

LOC {CASTL} M6/148916
GV/191.24/W5/NO./1981:8
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A SHELTER POLICY FOR KOKANEE

A SHELTER POLICY

FOR

KOKANEE GLACIER

PROVINCIAL PARK

Submitted to: Len Dunsford

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In partial fulfillment of the

requirements for WR. 271

Submitted by: Don Demers

April, 1981

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SUMMARY

This report is concerned with the development of a feasible shelter policy for Kokanee Glacier Provincial Park. A brief background on the history of the park is given. A total of five, out of thirty two cabins, are considered in the development of the shelter policy.

The report is broken down into three different parts: first, a description of the conditions of the cabins; secondly, presentation of the existing problems; and, finally, an outline of some possible solutions for a cabin policy.

The report concludes with a recommendation which will serve as a feasible shelter policy for Kokanee Glacier Provincial Park.

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I. KOKANEE GLACIER PROVINCIAL PARK

Kokanee Glacier Provincial Park is located 29 kilometers Northeast of Nelson in the Slocan Range of the Selkirk Mountains of British Columbia (see figure 1, page 2). The park was established in 1922 and is classified as a Class "B" back-country area, encompassing an area of 25,600 hectares. It is one of the oldest parks in the Provincial Park system, named for the glacier that clings to the easterly and northeasterly slopes of Kokanee Peak.¹ The park's topography is characteristic of the rugged mountainous terrain of the Slocan Range. The primary role of the park is to educate inexperienced members of the public in alpine recreational opportunities and conduct. Complementary objectives are natural and human history preservation and interpretation.²

Kokanee Glacier Provincial Park is a relatively accessible alpine area, with access available through seven drainage systems on six roads. There are two main access roads and four secondary access roads leading to the start of trails into the central area of the park. These access roads were constructed as a result of mining activities in the area in the late 1800's and early 1900's. The two

Location Map

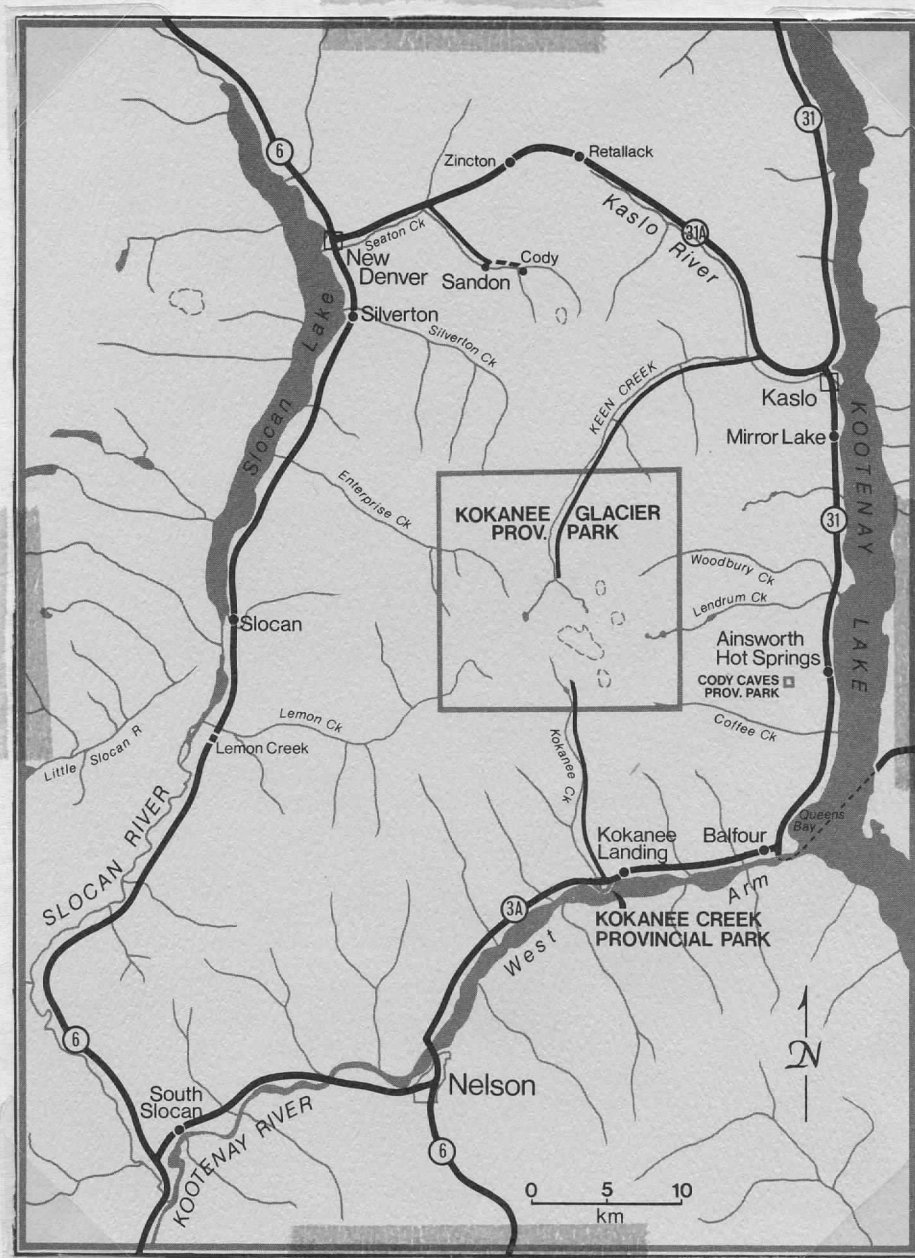


Figure 1.

main access roads are Kokanee Creek and Keen Creek. These roads are the most heavily used, and are classed for 2-wheel drive vehicle use. The four secondary access roads are located in the following drainages: Lemon Creek, Woodbury Creek, Coffee Creek and Enterprise Creek. These roads are not used much; therefore, maintenance is low and the road conditions are not suitable for 2 wheel drive vehicles.

All of the roads lead towards the core area of the park, but none of them go all the way in. Where the roads end, trails begin and these lead into the core area. A number of cabins were built along these trails to provide shelter for the men while they were on their way into and out of the mine sites. As well as the line cabins, site cabins were constructed in the late 1800's and were used by the miners and prospectors up until about 1924.

