildlife Branch.

Nuisance black bears will be live trapped and removed from the park. Special management practices will be employed to reduce bear problems and management staff within the park will be given instruction in copping with bear problems.

(d) Forests and Vegetation -

Forest fires will be controlled to ensure maintenance of recreational values. Contingency plans will be developed to specify fire control techniques and evacuation procedures to be employed.

Vegetation will be managed for recreational uses within the intensive use zones. Landscaping techniques will be used where necessary in the intensive use zones. In other areas the vegetation will be preserved in its natural state.

B. PEOPLE

1.) Recreation

(a) Access -

Champion Lakes Park is accessible by a 2-way paved road, 6 miles from Highway 3. The road is not kept open during the winter, however winter snowmobile use will be reviewed.

(b) Accommodation -

A 90-unit, universal design, vehicle access campground is located on the north shore of Third Champion Lake. A sanistation is situated at the campground entrance.

Renovation of this campground to upgrade all sites is almost complete.

A 42-00 per night camping for is charged in this campine and.

2.) Park Administration

- (a) A camping fee of \$2.00 per night is charged in the campground.
- (b) A made Youth Crew of 15 is based in a permanent camp at Champion Lakes Park and has traditionally been used in maintenance and trail construction works. Activities of such crews may be modified under revised Branch Youth Crew policies.
- (c) Champion Lakes Park is presently seriously overcrowded by day users at the peak of the summer use season. A gatehouse might assist in controlling user numbers and will be given consideration at an early date.

(c) Day Use Facilities -

Facilities catering to swimming, picnicking, hiking, boating and other beach oriented activities are provided at Third Champion Lake. A two hundred car parking lot completes the day facilities.

(d) Dispersed Back Country Use -

Very little use is made of the undeveloped areas of Champion Lakes Park, due largely to the lack of a good trail system. More back country use will be encouraged through improvements to the trail system.

(e) Seasonal Use -

The park is used only during the summer months, as the long snow season precludes camper and day use during the spring and fall. Winter use at Champion Lakes Park will be reviewed.

(f) Preservation -

None identified at present; some may be defined in future.

(g) Group Use -

No group use of park facilities occurs at present. The need for group camping facilities will be investigated. Potential for group picnicking in the existing day area will be investigated.

3.) Information Provision

A complete information package to disseminate information on Champion Lakes Park and the regional park system is required.

4.) Education Programs

Park facilities are used periodically for water safety programs (Labatts Water Safety) and for school nature programs. These programs will continue as long as the demand exists. Expering cress programs is operated in the park and is utilized for maintenance and trail construction.

5.) Interpretation Programs

A Park Naturalist program has been operating at the park on an intermittant basis. An annual summer naturalist program will be offered in the future, along with improved interpretation facilities.

C. DEVELOPMENT LEVELS

1.) Current Development - (see talbes 1-3)

Use - (see user data attached and Park Data Handbook)

- (a) The largest single grouping of campers originate in the Kootenays.
- (b) Kootenay residents account for 80% of the day users and about 50% of the campers (1973 Objectives Study).
- (c) 70-80% of Champion Lakes campers stay only one night (1972 Objectives Study).
- (d) Camper use peaks during July and August and 100% occupancy frequently occurs on weekends during this period, however monthly average use does not usually exceed 70%. (1972, 1973, 1974 facility use figures.)
- (e) Tenting is the most popular camping group, with camper vehicles second (1972,1973,1974 facility use figures).
- (f) Day use peaks on weekends, when parking capacity is often exceeded. Overflow parking occurs on road shoulders and in the boat launch parking area. The resulting traffic control problems must be resolved and will be considered in an evaluation of the social and physical carrying capacity of the Lake.

2.) Quality Factor

There is a need to provide increased diversity in recreational opportunities at Champion Lakes Park. New facilities and programs will, therefore, reflect this need. Upgrading of facilities is required in the existing day area and campground to ensure that these areas will withstand high levels of use.

No expansion of existing camping facilities is required, however there is a need to provide a wider range of camping opportunities without significantly increasing the amount of use.

