RECONNAISSANCE
AND
PRELIMINARY RECREATION PLAN

KOKANEE GLACIER PARK

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AND
D. M. TREW

1943
Reconnaissance
and
Preliminary Recreation Plan

KOKANEE GLACIER PARK

by

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Forest Economics Division
B.C. Forest Service
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Accompanying this report and filed in map cabinet, Forest Economics Division:
1. Geological survey topographic map of West Kootenay region showing park and road system. Scale 4 miles = 1 inch
2. Geological survey topographic map of Park showing trails and main areas of recreational value. Scale 40 chains = 1 inch
3. Two detail maps of Kokanee and Kaslo Lakes.
4. Available but not submitted with the report, the Forest Cover air survey maps of the Slocan and part of the West Kootenay drainage.
Preface

The Selkirk Mountain Range lies within the great northern loop of the Columbia River and extends southward to beyond the International Boundary, a distance in Canada of 250 miles. This mountain system comprises some of the most scenic alpine territory to be found anywhere. From the air the region looks like a veritable "Sea of Mountains" with the peaks and ridges rising like waves one after another as far as the eye can see. Kokanee Glacier lies roughly in the center of this mountain range and in 1922 an area of approximately 100 square miles surrounding this outstanding feature was reserved for the permanent use and enjoyment of the people of British Columbia.

Kokanee Glacier Park offers exceptionally good alpine scenery, hiking and climbing to meet a variety of tastes, potential skiing the year round, fishing, picnicking, swimming, and excellent opportunities for geological or botanical observations. Park-use at the present time is limited to the hardy hikers due to the difficult access by trail, but a preliminary investigation indicates that it is quite feasible to build a road up to Kokanee Lake from the South. This access would place the Park within an hour's drive of Nelson and therefore accessible to a considerable concentration of population. With the construction of such a road at least a part of the park would be within reach of a week-end outing for the whole family.

The report which is presented here is the result of a preliminary reconnaissance made in the summer of 1943 by Messrs. Lyons and Trew. This will serve as a foundation for future development of the park and as public use demands it, more detailed surveys will be necessary. The initial road construction recommended would appear to be a project that might well be included in any Rehabilitation Program that may be undertaken.

F.S. McKinnon
FORESTER
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Location</td>
<td>1.</td>
</tr>
<tr>
<td>II.</td>
<td>Park Name and Date of Establishment</td>
<td>1.</td>
</tr>
<tr>
<td>III.</td>
<td>Park Boundaries</td>
<td>1.</td>
</tr>
<tr>
<td>IV.</td>
<td>Description of Area</td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td>(a) Topography</td>
<td>1.</td>
</tr>
<tr>
<td></td>
<td>(b) Cover</td>
<td>5.</td>
</tr>
<tr>
<td></td>
<td>(c) Geology</td>
<td>6.</td>
</tr>
<tr>
<td></td>
<td>(d) Climate</td>
<td>6.</td>
</tr>
<tr>
<td></td>
<td>(e) Scenic Appearance</td>
<td>7.</td>
</tr>
<tr>
<td>V.</td>
<td>History</td>
<td>7.</td>
</tr>
<tr>
<td></td>
<td>(a) Origin</td>
<td>7.</td>
</tr>
<tr>
<td></td>
<td>(b) Mining</td>
<td>8.</td>
</tr>
<tr>
<td></td>
<td>(c) Logging</td>
<td>10.</td>
</tr>
<tr>
<td>VI.</td>
<td>Access to the Park</td>
<td>10.</td>
</tr>
<tr>
<td>VII.</td>
<td>Recreational Potentialities</td>
<td>13.</td>
</tr>
<tr>
<td>VIII.</td>
<td>Public Use of Recreational Facilities</td>
<td>17.</td>
</tr>
<tr>
<td>IX.</td>
<td>Game and Fish</td>
<td>17.</td>
</tr>
<tr>
<td></td>
<td>(a) Game</td>
<td>17.</td>
</tr>
<tr>
<td></td>
<td>(b) Fish</td>
<td>18.</td>
</tr>
<tr>
<td>X.</td>
<td>Outline of Proposed Developments</td>
<td>19.</td>
</tr>
<tr>
<td></td>
<td>(a) Roads and Trails</td>
<td>19.</td>
</tr>
<tr>
<td></td>
<td>(b) Picnicking, Camping and Commercial Sites</td>
<td>20.</td>
</tr>
<tr>
<td>XI.</td>
<td>Improvements: Details of Existing and Proposed</td>
<td>20.</td>
</tr>
<tr>
<td></td>
<td>(a) Roads</td>
<td>20.</td>
</tr>
<tr>
<td></td>
<td>2. Kaslo Road</td>
<td>22.</td>
</tr>
<tr>
<td></td>
<td>(b) Trails</td>
<td>25.</td>
</tr>
<tr>
<td></td>
<td>1. Molly Gibson to Kokanee Lake Trail</td>
<td>25.</td>
</tr>
<tr>
<td></td>
<td>4. Trails to Kokanee Glacier</td>
<td>28.</td>
</tr>
<tr>
<td></td>
<td>5. Esmeralda Trail</td>
<td>28.</td>
</tr>
<tr>
<td></td>
<td>(c) Picnic Grounds and Camp Sites</td>
<td>28.</td>
</tr>
<tr>
<td></td>
<td>(d) Commercial Concession</td>
<td>30.</td>
</tr>
<tr>
<td></td>
<td>(e) Parking Grounds</td>
<td>30.</td>
</tr>
<tr>
<td>XII.</td>
<td>Protection</td>
<td>30.</td>
</tr>
<tr>
<td>XIII.</td>
<td>Park Administration</td>
<td>31.</td>
</tr>
<tr>
<td>XIV.</td>
<td>Organization of Development Program</td>
<td>32.</td>
</tr>
<tr>
<td>XV.</td>
<td>Park Survey and Available Data</td>
<td>32.</td>
</tr>
</tbody>
</table>
KOKANEE GLACIER PARK

Class "A"


I. LOCATION: Situated in the Kootenay District between Slocan Li.
Kootenay Lake this park is a square area of ten by ten miles stra.
the 9,000 feet high Kokanee Glacier and adjacent Sawtooth range.
southern boundary is some seven miles north of the West Arm of Koo.
Lake and twelve to fifteen miles northeast of Nelson.

II. PARK NAME AND DATE OF ESTABLISHMENT: The park area was reser.
order in council on the 7th of February, 1922, and gazetted as "Ko.
Park". This was changed to "Kokanee Glacier Park" on June 27th, 1

III. PARK BOUNDARIES: The gazetted description of the boundaries.
follows: "Commencing at a point one mile west of meridian 117° 15
three miles south of 49° 46'; thence 10 miles in an easterly direc.
thence 10 miles in a northerly direction; thence 10 miles in a wes.
direction; thence 10 miles in a southerly direction to the point of
commencement."

These boundaries well encompass the whole of the area of
standing scenic and recreational value and there is no need from a
point of view to extend them, as has been proposed on various occa.
In fact, a park of four miles square would be sufficient to cover a
the valuable park area.

IV. DESCRIPTION OF AREA:

(a) Topography: The park is situated in the Slocan Group
Selkirk Range in a region of rugged mountain peaks and ranges rising
deep narrow valleys to elevations of 8,000 and 9,000 feet.

View from Emerald Peak - Kokanee Snowfield
within the rugged Selkirk Range.
Kokanee Glacier with its large expanse of snow field, and the long ragged Sawtooth Ridge, which shelters on its north side the Woodbury Glaciers, form the hub of a series of creeks radiating in all directions. The most important of these are: Coffee Creek and Woodbury Creek which flow east into Kootenay Lake; Keen or South Fork Creek flowing northeast into Kaslo River; Enterprise or Ten Mile Creek and Lemon Creek which run west into Slocan Lake and River respectively and Kokanee Creek the outlet of Kokanee Lake flowing south to the West Arm of Kootenay Lake.

A rather characteristic feature of most of the valleys is that they rise gradually from the lower altitudes only to end up in basins surrounded by sheer cliffs, steep sidehills or glaciers, known geologically as cirques. The exception to this is the Kokanee Creek Valley which rises gradually to Kokanee Lake and beyond to the broader "suspended" valley in which lie Keen, Garland and Kaslo Lakes.

Lakes can be found at the headwaters of most of the creeks and many small pools are scattered along the creeks within the higher areas, mostly all due to Glacier action.

Within the central main area of the park the more important are: Kokanee Lake, about ½ mile long, wedged between a steep rock wall on the east side, and a crumbling bluff and large boulder rock slide on the west shore. Its north end rises to an attractive open meadow forming the bottom of a rounded valley.

Kokanee Lake - Looking back from the trail over the divide to Kaslo Lake.
North of Kokanee Lake beyond the low Kokanee Pass, Keen and Garland Lakes are smaller, but are very attractive in typical alpine setting. Kaelo Lake, slightly beyond has been a pretty lake, but is now spoiled by its burnt and barren surroundings.

The Sapphire Lakes are a chain of pools and two small lakes at the headwater of Lemon Creek before it spills down into the cirque at the head of the Valley. The lower lake only is surrounded by alpine vegetation and scrub trees. Above it the shallow valley remains under snow a great part of the year.

The lower and prettiest of the Sapphire Lakes.

Sunset Lake on Woodbury Creek, and Grey Eagle, Lendrum and Nalmet Lakes on Coffee Creek are inaccessible from the main area. Most of them are accessible, however, by old mining trails. They have been stocked with fish and are frequently visited by fishermen.

The Joker lakes in the bottom of a deep cirque are directly fed by glacial streams carrying the finer particles of glacial erosion. Moraine deposits are still being piled on the rim of the cirque by a tongue of the glacier.

Kokanee Glacier, the largest of the two in the park, covers about two square miles, of which roughly one square mile is snowfield throughout the year. Except for the odd unusual summer, snow conditions are good the year round.
The muddy Joker Lakes at the foot of Sawtooth Range. Moraine deposit accumulating in the lower right foreground. Courtesy - Mr. P.H. Hoskins.

Crisp "corn" snow in September, "on top of the world".
Although the general movement of the ice is north eastward down into the tributaries of Keen and Coffee Creek, the snowfield is broken or diverted by ridges, two of which, the Battleship and Giants Kneecap, protrude from the ice. These ridges form basins which offer safer skiing for amateurs than do the open slopes which extend down to the ice flows. In the summer months the snow has the typical "spring" or "corn" snow composition so prized at ski resorts. This surface is also excellent for walking and hiking.

(b) Cover: With a minimum elevation of 4,000 feet, only a few narrow strips of timber extend up the valleys within the park area. Engelmann spruce and balsam or alpine fir are the predominant species with hemlock, fir, lodgepole pine and larch found in patches or scattered throughout the area. There is no very definite timberline but the forest types of any value are confined by rocky sites, slides and steep sidehills to the bottom of the valleys. Beyond this, scrubby spruce, balsam and larch extend in small patches of scattered knarled trees up to 7,000 feet.

Except for this scattered scrub there is little other vegetation of any size. Dwarf huckleberry, azaleas, alpine flowers and grass form patchy carpets amongst the rock slides and boulders of all sizes.

Several fires have burnt at various times within the park. The worst, and most noticeable, left a forest of dead trees around Kaslo Lake, down Keen valley and into the higher slopes of Enterprise Valley.

The 1931 fire up Keen Creek and around Kaslo Lake left this forest of snags to mar the scenery.
(c) Geology: The park area and most of the surrounding country is composed of fairly uniform porphyritic granite.

The valleys are narrow, from 2,000 to 3,000 feet deep with steep often sheer walls. Throughout the centuries water and frost have slowly eroded the face of these high cliffs creating rock-slides which piled up at the base. The top valley in which Kokanee and Kaslo Lakes lie still maintains the broad shallow appearance of recent glacialiation.

The mineral deposits are chiefly mineralized fissure-veins, mostly of silver, lead and zinc ores with small quantities of gold.

(d) Climate: The Kootenay region lies within the Interior wet belt, characterized by moderate precipitation without excessive temperature variations. However, since the park lies some 5,000 feet above the main valleys it has the characteristic precipitation and temperature variations of high altitudes, that is, heavy snow falls, from 5 to 10 feet, lingering well into the summer and extremes of temperature even in daily variations. Although there is usually a tempering summer breeze, the sun's rays are hot due to the lack of overhead haze.

Low temperatures, even frost can be expected in summer with below or near zero weather in winter.

Under 5 to 10 feet of snow, the upper valley becomes a vast winter sports playground.

Courtesy - Mr. P.H. Hoskins.
(e) Scenic Appearance: The scenic value of this park lies in its ruggedness, the scenic vistas across a sea of mountain peaks and ranges, and the attraction of the impressive glaciers and snowfields. Scattered small lakes in their rugged mountain setting highlight the beauty of the surroundings.

During the fall and particularly in September, the colours of the alpine flora are very vivid and contribute greatly in ameliorating the desolation of the burnt area around Kaslo Lake. At this time, the huckleberry and azalea spread patches of red and yellow along the mountainside, interspersed with bright golden larch.

The broad shallow valley north of Kokanee Pass in which lies Keen and Garland Lakes amidst their alpine setting, contrasted by Kaslo Lake in its burned desolation.

V. HISTORY:

(a) Origin: The first recorded request for a park reserve around Kokanee Glacier was made in January, 1915, by the Kaslo Board of Trade. Although apparently favourably received, no action was taken because of lack of survey data in that area.

In 1921 the request was renewed by petitions from Kaslo, Nelson and surrounding communities, which resulted in the Kokanee Park being reserved as of February 7th, 1922. In June, 1924 the park was approved and named Kokanee Glacier Park.
In 1936 the Nelson Board of Trade suggested that the Dominion Government take over the Park for development. This request came at a time when the Dominion Park Service was already overtaxed, so no action resulted.

In 1937, 1938 and 1939 a Y.M.F.T.P. project started improvement work on the existing Kokanee Creek road and extended the road a short distance beyond the Molly Gibson mine site.

(b) Mining: There has been much prospecting and mining throughout the region and claims have been staked even on the highest peaks. Access to all parts of the park was made possible by old mining roads and trails, most of which were sufficiently well built to withstand several years abandonment. Although there is little mining activity in the region at present, considerable prospecting was carried out in the early part of the century.

Some of the more important mines in the park are the Molly Gibson, the Joker and the Smuggler mines. Outside of the park on the Kaslo road are the Cork-Providence, the Silver Bell and the Enterprise mine on Enterprise Creek.

The Molly Gibson mine is half way up the hillside to Esmeralda Peak. It was linked to the Molly Gibson Mill at the end of the present Kokanee Road by an aerial tramway reported to have the largest single span in the world, being slightly short of a mile long. At present only part of the cable and a few wooden towers remain. The first recorded shipment of ore from this mine was in 1890 and the last in 1932 with intermittent operations throughout this period. The mill had a concentrator capacity of 100 tons, handling mostly silver, lead and zinc ore.

The Joker and Mansfield prospects are in the Joker Lake basin at the head of Keen Creek. Several adits and shafts some 200 to 300 feet long were driven into the rock above the lakes, but no shipments of ore have been made. Gold has been revealed in some assayed samples.

The Smuggler claim is on one of the proposed trails to the Glacier slightly below the ridge leading onto the snowfield. There are three adits, still partly accessible although probably dangerous, and several open cuts which offer a fair idea of mining and exploration procedures in this region. This claim is reported to have produced 14 tons of silver-lead ore yielding 276 ounces in silver and 65% lead. The lode system is believed to be linked with the Molly Gibson claim.

Part of the old mine camp is still standing on a broad ledge some 300 feet in elevation below the main workings. From the fact that all the cabin timbers and mine props had to be carried up the mountainside along with other necessary equipment, it is easy to realize the cost and difficulty of prospecting and mining in this region.
Remnants of the Smuggler mine camp, high up on the mountainside above the upper valley.

The lower end tower of an aerial tramway as seen from the Kalso Road.
Other mines outside the park are the Cork-Province, Silver Bear and Silver Bell on or near the Kaslo road in Keen Creek Valley. The Cork-Province mine was last reported working in 1929. The mill and camp buildings are still standing and in fair condition.

The Silver Bear and Silver Bell are located further up the Keen Valley. The lower tower of a fully rigged tramway system stands close to the road and offers a point of interest to visitors. None of these mines are working at present.

The only other mine likely to be noticed by visitors to the park is the Enterprise mine and mill situated 5 miles up Enterprise (10 Mile) Creek at the end of the road. This mine has been operated at intervals since 1894, and is in operation at present. Its main production is silver, lead and zinc concentrates.

Many other mines, mostly abandoned, are scattered throughout this region. Many of the old diggings and adits stand out on the mountainside, marked by the mine dumps outside the entrance to the tunnels and adits.

(c) Logging: To date no logging has been carried out within the park. A truck logging operation is working up Lemon Creek outside the boundaries and is cutting amongst other things valuable "match-stick" white pine.

VI. ACCESS TO THE PARK: Although Kokanee Glacier Park occupies the center of a rough rectangle of roads, its high location in rough country makes it difficult of access. The main centers on these highways are Nelson, Kaslo, New Denver and Slocan City.

At present only two roads lead within the park boundaries, but both end at least three miles from, and 1,500 feet below, the lowest point of attraction.

The Kokanee road takes off near the mouth of Kokanee Creek some 12 miles from the Nelson ferry crossing, and climbs 3,000 feet in 9 miles to the Molly Gibson Mine site. Although it has been improved and repaired in recent years it still has many rough, steep stretches and poor bridges.

The Kaslo road, entering the park from the north, is mainly used for access from Kaslo. It leaves the Kaslo-New Denver road approximately 5 miles west of the former city and follows up the south fork or Keen Creek for 15 miles to the old Joker mill site. The road rises at a very easy grade throughout its entire length and although somewhat narrow in places, it is in fairly good condition. It is occasionally blocked by fallen trees and slides.

These two roads are linked together by a trail which climbs from
the Molly Gibson mine, the terminus of the Kokanee road, up to Kokanee Lake and over the low Kokanee Pass down to Kaslo Lake.

![View down Kokanee Valley from the trail beyond the end of the road.](image)

From here it avoids the steep drop into Keen Creek by turning east through the Slocan Chief Basin and gradually switchbacking down between Keen and Joker Creeks to the head of the Kaslo road.

There are no other roads entering the park but several logging and mining roads afford access by car to within hiking distance and are linked by trail to the Kokanee-Kaslo trail or other points of interest.

The more important of these are as follows:

The Enterprise or Ten Mile Creek road and trail allows a 5 mile drive by car over a narrow, rough and occasionally steep mining road which ends at Enterprise mine. Beyond here an over-grown wagon road, once used to supply the old mines scattered along the sidehill, continues up the valley. Through neglect, it can barely be called more than a trail, and as such follows up the valley some 10 miles through the rock slides around Tenal Lake and over Enterprise Pass down to Kaslo Lake.
Teanal Lake at the head of partly burned
Enterprise (Ten Mile) Creek, from Enterprise Pass.

The Duhamel-Lemon Creek road leaves the West Arm highway 5 miles beyond the Nelson ferry crossing. It is used and maintained by a truck logging operation and is in very good condition with many passing points. In climbing 11 miles the road skirts two small lakes as it nears a low divide into the Lemon Creek watershed and then follows up this creek to within 1/2 mile of the park boundary. From here an old pack trail continues up the creek and finally climbs a deep, steep walled cirque to the Sapphire Lakes and Lemon Pass. Access to the Kootenay and Kaslo Lakes is fairly easy from here.

A secondary trail up Nilsik creek branches off from Lemon Creek approximately 1/4 of a mile within the park boundary, and climbs up the north sidehill to an old mine site. The Lemon Creek road and trail is one of the more difficult means of access to the park. There are only three miles of road leading from the main highway 5 miles south of Slocan City, and then 4 to 5 miles of trail over an old overgrown wagon road to join the Duhamel Creek road as it enters Lemon Creek. Several bridges on the trail are either out or in poor condition.

Although trails exist up Coffee and Woodbury Creek, they are seldom used except by a few fishermen. Their only value is from a protection
standpoint since the area they cover is barred from the rest of the park by the Glacier and Sawtooth Range.

The Coffee Creek trail is said to be in very poor condition while that up Woodbury Creek is still passable and more commonly used. Queens Cup Basin with pretty Sunset Lake is accessible by a side trail up Pontiac Creek.

Pretty Sunset Lake, in Queens Cup Basin on Woodbury Creek.

Courtesy - Mr. P.H. Hoskins

VII. RECREATIONAL POTENTIALITIES: When determining the recreational potentialities of any park it is first necessary to ascertain the recreational and scenic attractions available and balance this against accessibility from local centers of population and main travel routes. Other factors, such as proximity of other parks or areas of similar or near similar attraction, must be held in account. This factor in itself establishes the demand and need for the recreational center and directly influences the amount of development and improvement that can be undertaken.
In considering Kokanee Glacier park then, it is first necessary to evaluate its attractions.

To the average person who spends most of his life in the lower valleys either in city or country there is always a definite appeal to be able to climb up hills and mountains to obtain a view of what lies beyond their immediate horizon. Access to Alpine country has therefore a great attraction. It not only is the top of the world with consequently a greater field of visibility, but presents a different type of country, in flora, fauna and physical features. Also the invigorating air, although not consciously noticeable has much to do with the enjoyment of high altitudes.

Kokanee Glacier Park has therefore a definite attraction in its alpine setting, its wild ruggedness, and panorama of mountain ranges.

The hiker steps from a world of rocks and boulders into this dazzling whiteness within a few seconds.
The proximity and accessibility of the spectacular snowfields and glaciers will likely prove to be the feature that will attract and sustain the attendance in the park.

Added to this are the somewhat more subdued yet very appealing lakes and pools, reflecting these very mountains, and surrounded by dwarfed trees, colourful shrubs and other alpine flora.

Part of Garland Lake, rugged and beautiful.

To sum up its attractions, the park offers unusual scenery and environment, hiking to meet all individual tastes, year around skiing possibilities, picnicking, fishing and swimming and for the more curious, varied nature studies.

These then are the recreational and scenic attractions. Against them must be balanced the other influencing factors such as the extent of these attractions, accessibility and proximity of other parks or areas which offer somewhat similar attractions.

Although the park comprises an area of ten square miles, its recreational value lies within an area of only four square miles, that is, the area roughly containing the Glacier and Kokanee, Sapphire and Kaslo Lakes. Even the northern part of this is spoiled by a forest of standing dead snags from a 13 year old burn. This is a limiting factor which does not necessarily reduce the value of the park, but limits its chance of becoming an outstanding vacationing center.
Looking south from a pinnacle high above Kokanee Valley.

In a province like British Columbia which some consider a park in itself, and especially in the Kootenay region where areas of scenic grandeur are profuse throughout the Selkirk Range, Kokanee Glacier Park cannot be said to be outstanding. However, when balanced against accessibility and travel distance it becomes outstanding in its proximity to a relatively large population and the comparative ease of road construction. To our knowledge at present there is no area that offers this type and combination of scenery and recreational facilities within the same travel radius from Nelson and possibly Trail.

Accessibility is probably the one major factor by which the value of Kokanee Glacier Park can be enhanced. At present access to the lakes and Glacier is difficult and only possible to the more hardy hikers. It is not within reach of a Sunday outing for the whole family, which is what might be termed the climax of park use.
A preliminary reconnaissance showed the feasibility of bringing a road up to Kokanee Lake from the south thereby putting the park within a $\frac{3}{4}$ hour ride from Nelson, and hence able to draw from surrounding communities having direct connections with that town, and the tourist traffic from the United States and the southern trans-Canada route (with the opening of the Hope-Princeton connection). The possibilities of extending the Kaslo road is a more difficult proposition but not impossible if the demand should justify it.

VIII. PUBLIC USE OF RECREATIONAL FACILITIES: At present public use is confined to a few hardy hikers and mountaineers, to enthusiastic fishermen, and in winter or late spring to those skiers who are drawn to the high and wide open spaces of deep snows.

View down Woodbury Creek.

Courtesy - Mr. P.H. Hoskins.

Without doubt many other people have looked up towards the lofty peaks around Kokanee Glacier, but have not quite dared to tackle the climb.

IX. GAME AND FISH:

(a) Game: The scarcity of deer and bear can be attributed to snow covering the ground for all but 2 or 3 months of the year and the lack of edible plants and shrubs. Black bear are numerous at elevations slightly lower than Kokanee Lake and there are good chances of finding a few grizzlies occupying the higher ridges. No big game hunting is expected in this park.
Other animal life consists of porcupines and rock rabbits which are abundant throughout.

(b) **Fishing:** A great percentage of the present visitors to the park are fishermen combining their sport with a days outing in pleasant surroundings. Kokanee Lake is one of their favorite spots, being the most accessible. However, the other lakes including Tanal, Wheeler, Sunset and others in the Coffee and Woodbury Creek drainage have occasional visitors. Most of these lakes were stocked with Cutthroat trout; Kokanee, Keen, Garland and Kaslo Lakes as far back as 1924; and others like Tanal, Wheeler and Sunset between 1933 and 1938. Kaslo Creek has a reputation for good sized fish, but also as being difficult of access along certain parts. It was first stocked with brook trout and later with cutthroat.

Kokanee Lake is a favorite with fishermen in these high altitudes.

The Joker lakes are too choked with glacial sediment to sustain fish and the Sapphire Lakes are frozen a greater part of the year. Tanal Lake on Enterprise Creek is overstocked, resulting in small diseased fish.

As in other parks that offer fishing as one of its main attractions, it is important that this aspect be carefully regulated and guarded by a practical fish management plan.
X. OUTLINE OF PROPOSED DEVELOPMENTS:

(a) Roads and Trails: In sizing up the recreational potentialities of Kokanee Glacier Park it was shown that a road giving access to Kokanee Lake was of primary importance, and that such a road was most feasible up Kokanee Creek. This project would require relocation of parts of the existing road, and construction of 2½ miles of new road up to the lake.

From a practical standpoint there seems to be no justification in extending the road beyond the southern end of Kokanee Lake to join with the Kaslo road. The construction difficulties would be great and from a psychological point of view the Kaslo approach is scenically poor. However, this does not exclude the necessity of improving the present Kaslo road to the Joker Mill Site and improving the trail to the Slocan Chief cabin and Kaslo Lake. By doing this, approach to Kaslo Lake and the Glacier will be about as close as from the Kokanee road end.

There does not seem to be sufficient demand at present to warrant the opening and maintenance of the other trails, such as those up Enterprise, Lemon, Coffee and Woodbury Creeks. Improvement on those should only be considered in the light of future demands or for protection purposes.

Other trails required in the park are to Sapphire lakes by two or more alternate routes, and to the Glacier direct from Kaslo Lake, from Kokanee Lake and up through the Esmeralda Gap.
(b) Picnicking, Camping and Commercial Sites: With the Kokanee road ending at the south end of the lake there is need for toilet facilities in that vicinity and two or three picnic tables and fireplaces down near the lake. It is believed that the need for a commercial concession, of the lodge and annexed cabins type, will arise and a site for this purpose will be set aside near the parking grounds.

Other picnic grounds and facilities will be developed at the north ends of Keen and Garland Lakes where there is also safe swimming for children. No improvements other than trails and sign posts are anticipated around Sapphire and Kaslo Lakes, or in the vicinity of the Glacier.

XI. IMPROVEMENTS: DETAILS OF EXISTING AND PROPOSED:

(a) Roads:

1. Kokanee Road: This road will be the main entrance to the park. The minimum requirements are a double lane 6-10% grade, gravelled and well ditched road, with a minimum of switchbacks, although no such road has been located yet it is believed that this is both economical and feasible of construction.

The existing 9 miles of road requires some 3\(\frac{3}{4}\) miles or relocation in two sections. The first two miles from the West Kootenay Arm highway is too steep and has several switchbacks and dangerous spots along the edge of a steep ravine. At present, like most of the remainder of the road, it is narrow, lacks sidings and is being gouged by surface water. There does not seem to be any obstacle to swinging the road further to the east up or across the shallow ridge that somewhat parallels the present location. Such a road may also afford a few scenic lookout points east and southwest along Kootenay Arm. Throughout this area the forest cover is fir, hemlock-tamarack reproduction.

The section between mile 6-7\(\frac{3}{4}\) should also be relocated either in its entirety or in parts. This piece of the road runs mostly through mature timber or scrub close to the bottom of the valley. At present the road is rough, narrow and badly rutted by surface water and has several sharp switchbacks, two of which straddle the creek making use of three bridges in close succession. Although there is no great lee-way for relocation the present location can be greatly improved.

Besides the two above mentioned sections, the remainder of the road has a fair grade and only requires widening and improving. The mile 2 to 6 section is in good condition at present and will be relatively simple to widen. However, the remainder up to the Molly Gibson mill site will present a few construction difficulties such as rock work and steep sidehill cuts. At present the road is blocked about a mile from the end by a quarter mile broad snow slide which has strewn rocks and trees across it.
The Kokanee Road switchbacking across Kokanee Creek.

The Kokanee Road, a mile from Molly Gibson mill site. Kokanee Ridge, and Esmeralda Peak in the background.
Beyond the mill site 2 1/2 miles of trail lead up to Kokanee Lake. The proposed road will roughly follow the same location, criss-crossing the trail on a more smoothly rising grade.

From a rough preliminary reconnaissance there does not appear to be any great construction difficulties. Much of the open or semi open hillside is of a loose rock type fallen from the slowly eroded bluffs and peaks above. Only a few actual rock slides exist on the route. The end of the road will be on the knoll above the south east corner of the lake, where there is enough room to combine a parking ground and commercial concession.

In undertaking the construction of the road, it is believed the best distribution of labour will be to have one crew work from the main road up, and two other crews working both ways from the present old campsite 6 miles up the road. This camp is situated on a short open road in a pitch of mature hemlock-spruce within a few hundred feet of Kokanee Creek. The building and tent frames are in fair condition. A year round water supply is available and fuel is plentiful. A twenty foot bridge at the entrance to the camp grounds will need replacing.

2. Kaslo Road and Trail: Work on this road will be confined to improvements such as ditching, replacing culverts and bridges and falling snags along the right-of-way. Parking grounds and toilet facilities can be made at the Joker Mill site if travel by this route should warrant it.

As stated previously, this approach to the park is unattractive and the only justification for its maintenance is to afford entrance for a few people from Kaslo either to visit the park or fish in Keen Creek, and from the protection standpoint. The road is in fairly good condition at present, rising up the Keen Valley on a very easy grade and ending in a cirque at the old Joker Mill site which now is only a 1 acre clearing with a few tumble-down shacks hidden in the vegetation and windfall.

The 1931 fire which burned up to Kaslo Lake has thoroughly gutted the sidehill leaving a forest of dead snags and a few large cedar around the mill site. Access to the creek is generally difficult, the last five miles of valley bottom is through swamp and patches of mature spruce-cedar-balsam, maple and willow.

Two trails lead off from the end of the road. The one to Kaslo Lake generally obstructed by windfalls, climbs steeply with many switchbacks towards the Slocan Chief mine and cabin. It skirts a small lake tributary to Nulka Creek which forms part of a small oasis of green trees and pools in what might be called the Slocan Chief basin.

From here access to the Glacier is fairly easy over a steady climb around and over the east ridge.
Looking N.E. across the Slocan Chief Basin, down Keen Valley. The Slocan Chief cabin is in the fringe of trees in the center foreground.

The glacier as seen from the Slocan Chief Basin on the Kaslo trail approach.
The other trail from the Joker mill site is the Old Joker Mine trail leading up past what is descriptively called the Brideveil cascade and into another deep cirque surrounding the two Joker lakes; from here it climbs to the Joker and Mansfield mines.

3. Proposed Esmeralda Spur Road: This road would be for the purpose of facilitating the approach to Kokanee Glacier through a narrow gap north of Esmeralda Peak or a point $\frac{1}{2}$ mile further north along the ridge.

The rock slide covering the last few hundred feet below Esmeralda Gap. It is but a step from the gap onto the Glacier.

Courtesy - Mr. P.H. Hoskins.

At present a rough trail leads part way up the mountain side from the basin one half mile south of Kokanee Lake. The proposed road would allow driving to near the 7,200 foot level, approximately an 800 foot climb. The road by necessity would be fairly steep (15%) with one or two switchbacks and would terminate on a slight ledge which offers parking and turning possibilities.
Beyond here, the climb is steep, and, towards the top, even dangerous, because of rock slides. It may be possible to build a trail and steps to the top, to reduce the present difficulties, but a rope or cable hand rail would reduce the hazards. Future years may see the need for an aerial tramway, or other funicular system direct from the parking ground to the Glacier.

Looking up to Kokanee Ridge from Kokanee Lake.

(b) Trails:

1. Molly Gibson Mill to Kokanee Lake Trail: This trail follows along 500 feet of overgrown road built in 1959 by the Y.F.T.P. and continues on a shallow grade to the vicinity of Gibson Lake but by-passes this lake by rising sharply for about 4 of a mile through scrub timber up the east sidehill. As glimpsed from the trail, the lake has little attraction being shallow and partly a mud flat scattered with logs in summer. The last mile of trail is on a fairly easy grade and passes at the foot of a hog back ridge extending down like a wall from Esmeralda Peak. Immediately beyond this lies
a small grassy basin through which flows a small creek. It is from here that the present Esmerelda trail starts. Arriving near Kokanee Lake the trail passes over a broad ridge with scattered clumps of dwarfed spruce, and leads down to the lake in a series of short steep drops.

The proposed road will follow the Kokanee trail along this hillside to the gap in the upper left corner of the picture.

2. **Kokanee Lake to Kaslo Lake Trail**: From the south end of Kokanee Lake a trail crosses the rock slide above the west shore and drops down to the meadow before rising again over Kokanee Pass. Beyond here it heads down to Keen, Garland and Kaslo Lakes. Throughout, it is in fairly good condition being for the most part over open alpine slopes scattered with scrubby spruce and low huckleberry and azalea bushes. The half mile of trail across the rock slide above the lake is well constructed and in good condition except for one or two places where it is obstructed by a few large boulders.

3. **Sapphire Lake Circuit**: No trails exist at present but most of the country is open and will need very little actual work to facilitate hiking to these lakes. A few small sections of trail over rock slides combined with trails markers is all that will be required. Such a trail should be made up Griffin Creek, which has many attractive pools, and over Lemon Pass into Sapphire Lake basin known as Glory Basin. An easy return trail can be made down Garland Creek.
On the Sapphire Lake Circuit, a crystal clear pool on Griffin Creek.

The western approach to the snowfield over the northern crest of Kokanee Ridge.
4. Trails to Kokanee Glacier: At present the easiest way up is from Kaslo lakes up the trail towards the Glocan Chief cabin, and branching from this up the height of land past an old mining camp situated on a ledge above the Kokanee Pass and thence approaching the west flank of the Glacier. Because of its steepness it is necessary to reach the Glacier close to the summit. This is possible by climbing to the 3,500 foot contour, and crossing the ridge onto the snow directly under the northwest end of Kokanee Glacier Ridge.

A more direct route to the west flank of the glacier from the proposed road end is possible by rising along the sidehill above Kokanee Lake. Several ledges break the steepness of this slope. It is believed that the grade could be kept fairly easy with a minimum of trail work required. This trail would then join the present approach to the snowfield just described from Kaslo Lake.

Several old mine tunnels and prospect diggings on the Smugglers claim on the sidehill will add interest for the hikers.

5. Esmeralda Trail: This approach to the Glacier is described under "Proposed Esmeralda Spur Road".

(c) Picnic Grounds and Camp Sites: Planning the number and distribution of improvements such as picnic tables, fireplaces, toilets, etc. will require a more detailed study than is a present possible. A better knowledge of snow conditions, snowslides, prevailing winds, etc. must be considered and a study of public use as it develops will govern the number and types of improvements. Topped and shattered trees, due to recent snowslides, were noticed at the head of Kokanee Creek.

As outlined in "Proposed Developments", the south end of Kokanee Lake and a small area around Keen and Garland Lakes will undoubtedly require public facilities.

Although it is expected that a commercial concession will be developed at the end of the road, it will still be necessary to provide public use facilities such as picnic tables, fireplaces, toilets, and possibly camp sites.

A tentative plan is submitted showing the most likely area in which these improvements will be placed. Due south of the lake, a broad ridge extends west from the mountain side and drops abruptly to Kokanee Creek. It is expected that the parking ground will be located on the south side of this ridge extending up to the proposed lodge site on the top.

The north side of this promontory will then remain in a natural condition with only the trail leading down from the end of the road to the west side of the lake. It is believed that a small picnic ground area can be set aside south of the hill above the creek. This area would be shielded from passers by on the trail by a curtain of stunted spruce.
Beyond the bridge crossing the creek the trail winds up amongst some large boulders to another flat promontory. This area offers space for more picnic ground developments, and, if needed, one or two tent camp sites.

The rock slide on the west side of Kokanee Lake. Possible picnic and camp grounds in the foreground.

No improvements are planned for the meadows at the north end of the lake. This area can be developed if the necessity should arise and could accommodate several sets of picnic tables along the fringes.

Both Keen and Garland Lakes in their pleasant alpine surroundings will attract picnickers and especially families with children because of the safe bathing in shallow water. The construction of a shelter for bathers may be required. This will likely be a stone building since such material is readily available and will blend with the surroundings.

Several picnic tables and fireplaces could be located near both lakes amongst clumps of spruce. The best sites seem to be on the northern shore of each lake emphasizing the views southward rather than towards the burnt part of Kaslo lake to the north.

At present no other picnicking or camping improvements are necessary either at Sapphire Lakes or in the vicinity of the Glacier. It is not possible to anticipate public requirements beyond the developments that have been suggested above.
(d) **Commercial Concession:** This is expected ultimately to take the form of a main lodge with several cabins. The building is expected to be predominantly of stone construction, probably with a single story some two to four feet above the ground to make allowance for snow conditions. Because of its proximity to Nelson, there will be no immediate need for a lodge. As the road is completed, visitors will be able to return to town for accommodation. This will permit a more complete study of the type and requirements of the visitors to the park.

With regards to location it is already realized that the lodge will have to be built on the west end of the broad ridge south of the lake. This is made necessary because of snowslides which occasionally break loose from the heights above. This location will also give a better view up the lake and down Kokanee valley. Cabins can be added later if necessary.

![Kokanee Lake, viewed from the proposed lodge site.](image)

(e) **Parking Grounds:** Tentatively, the road will end at the lodge and parking space will be provided on the south side of the broad ridge, keeping the cars out of sight of the lake if possible. Size and type of parking ground is yet to be determined and will be governed by terrain and requirements.

**XII. PROTECTION:** Because of the sparseness of cover within the main area of the park, and the fact that these higher areas are snow bound a good part of the year, the fire hazard is limited and may be mostly a matter of spot fires either from lightning strikes or hikers and campers. With a road to Kokanee Lake, access to this upper country will be fairly easy, and the
chances of a large conflagration reduced to a minimum.

For the remainder of the park that is in the timbered valley bottoms and slopes, protecting and fire fighting will always be a problem. However, with an intensified fire detection system which it is hoped to have in the future and by maintaining the existing trails up most of the valleys, the number and size of the fires will be greatly reduced.

To date the greatest damage done to the park by fire was by the 1931 fire up the west side of Keen Creek to Kaslo Lake and the burning out of the headwaters of the Keen and Enterprise valleys. Although several other fires burned within the park in 1920, 1930 and 1938, the only other noticeable one was a small area east of Molly Gibson mill in 1920. Most of this is overgrown by now.

There are no permanent lookouts in the immediate vicinity of the park. The closest, (the Buchanan and Idaho lookouts), are to the north over 15 miles away. Two others to the south have a distant view over the park. These are the Copper and Russell lookouts.

XIII. PARK ADMINISTRATION: Kokanee Glacier Park is a Class "A" provincial park administered by the Parks Section of the Forest Branch. Local administration is under the District Forester at Nelson. In addition there has been appointed a Parks Advisory Board of five members from Nelson and Kaslo.

Snow conditions will limit the need of a year-round park warden. The alternatives when the road is completed will be to have periodic visits by a patrolman, to clean up, cut wood and attend to minor chores, or to employ a park attendant for the summer months.

There are several trap lines along the various creeks leading from the park. These are held by the following trappers:

C.T. Clever, Salmo — Trap line on Enterprise Creek
R.C. Gilker, Kaslo — Trap line on Keen Creek, including Kaslo Lake
Wm. Gerdes, Slocan City — Trap line on Lemon Creek and tributaries at the head of the Creek.
W.D. Ross, Balfour — Trap line on Kokanee Creek including Gibson and Kokanee Lake.
A. Grant, Ainsworth — Trap line at headwaters of Coffee, Woodbury, and Lendrum Creeks including the lakes.

It has not been possible to ascertain whether or not any of these trappers have cabins in the park, but none exist within the main recreational area. For administration purposes, they should be contacted by the District Foresters office and those having cabins within the Park should be put under permit. All should be notified that further cabin construction must be approved.
The only known inhabitable cabin in the park is the old Slocan Chief mining cabin. This cabin does not seem to come under any particular ownership, but is used by many overnight visitors to the park. The B.C. Mountaineering Club was the last known occupant.

XIV. ORGANIZATION OF DEVELOPMENT PROGRAM: Both from the standpoint of necessity and importance the improvement and extension of the Kokanee road should be the first undertaking on this project. In view of the fact that the existing portion of this road is rapidly deteriorating it will probably be necessary and advisable to first relocate and rebuild the lower part of the road up to the old camp site at Mile 6. This will only require relocation of the first two miles of road which logically should be built from a camp on or near the main highway, thus reducing use of the old section of road to a minimum. A camp site should be located when the relocation survey is being made. The upper part of the road and the new road can best be worked from Mile 6 camp.

The number of men required will be governed by the amount and type of equipment available. Bulldozers could be used to advantage on this project as there is little rock work on the lower part of the road and the upper part is believed to be mostly loose rock from old slides.

After completion of the main road to Kokanee Lake, the spur road up towards Emeraldas Gap should be located and built up as far as possible.

Improvements on the Kaulo road and on the other trails giving access to the park can best be done by a small semi-mobile crew.

Location and installation of picnic tables, fire-places, toilets etc. will be done by a specially trained mobile park crew when the park becomes more accessible and the need for these facilities is felt.

XV. PARK SURVEY AND AVAILABLE DATA: This report was written from a field reconnaissance made in September, 1943 by two members of the Parks Section. This was the first survey made of the park from a recreational point of view, and this report, derived from it, will serve to classify the park within the Provincial Park system and lay the foundation for its development towards maximum public use. More detailed surveys will be needed of the proposed improvements when time permits.

This park is fortunately well covered by an excellent geological survey map at a scale of 40 chains = 1 mile, and by a complete coverage of aerial photographs flown at 16,000 feet in 1939. Forest cover maps derived from the aerial photos and forest surveys also cover most of the area and surrounding country.