Once the miners and prospectors vacated the area, hikers and climbers began to use it. These recreationalists were a mixture of seasoned and green horn outdoorsmen. They used the cabins for shelters while they were hiking, climbing, skiing, etc. The line cabins were not strategically located as far as the recreational public were concerned, and did not offer much more than a rest stop. Some people did, and, still do, use some of the line cabins, but not to any great extent. The site cabins were more appropriately placed to suit the needs of the recreating public; thus, the line cabins received very little use, whereas the site cabins were used extensively.

The line cabins are in poor shape at the present time and none of them are safe enough to be used by the public. Many of the cabins have fallen down because of old age and vandalism. The line cabins that exist today are in desperate need of repair if they are to be used, or even preserved for interpretation. There are two site cabins that are used frequently today: the Slocan Chief Cabin located in the core area of the park at the base of Kokanee Glacier, and the Silver Spray Cabin located in the Clover Basin. Both of these cabins have received maintenance work over the years, and at present are fairly safe for the park user.

The Silver Spray Cabin is in relatively good shape and is capable of accommodating six people comfortably. It does not receive very much use compared to the Slocan Chief Cabin, but it is the only other cabin receiving enough use to warrant attention. The Slocan Chief Cabin receives use on a year round basis, and signs of old age are showing up in the structural stability of the cabin.

Since 1922 the Provincial Parks Branch has been responsible for all the cabins within the park. Different outdoor groups have maintained some of the cabins, but lately very little time and/or money has been spent on them.

The report is being written for Mike Hanry, the Master Planner for the Parks Branch in Nelson, who may use the information when drawing up the master plan for Kokanee Glacier Provincial Park. He is mainly concerned with the functioning and conditions of the Slocan Chief Cabin.

Therefore, the report will mainly concern itself with the Slocan Chief Cabin, outlining the current problems in regard to it and suggesting recommendations. Other cabins will be mentioned and suggestions will be detailed regarding the type of action that should be taken on them.

The purpose of this report, however, is to provide the Provincial Parks Branch in Nelson with a shelter policy for Kokanee Glacier Provincial Park.

II. LINE CABINS

A. History

There are 18 line cabins in Kokanee Glacier Provincial Park, all in varying stages of disrepair. A field check of the cabins showed all the structures in poor to very poor condition. None of the cabins are in good enough shape to be classified as safe for the park visitor to use. There are three line cabins, however, which the Provincial Parks Branch have concerned themselves with. They are not interested in repairing the cabins to a condition good enough for visitor use, but they would like to preserve the cabins by closing them to the public.³ If the cabins were closed down to the park user, the Parks branch would repair the cabins so they could be preserved and interpreted in the future. These cabins are: Joker Millsite, Woodbury and the Silver Spray Creek. These cabins are in the best condition, and would require the least amount of time and

money to preserve. The remainder of the cabins are in very poor shape, with some existing as piles of lumber.

B. Joker Millsite Cabin

The Joker Millsite Cabin, located in the Keen Creek drainage, is one of the cabins which the Parks Branch is interested in. The cabin was used by a group of second year Wildland Recreation students during the fall of 1980, and the cabin was described as being in poor condition for overnight use.⁴

The cabin was constructed in 1913, serving as an overnight shelter for the miners, and later for the hikers heading towards Kokanee Glacier. The cabin has received very little attention in regard to maintenance requirements. The roof requires much repair work if it is to be used again as an overnight shelter. The walls have been attacked by porcupines, and the floor is quite rotten in spots.

The Parks Branch wants to close this cabin down to public use, and restore it so they can preserve it as part of the human history of the area.³ They would not repair the cabin to any great extent, but it would be porcupine proof, and the roof would be repaired. The cabin definitely has an interesting history that the Parks Branch would like to preserve. The cabin served as an overnight shelter for prospectors and miners on their way into the core area of the park. Hikers and outdoor recreationalists, have used the cabin on their way into Kokanee Glacier. Due to the

limited use the cabin has received lately, and given the Parks Branch budget, the cabin will not be repaired to the extent of completely restoring it for overnight use. The cabin will only be repaired enough to allow for preservation and interpretation.

C. Woodbury Cabin

Another cabin that is being considered by the Provincial Parks Branch is the Woodbury Cabin, located near the Woodbury Creek trailhead. It is approximately a twenty minute walk from the road end to the cabin. This cabin is in relatively poor shape; all the windows are broken; the roof is full of holes; the floor is rotten; and the walls have been attacked by porcupines. The cabin receives very little use by the park visitor, due to the condition it is in and the proximity of the cabin to the parking lot. The Parks Branch has no interest in totally repairing the cabin for overnight use, but they mentioned they might close it down and repair it for possible interpretation purposes.³

D. Silver Spray Creek Cabin

The third cabin is located at the head of the Silver Spray Creek Valley. The cabin is approximately 17 feet x 20 feet, constructed with large logs. The floor has been attacked by porcupines, but, other than that, the cabin is in good shape. This cabin served as a stop over shelter for miners and prospectors on their way into and out of the

Clover Basin. The structure does not receive enough use by outdoor recreationalists to warrant repairs, but the Parks Branch wants to preserve and interpret the cabin.

All other line cabins were looked at by a summer crew hired during the summer of 1980. The remainder of the cabins are in very poor shape, and the Parks Branch is going to leave the structures the way they are and allow them to deteriorate with time. A number of the cabins are only a pile of lumber or structures that have partially collapsed. Therefore, in designing a shelter policy for Kokanee Glacier Provincial Park, the line cabins will not be considered. The only involvement will be with the three cabins that are being considered for preservation and interpretation.

III. SITE CABINS

A. History

There are fourteen site cabins in Kokanee Glacier Provincial Park. These cabins were constructed in the late 1800's at or near the mine sites to provide shelter for the prospectors and mine workers. All of these cabins were vacated by the miners by 1924, and from that time on outdoor recreationalists have utilized some of the cabins while recreating in the area.

As with the line cabins, the site cabins are in varying

stages of disrepair. There are only two cabins, however, which are receiving enough use to warrant any attention from the Provincial Parks Branch: the Silver Spray Cabin located in the Clover Basin, and the Slocan Chief Cabin, located near the base of Kokanee Glacier in the core area of the park. The other site cabins receive very limited use, and this use occurs mainly during the summer months.

B. Parks Branch Concern

The Parks Branch indicated that they are chiefly concerned with the two cabins that are receiving the use; the other cabins are going to be left to deteriorate.³ They do not have the budget to maintain the two cabins receiving the use, let alone all 14 cabins. Therefore, this shelter policy will focus on the two site cabins, indicating the problems that exist, listing possible solutions, and finally recommending a solution. The Silver Spray Cabin is not used as extensively as the Slocan Chief Cabin; thus, more emphasis will be placed on the Slocan Chief Cabin.

IV. SILVER SPRAY CABIN

A. History

The Silver Spray Cabin is located in the Clover Basin of Kokanee Glacier Provincial Park. The cabin is still in

relatively good condition and is still used occasionally by outdoor recreationalists. The cabin was originally constructed for the miners working the mine in the area, but once the mining activities ceased the cabin was no longer utilized by the miners.

B. External Problems

There are presently no external problems at the Silver Spray Cabin site. The water supply is good, firewood is ample, toilets are in good condition, and garbage is not a problem. As the cabin is able to support a maximum of six people at any given time, there should be no concern or worry about damaging the environment.

C. Silver Spray Structure

The Silver Spray Cabin is in relatively good condition, but some work is required if the cabin is to be used by the public and be safe.

There are a couple of spots on the roof that require patching to prevent leaking during rainstorms and winter snow melts. Three base logs are required on the walls of the cabin, as the present ones are half rotten. To make the inside environment more pleasant, some money could be spent on constructing new tables and benches.

D. Silver Spray Cabin vs. Slocan Chief Cabin

Visitor use at the Silver Spray Cabin, if compared to the Slocan Chief Cabin use, shows the Silver Spray Cabin not being used extensively. The Provincial Parks Branch would like to see this change and have some of the Slocan Chief users utilize the Silver Spray Cabin as well. Even so, the Slocan Chief Cabin is the major interest of the Provincial Parks Branch, and thus, this report concentrates on the Slocan Chief Cabin more than on the Silver Spray Cabin. The Silver Spray Cabin will be considered in determining the cabin policy, though, because it does have potential for providing shelter to the outdoor recreationalist. ⁷

V. SLOCAN CHIEF CABIN

A. Budget

The Provincial Parks Branch receives an annual budget and out of this budget comes money for Kohanee Glacier Provincial Park. The past few years have seen very little money go into maintaining the park.³ This is the only reason for the Slocan Chief Cabin being in the condition it is. The Parks Branch has not had the money to maintain the cabin properly. They are now faced with a very definite choice and that is to repair the Slocan Chief Cabin at a cost of approximately \$20,000, or to build a new cabin. They also have to decide where they would build a new cabin

if they did build. The Slocan Chief Cabin would have to have something done to it as well, even if a new cabin was constructed.

B. History

The Slocan Chief Cabin has become a real problem for the Provincial Parks Branch. The cabin is located in the core area of the park, and all the trails within Kokanee Glacier lead into the core area and toward the Slocan Chief Cabin. It is the only cabin in the park that receives use on a year round basis. Present use figures show 95% summer use and 5% winter use, though winter use is increasing annually. The cabin is the most heavily used structure in Kokanee Glacier Provincial Park.

The Slocan Chief Cabin was built in 1896 by Held and Dickinson, a construction firm from Slocan City.⁵ The cabin was constructed for the Smuggler Mining Company, which operated a mine some distance above the cabin on the Smuggler Ridge. Mining was the original purpose for constructing the cabin; however, after 1923, when the last of the ore was hauled out, miners and prospectors vacated the area. Outdoor recreationalists began using the area and the cabin for shelter. A brief summary on the history of the cabin shows that up until 1928 the cabin was in excellent condition, well equipped with bunks, cooking utensils and China. From 1928 to 1939 vandalism became a major problem in the cabin, with all the dishes being broken, the tables and benches

used as firewood, windows broken, etc. From 1939 to 1962 various outdoor groups and individuals used and maintained the Slocan Chief Cabin, even though by 1962 the cabin was in poor shape and much work was required to restore it to a useable condition.

Because of the work of various volunteer work parties, in the summer of 1962 the Slocan Chief Cabin took on a whole new appearance.⁵ A new shake roof, new windows, a new heater, a new cook stove, a rebuilt sleeping area, a new porch floor, and a new wood shed were the improvements to the cabin. Donations towards the cost of the materials were received from the Interior Breweries and Ross Fleming of Nelson. The balance was paid by the Parks Branch.

By 1975 the structures of the cabin were showing definite signs of old age, and a member of the Parks Branch investigated the cabin to determine its condition. It was determined to be unsafe, but nothing was done about it until 1977. During the summer of 1977, R.D. Blackburn, a foreman for a construction company, was hired to do an assessment on the structural condition of the Slocan Chief Cabin. The assessment was conducted over a period of three days at a cost of close to \$300.

The assessment indicated that approximately \$10,000 would be required to repair the Slocan Chief Cabin to a good condition. This assessment included replacing 7 logs to restore the walls, replacing some of the floor joists

(where floor was weak), venting the foundation, rebuilding the front porch, replacing the eve supports, rebuilding the peak walls, providing a ridge pole with king trusses over the front and back walls, and installing a new stove and chimney.

During the summer of 1979, the Regional Manager for the Parks Branch ordered that the roof of the Slocan Chief Cabin be repaired to a safe condition. The cabin was shut down for one week during the summer while a parks crew conducted the repairs. At a cost of \$5,000 the Slocan Chief's roof was repaired to a safe condition, and a new heater was installed. At present, no other work has been completed on the cabin, and there is still much required if the cabin is going to safely serve the public.

C. External Problems

External features of the cabin which are of major concern are water, waste disposal, and fuel for cooking and heating. These problems have existed for a long time, but lately they are becoming of greater concern to the Parks Branch.

1) Water

Water is an obvious imperative on a year-round basis. There are two water sources which the Slocan Chief Cabin can utilize. The first is from a small stream near the cabin, and the other source is Kalmia Lake near the Ranger's "A" Frame. During the summer months the stream supplies

adequate amounts for the park users. Pollution of this stream is becoming more of a threat each year, however, as the number of visitors to the area increases. Foot traffic, as well as people washing cook gear and themselves, can lead to degradation of the stream.

During the winter months the volume of water in the stream is quite low, and it is difficult to obtain a sizeable volume of water. Kalmia Lake can be used, but the distance to travel is greater, and there are usually 5 to 6 meters of snow to shovel off the lake first. Snow can be melted, but there is a problem with the amount of fuel required to do so.

With winter use increasing annually at the Slocan Chief Cabin, the lack of water is definitely going to become more and more of a problem.

2) Waste Disposal

Waste material at the Slocan Chief Cabin is a definite problem. As the number of visitors increase, so does the amount of waste material. There are two general categories of concern at the Slocan Chief Cabin: (1) Wood ash and human garbage and (2) human waste. Both these problems will always be a reality as long as there is use at the cabin. Human garbage exists because not every cabin user packs out what he packs in. Human waste is also a problem; the outhouses are plugged solid and full. It is impossible for them to be pumped out, due to the amount of solid material that has been dumped down them. In the winter, there are

5 meters of snow on the ground and the toilets have to be dug out before use. Some people have been extremely lazy, using the back porch of the cabin as an outhouse. Waste disposal, thus, is a definite problem with the Slocan Chief Cabin, and something has to be done to improve the present facilities and conditions.

3) Wood

Wood is the heat source that is presently being used at the Slocan Chief Cabin. It is used during the cool damp days of summer and fall, but mainly during the cold winter months. Wood consumption in 1980 was in the vicinity of 8-10 cords. This amount could increase considerably if the use of the Slocan Chief Cabin increases.

Supplying wood for the cabin user is a fairly expensive operation for the Parks Branch. There is no firewood within a reasonable distance of the Slocan Chief Cabin (due to a forest fire in 1932); therefore, they have to fly the firewood in by helicopter.

Because of poor insulation, the cabin does not contain the heat very well; thus, the consumption rate of firewood is high. If the cabin is to be used economically, the structure should be insulated properly to cut down on heat loss. This would be an expense for the Parks Branch, but it is something they have to consider in the future as the use of the cabin increases.

D. Social Problems

1. Booking System

As stated earlier, the present figures indicate 95% summer use and 5% winter use. During the summer season a booking system is not utilized. The cabin is open to the public on a first come-first serve basis. This creates few problems, because, if the cabin is full, people pitch their tents outside and are fairly comfortable.

During the winter months of November to April the Parks Branch uses a booking system to reserve places at the cabin. The cabin can accommodate 16-20 people comfortably, but if all their gear is considered it is probably better to say 12-14 people. In order to use the Slocan Chief Cabin during the winter months, the user is asked to contact the Parks Branch in Nelson and reserve a time. Some people are aware of this system, but there are also people who are not aware or just ignore the system. Therefore, problems develop with too many people using the cabin at one time. If people use the cabin without first registering, the Parks Branch has no idea that those extra people are there, so the Parks Branch allows people to reserve until their registration book says the cabin is full. Tempers flare when people who reserved a place in the cabin arrive and find no room.

The present booking system is not working well at all; either there are too many people at the cabin, or the cabin is not being used to its capacity as people reserve places

and then do not go. A new form of reserving space at the cabin has to be developed if the public is going to be kept happy and the cabin is to be used to its full capacity.

2) Local Outdoor Groups

Outdoor recreational groups from the local area are creating some hard feelings with local citizens of the West Kooteneys. Some groups have been reserving the total cabin for themselves for 2 and 3 weeks of prime winter time. Individual outdoor recreationalists are not happy with this, and it is something that the Parks Branch has to look at. There should be a set size to a group and a set time of occupancy for the cabin users.

3) Cabin User Conduct

Most of the park visitors that use the Slocan Chief Cabin are responsible, mature, outdoor recreationalists who care about the outdoors and the luxuries of a cabin in the wilderness. There are, however, some individuals who venture into the outdoors without any concern for the environment or anything else. The Slocan Chief Cabin has experienced these types of people in the past, and they will probably exist in the future as well. The Parks Branch has tried posting signs in the cabin asking people to clean up after themselves etc., but some people do not read these postings.

A few individuals can make the cabin environment very uncomfortable and unpleasant because of their actions. It is not fair for the other cabin users to have to put up with

this type of character. The Parks Branch realizes that the problem exists and they would like to have some recommendations on how to make the cabin user more responsible while visiting the cabin. Three or four solutions are recommended in this report, which might work to solve some of the problems of the careless cabin user.

4) Destination Point

As all trails in Kokanee Glacier Provincial Park lead into the core area, the Slocan Chief Cabin has become the main destination point for the park user. This is a major problem facing the Provincial Parks Branch at this time; they are trying to divert the park user into other areas of the park, and thus, relieve the Slocan Chief Cabin and area of some of the heavy use it is receiving. The only other cabin in the park that is receiving any amount of use is the Silver Spray Cabin located in the Clover Basin, and its use is far below that of the Slocan Chief Cabin. The Slocan Chief Cabin is the destination point at the present time; therefore, use is high and maintenance requirements continue to increase. The Parks Branch has to consider this, and it is currently working on plans which may lead to dispersing the park visitor into other areas of the park. In the recommendations of this report, some solutions are given which may get visitors into other areas of Kokanee Glacier Provincial Park.

VI. POSSIBLE SOLUTIONS

A. Repair Slocan Chief Cabin

After looking at the study that was conducted by the Parks Branch during the summer of 1979, I found that for a cost of approximately \$20,000, the Slocan Chief Cabin could be repaired to a safe condition for the park user. If these repairs were to take place, the cabin would be able to be used for the next 10-15 years by outdoor recreationalists. The repairs would follow fairly closely the recommendations made by R. D. Blackburn when he assessed the cabin in 1977.

This is one solution that the Parks Branch is considering, because the secondary role of the park is to preserve and protect the human and natural history of the area. The Slocan Chief Cabin is a definite historical feature of the area.

If the Slocan Chief Cabin is repaired at a cost of \$20,000, there are still all the external and social problems left unsolved. The cabin will be structurally safe and sound for the next 10 to 15 years, but the other maintenance problems will also be around for the next 10 to 15 years. So, to make this solution somewhat more feasible, I have listed some possible recommendations for the other problems associated with the Slocan Chief Cabin.

1) Water

As the amount of use by park visitors increases,

water will become more and more of a concern. During the summer months the stream in front of the cabin is used and provides an ample supply of water. To reduce chances of stream degradation a gravity feed system could be installed quite easily. All that is required is a piece of pipe, a log post, and a water tap. This system would only be used during the summer months, however, as it would freeze up if used during winter.

To accommodate the winter user with an ample water supply, the existing collection hole could be enlarged. Another alternative for summer use would be to sink a fiberglass, 45 gallon barrel in the stream, with a top on it to keep debris out. This would allow for a greater volume of water available to the cabin user. Kalmia Lake would not have to be used if one of these systems was installed.

2. Waste Disposal

Human garbage has been a problem at the Slocan Chief Cabin, and it will continue to be a problem in the future. However, there are some things that can be done to reduce the amount that exists. Signs should be erected asking people to pack out what they pack in. Garbage cans should be provided inside the cabin for people to use. Any garbage that does not burn should be stored in a separate area, where the parks personnel can pick it up while conducting their routine checks. The designation of a small garbage pit should be located where people

will notice it. The wood ash could be placed in the garbage pit as well.

The outhouses that exist presently are in poor shape, and they are full. They were originally designed to be pumped out annually; but, due to the actions of some ignorant people, they are plugged with solids and can no longer be pumped out. I recommend that two new locations for the outhouses be selected. The construction of two new outhouses is probably a good idea as well because the existing ones are in poor shape. Signs should be posted on the doors, stating that no garbage other than biodegradable waste be dumped in them. These toilets would be pumped out every one or two years, with the waste being flown out by helicopter.

3) Wood

In October of 1979 the Parks Branch installed a new wood burning stove in the cabin which will probably last for the next 10 to 15 years. There is an option of putting in a fuel burning stove, but the cost would be much greater, as fuel would have to be flown in periodically over the winter months. The price of fuel is rising continuously as well, so the costs of fuel compared to wood for heating are too high.

Presently, firewood is flown in by helicopter at the beginning of the winter season. It is stockpiled in 6' lengths outside the cabin. The park visitors used 10 cords of wood during 1980, and this figure is bound to increase

as the amount of cabin users increases.

To ease the cost of flying the wood in, efforts should be made to make the fly out trip by the helicopter beneficial as well. The garbage could be taken out or the waste from the toilets flown out, rather than making another trip for that reason.

Measures could be taken to increase the insulation capability of the cabin; this would greatly reduce the amount of wood which is used to heat the place.

Signs could be posted in the cabin stating that the firewood has to be flown in by helicopter at a great expense, and that care and moderation should be taken when using the firewood.

The cabin users could be made to cook their food with their own fuel and campstoves, rather than using the wood-stove to cook with. This would also cut down on the volume of wood consumed.

Another solution is to charge the cabin user a fee for the firewood. A fee of perhaps \$1.00 a person could be charged, to partially cover the cost of supplying the firewood.

4) Booking System

As mentioned before, the cabin does not have a booking system during the summer and fall months. From November through to April people are asked to register before using the cabin. In order to register, people fill out a form

and submit it to the Parks Branch office in Nelson. This system does not work very well because some people do not register before using the cabin.

A possible solution to the problem is to install notices at all trailheads leading into Kokanee Glacier Provincial Park. These notices would state that people have to pre-register before using the Slocan Chief Cabin during the winter months. As well as this, notices could be placed in the local newspaper asking people to register with the Parks Branch office in Nelson before using the cabin.

Another possible solution would be to book the Slocan Chief Cabin to three/quarters of its carrying capacity. Once the cabin is booked to three/quarters of its capacity, no more reservations would be accepted. With this method, the Parks Branch would be allowing for the people who will not register or do not know about the system.

5) Local Outdoor Recreation Groups

There are a number of outdoor recreation groups in the Kootenays which utilize the Slocan Chief Cabin during the winter months. It serves mainly as a base area for ski lessons, ski tours, and other outdoor recreational activities. A problem has developed over the years as more and more individuals use the area and the Slocan Chief Cabin. The group sometimes book the whole cabin for periods of up to 3 weeks, thus creating hard feelings with other individuals who also want to use the cabin, but cannot.

A solution to this problem is to limit the size of groups booking the cabin and put a limit on the period of occupancy. For example, the party size could be limited to 6 people with a time limit of one week's occupancy.

6) Cabin User Conduct

There is a problem at the Slocan Chief Cabin with some users having no respect for the environment or the cabin. It is a problem which practically requires a park ranger to be present at all times in order for it not to exist. A park ranger would be a definite solution to the problem, but due to the lack of budget money it is impossible at the present time. The Parks Branch should budget for a full time ranger, or at least have a park employee visit the cabin throughout the winter season to check on things.

Another solution is to place some rules and regulations in the cabin; they would be hard to enforce without the presence of a park ranger, but it would at least let people know that there are rules of conduct that should be followed.

7) Volunteer Hutkeeper

A volunteer hutkeeper is another solution that would solve the problems of a messy cabin, vandalism, etc. Apparently during the spring of 1980, there was a gentleman staying in the cabin for approximately one month.⁶ He had the cabin neat and tidy, a stockpile of firewood, plenty of water, etc. It proved that the volunteer system could work at the Slocan Chief Cabin.

To obtain a volunteer hutkeeper, the Parks Branch could advertise the position in the local newspaper, etc. Interviews would be held, and a suitable applicant would be chosen. To compensate for some of the volunteer's expenses, the Parks Branch could possibly fly his food in for him and allow him to stay in the cabin free of charge.

8) Concessionaire

The idea of a concessionaire utilizing the cabin during the winter months was brought up in 1977. It was not well liked at all, as the majority of the public rejected the proposal. However, if the Slocan Chief Cabin is repaired, a concessionaire would solve many of the present problems with the cabin. If a concessionaire was allowed to set up in the cabin, it would not mean he would have total control of the cabin. The Parks Branch would still oversee the operation, and cabin users could have the option of utilizing the concessionaire's services.

9) Destination Point

This is the major problem confronting the Parks Branch at the present time. The Slocan Chief Cabin has become a destination point for the majority of park users, and, as a result, the present problems exist at the cabin.

A solution to this problem is to create other areas of interest within the park. Pamphlets could be published, indicating other areas of interest in Kokanee Glacier Provincial Park, and distributed to the public.

Installing a new shelter somewhere else in the park is one of the recommendations of this report; it would definitely solve the problem of heavy use in the core area. There are spots in Kokanee Glacier Provincial Park where a cabin could be constructed, and the area still provide all the recreational opportunities found in the core area. Actually, other possible solutions (related later) for a shelter policy will show definite advantages for dispersing visitor use to other areas of the park.

10) Interpretation

Another alternative for the cabin is to close it down to the public, and install a plaque which would tell the history of the cabin and the area. This method would cost much less than hiring an interpreter from approximately May 1 to August 31 of each year (which is one of the proposed solutions).

Closing down the cabin may raise some voices of protest from the local public, as they want to see the cabin used as an overnight use area for the next 100 years. Complaints were received at the Parks Regional office, when the Slocan Chief Cabin was closed for one week in October of 1979, to do some maintenance repairs and install a new stove.³ People complained about the cabin being closed down to the public. If a decision was made to close it down for good, there would probably be many letters written and complaints from the public.

Another solution, which the Parks Branch is considering at the present time, is to repair the Slocan Chief Cabin to a useable state for the next 10 to 15 years and then shut it down.

2. Close and Interpret the Slocan Chief Cabin

In the introduction of this report, the objective of Kookanee Glacier Provincial Park is given. The complementary objectives are natural and human history preservation and interpretation. The Slocan Chief Cabin is a part of the human history of the area.

If the Slocan Chief Cabin was closed down to the overnight cabin user, there would be no problems existing for the Parks Branch to solve. All the present maintenance problems, (water, firewood, toilets, waste) would no longer exist, because the cabin would not be used at all by the public.

The cabin would be closed on a year round basis, with an interpretation program running during the summer months. The interpretation program would consist of information on the history of the Slocan Chief Cabin, when it was built, why, etc. Mining history of the area would be included in the interpretation program as well.

3. Repair the Silver Spray Cabin

To repair the Silver Spray Cabin to a good condition, it would cost approximately \$5,000. If this money is spent,

the cabin will provide shelter for outdoor recreationalists for the next 20 years. Some work is required on the roof of the cabin, as it presently leaks in some spots. There are a few wall logs that need replacing as well.

If the Silver Spray Cabin was fixed up, and the Parks Branch advertised it more, it would probably relieve the Slocan Chief Cabin of some of the heavy use it is presently receiving. As mentioned in the introduction, the Silver Spray Cabin can comfortably accommodate six people; it is, therefore, much different than the Slocan Chief Cabin which can accommodate up to 20 people. The environmental problems that exist at the Slocan Chief Cabin do not exist at the Silver Spray Cabin at the present time.

The area around the Silver Spray Cabin offers approximately the same type of environment as the Slocan Chief Cabin; therefore, it should not be too hard to convince people to use other areas of the park rather than the core area.

If the Silver Spray Cabin is repaired and visitor use is promoted, some guidelines will have to be set up to insure that the same problems that exist at the Slocan Chief Cabin do not exist at the Silver Spray Cabin. A set of rules and regulations shall be posted inside the cabin for all hut users to view.

Water and firewood is no problem at the Silver Spray Cabin. There is water available on a year round basis from

two different sources. Firewood can be obtained in the immediate area; all the Parks Branch has to do is hire a crew to cut it during the summer and store it near the cabin. Garbage shall be taken care of by having a "pack out what you pack in" system. Routine checks into the area can be conducted, and any garbage that exists can be removed by them. Human waste is no problem at the Silver Spray Cabin; the toilets are in good condition and empty at the present time.

The cabin would be used on a first come-first serve basis, until it becomes heavily used and problems arise with people complaining about the cabin being full all the time. Once this happens a booking system will have to be implemented. Again, the idea would be to book the cabin to three/quarters of its capacity and allow the other 25% for people who neglect to use the system or do not know about it.

The Silver Spray Cabin receives most of it's visitors during the winter months; therefore, it may be beneficial for the Parks Branch to have a volunteer hutkeeper stay in the cabin during the winter months. The keeper would generally keep the cabin tidy and see that people using the cabin conduct themselves in an orderly fashion. The public would not have to know that the hutkeeper was a volunteer; thus, a bluff could be used to convince people that law and order rules in the cabin. With the hutkeeper living in the cabin, the structure is maintained much better and the chances of untidiness and vandalism occurring are greatly reduced.

4. Build an Energy Efficient Shelter

For a cost of approximately \$20,000, an energy efficient shelter could be constructed in Kokanee Glacier Provincial Park. If an energy efficient shelter was constructed, all of the cabins could be closed down with some of them left open to interpretation. With a new building in the park, the structural problems of the Slocan Chief and Silver Spray Cabins could be neglected as the cabins would no longer be needed.

The Freshfield area in Banff National Park has an energy efficient shelter located in it.⁷ The building was constructed in 1978 at a cost of \$20,000. The building was flown in pre-fabricated and a work crew assembled the building in one weekend.

This is the same type of building which is being recommended for Kokanee Glacier Provincial Park. The design qualities of the structure meet the environmental conditions in Banff National Park, and therefore, should be able to withstand the conditions in Kokanee Glacier Provincial Park.

The following guidelines go along with the energy efficient shelter:

1. Heating and cooking fuel (white gas, propane, catglitic heaters) would be packed in by individual users.
2. Garbage would be packed out by users other than that which could be burned in a burning pit.

3. Use of cabin through registration system only.
4. A time limit of 2 weeks occupancy will be put on the shelter.
5. Group sizes will be limited to six individuals.
6. A set of rules and regulations will be posted and followed. If the rules are not followed, the building will be closed to the public.

This energy efficient shelter, if constructed, would take the duties of the Slocan Chief Cabin over very easily. The shelter can accommodate 16-20 people quite comfortably, and a definite asset is that the shelter is new and does not require any repairs.

If a decision was made to construct the shelter, a decision would also have to be made as to where the shelter would be located. It could be located in the core area of the park, near Kaslo Lake, which is approximately 3 hours from Kokanee Glacier. Another possible location is Sapphire Lake; the area around Sapphire Lake offers all the different recreational opportunities that are presently found in the core area of the park.

The excellent features about the energy efficient shelter are that the building is self-contained and the maintenance requirements are low. There are no toilet holes required because there is a portable tank that is used and flown out by helicopter when full. Firewood is not required, because the shelter user supplies his own fuel for cooking

and heating. Waste material and garbage is stored in a large bin which can also be flown out when full.

If the shelter is constructed, it may be an idea to have it open during the winter months only. In the summer months people can use their tents to sleep in; this will cut down on the maintenance costs of the shelter, and the life of the cabin will be extended greatly if only used 6 months of each year.

5. Portable Shelter

The East Kootenay Parks have been using portable shelters for quite some time now and rather successfully. The idea behind a portable shelter is the structure can easily be moved from one area to another, over the years. With this method the amount of environmental impact on any one area can be controlled. As well as that, the shelters can be located where the park users want to be.

With the use of portable shelters, one area does not get heavily used and the environment is not badly damaged. Maintenance problems such as firewood and water are non-existent because the visitor is not in any one area long enough to be detrimental to the resource.

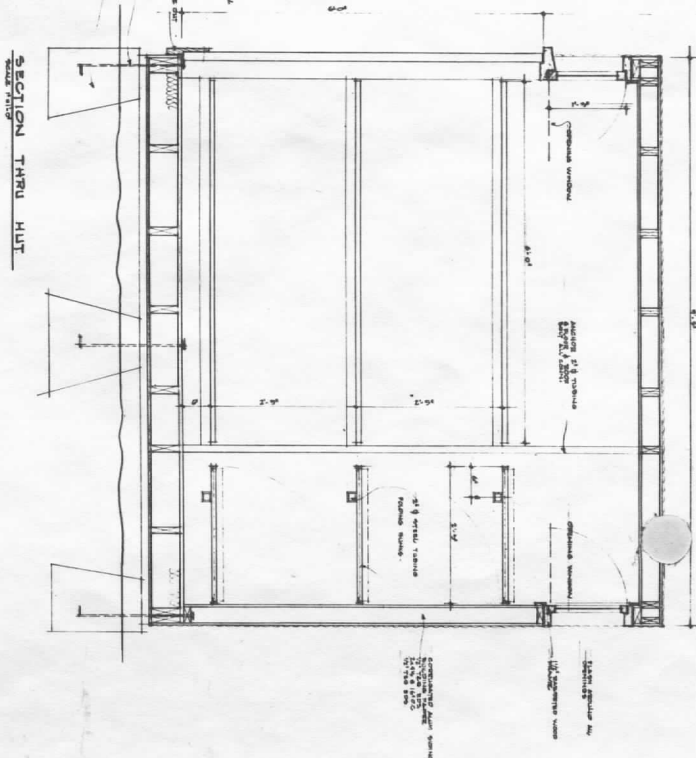
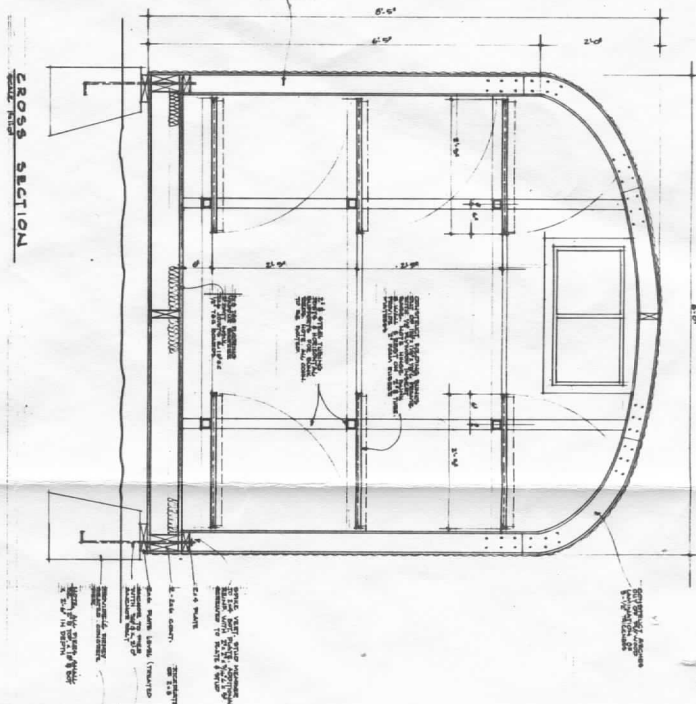
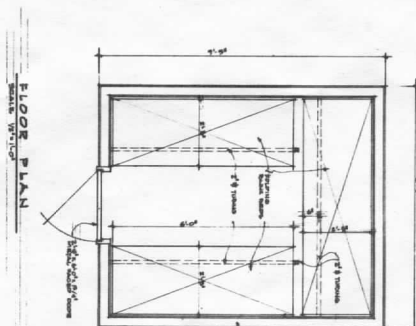
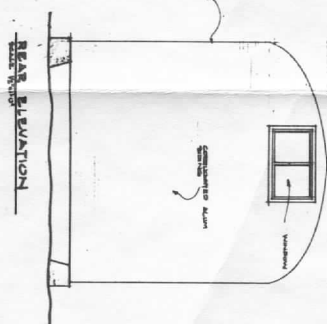
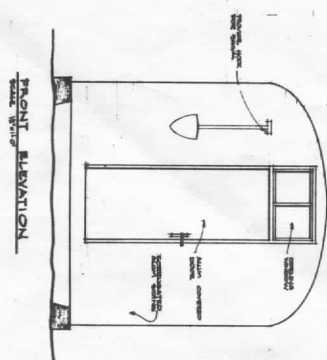
Figure 2 on the following page shows the type of portable shelter which is being used in the East Kootenays, and which this report recommends for Kokanee Glacier Provincial Park.

One of these portable shelters can be purchased for approximately \$10,000. They can accommodate nine people

THE MOUNTAIN HUT

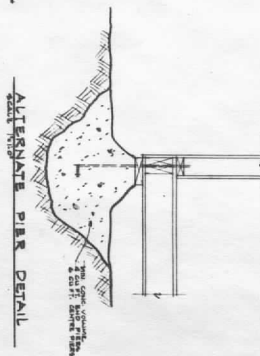


DATE		REVISIONS	
MOUNTAIN HUT FOR 3 PERSONS FOR THE ALPINE CLUB OF DENVER			
PLAN, SECTIONS & ELEVATIONS			
DESIGNED BY	SCALE	NOTES	DATE DRAWN
CONOS - DESIGNEE & ARCHITECT	1" = 10'	SEE PLAN	APR 24, 1917
PREPARED BY			REVIEWED BY
CHECKED BY			BY

[illegible]

THIS HUT TO BE:

- 11) PRECUT & ERECTED ON SITE.
OR (2) - PREFABRICATED & MOUNTED ON SITE
OR (3) - PRECUT, ERECTED & TRANSPORTED
ON SITE BY HELICOPTER.



comfortably. There are no beds provided; people use foamies or air mattresses. The shelter is heated by the park user who supplies his own fuel.

The shelter would only be used during the winter months, being stored back in Nelson during the summer. A set of rules and regulations would be posted in the shelter; if they are not followed, the shelter will be removed from the park. Outhouses would have to be constructed for this shelter; this may present a hassle if the shelter is going to be moved to a different area each year.

RECOMMENDATIONS

The objectives of the park are to interpret and preserve the human and natural history of the area; mining and the cabins are a definite part of the human history of the area. The cabins were built to provide shelter for the miners and something has to be done to preserve some of these cabins for future generations to see.

After considering all the possible solutions for a cabin policy, I am recommending two solutions which I think will best satisfy the needs of the recreating public, the Provincial Parks Branch and Kokanee Glacier Provincial Park.

A. Line Cabins

I am recommending that the three line cabins which were mentioned at the beginning of the report be repaired

to a state where they can be boarded up and preserved for future generations to see. No possible solutions (in regard to repair) for the line cabins were given in the report because none of these cabins are going to be used by the public. The cabins should, however, have all the holes boarded up as well as the windows and doors. This will restrict park visitors and rodents from entering the structures.

Interpretation plaques should be installed outside of each cabin, so that park visitors can learn a little bit about the history of the cabin.

It is very necessary for the Parks Branch to do the foregoing, or something similar, as it is their responsibility to preserve and protect human history. Even though they can not preserve all the line cabins in the park, it is their responsibility to preserve some of the history of the line cabin era of the late 1800's.

B. Site Cabins

The major recommendation is in regard to the Slocan Chief and the Silver Spray Cabins because these cabins are in the best condition and most used by the public.

In the body of the report, five different possible solutions were given for a feasible cabin policy for Kokanee Glacier Provincial Park. From the five possible solutions, I recommend a combination of solutions 1 and 3. Solution

1 is to repair the Slocan Chief Cabin and solution 3 is to repair the Silver Spray Cabin. Reasons for making this decision are given below:

- The two cabins are a part of the natural history of the area; therefore, they should be preserved. Not all the site cabins are in good enough shape to be repaired, but these two cabins are in fairly good shape yet. I feel it is a Parks Branch responsibility to preserve some of the site cabin history of the area.
- This recommendation calls for approximately \$25,000 to be spent to restore them to a safe condition for park users for the next 15 or so years. This may seem like a large amount of money, but I think the people deserve the right to have the cabins repaired to last for the next 15 years. Since 1896, when the Slocan Chief Cabin was built, volunteer groups have spent much time, money and effort on maintaining the cabin. It is important, therefore, for the Parks Branch to continue this good work.
- Repairing the Silver Spray Cabin not only preserves it, but it takes some of the heavy visitor use off of the Slocan Chief Cabin. This is the major reason for repairing the Silver Spray Cabin.
- If a new energy efficient shelter was constructed it might last 20 years, but then what happens?

The Parks Branch may find itself with the same problem that now exists in regard to the Slocan Chief Cabin. Also, there would, then, be no money to repair the Slocan Chief Cabin or the Silver Spray Cabin; they would have to be closed down because of low safety standards.

CONCLUSION

It is the Parks Branch's responsibility to maintain some history of the area. This can best be done by repairing the Slocan Chief and the Silver Spray Cabins to a useable state for the next 15 or so years and then closing them down for interpretation. The three line cabins would be preserved merely for future interpretation. If the maintenance costs of the site cabins, 15 years from now, are not exceedingly high, then the cabins can remain open to recreationalists.

These recommendations will satisfy the recreationalists, but if the cabins are closed down to interpretation now, people would complain. However, if the public knows they can use the cabin for 15 years and that it will, then, be closed down for preservation, I think they will be happy. That is the reason for the Parks Branch's existence: to provide areas for people to use and enjoy. This enjoyment will be enhanced if some of the history represented by the cabins is preserved.

APPENDICES

Number	Source
1	Kokanee Glacier Provincial Park Pamphlet.
2	Kokanee Glacier Provincial Park Interim Policy Statement.
3	Interview with Mike Hanry by Don Demers, January 8th, 1981.
4	Interview with Rick Oliver, by Don Demers, February 10th, 1981.
5	Bulletin on History of Slocan Chief Cabin.
6	Interview with Helen Butling, by Don Demers, January 10th, 1981.
7	A Climbing Hut In the Alpine Environment, University of Calgary, 1978.