Development of new day facilities is required at Third Lake if the existing demand is to be accommodated. However increases in density at the existing beach cannot be tolerated and any new development will be subject to an evaluation of the social and physical carrying capacity of the Lake.

Any development of the other lakes as well as the undeveloped areas of the park must not upset the natural characteristics of the park.

Type III trails will adequately meet the development needs in the undeveloped areas of the park while Type II trails are required in the high use zones.

3.) Future Development

Development of the following facilities and programs will add to the diversity of recreational opportunities and result in the optimum development of Champion Lakes Park in terms of facilities and services provided.

- (a) An information program to disseminate information on Champion Lakes Park and the regional park system.
- (b) New day facilities on Third Lake to relieve congestion at the existing site (subject to evaluation of social and physical carrying capacity of the Lakes).
- (c) Upgrading of the existing campground to include revegetation, dust control, pavement, improved security measures and completion of the approved plan for reconstruction.
- (d) Improved trail system.
- (e) Enhancement of canoeing opportunities on First and Second Champion Lakes.
- (f) Improve nature interpretation programs and facilities.
- (g) Group and/or walk-in camping facilities (subject to an evaluation of needs).
- (h) Renovation of existing day area, including resanding the beach and renovating the changehouse.
- (i) Enhancement of the fishery resource in all three Champion Lakes (to be co-ordinated with the Fish and Wildlife Branch).
- (j) Improvements to park service facilities (i.e. storage area, park residence, staff quarters etc.).
- (k) Group picnicking facilities.

IV. FUTURE DIRECTIONS (table)

V. CONSTRAINTS

- 1.) Expansion of day facilities, development of group and walk-in camping facilities, improvement of canoeing and trail systems and implementation of winter use is subject to an investigation of the shoreland capability in Champion Lakes Park. This investigation must consider possible contamination problems in Third Lake, if use is increased.
- 2.) The potential link between Champion Lakes Park and the new Castlegar-Salmo Highway must be considered in a regional review of the supply and demand for recreation in the Castlegar-Trail-Salmo area.
- Development of staff quarters will be subject to an investigation of needs and alternate solutions.
- Continual supplementation and revision of user information is required to assure that an adequate base of information, on which decisions can be made, is maintained.

	FACILITIES AND PRIMENING				STAFF	RESOURCE NGMT	EER.LCES .		
	rewarthing & Reparements	PAIGGIT	COMPLICTION OF . APPROVED PLANS	MEN FACILITIES & PROGRESSES			RELICARCH	PLANIENS :	ENUNEERING!
1. L. J. W. J. W.	-Renovate existing day area (includes resanding beach and upgrading change-house).	-complete and up- grade existing na- ture trailsupgrade youth crew camp sewage dispo- sal systemupgrade wood stor- age area implement an in- terim program for dust control in the campground.	-completion of camp- ground, reconstruc- tion as planned.	-implementation of an information programdevelop new day facilities on Third Lakefurnish the Park with gatehouse and barriersconstruct park residence and staff quartersinstall lighting in service yardinstall underground gas storage.	-3 fee collectors -1 security -1 summer naturalist	-assess geometric park boundatiesestablish corridor reserve over main access and new Castlegar-Salmo Highway.	Champion Lakes Parkinvestigate alter- natives for imple-	-Plan new day areas. - plan trail development - cocate park residence. - interpretive plan required.	-Evaluate day area renovationsDesign for youth crew camp sewage disposal systemdasign Park residence and staff quarters.
P. T. A.O., L.CI		-landscape public buildings in the campground.		-expand trail system to include Portage/ trail to 1st Lak. Kearns Lake Trail, and Park perimeter trailexpand water storage facilities.		-initiate fishery enhancement program.	-evaluate need for additional water storageevaluate potential for winter use.	-Plan trail develop- ment.	-evaluate need and design for addi- tional vater storage.
A T AOUL O		-pave campground roads, boat launch and sani-station.		-construct Amphi- theatredevelop group and/ or walk in camping facilitiesconstruct storage building for ser- vice yard.	-1 summer naturalist		-evaluate potential and demand for group and walk-in camping.	Plan group and walk- in campground.	-Design service yard storage building: