

RECONNAISSANCE  
*and*  
PRELIMINARY RECREATION PLAN

WELLS GRAY PARK

by  
C.P. LYONS  
Parks Section  
FOREST ECONOMICS DIVISION  
B.C. Forest Service

– 1941 –

Reference No. P41  
General file: 0135867

## PREFACE

Wells Gray Park is an outstanding potential recreational area; it has remarkable scenic attractions as well as exceptional fishing, big game hunting and wilderness area possibilities. The Park is located about 100 miles north of Kamloops in the Kamloops Forest District and is accessible by the Caribou and North Thompson River regions.

The proper development of this area as a Provincial Park depends upon planned recreational management in order to adequately provide for present and future use. With this objective in mind, a reconnaissance of the Park was made in 1940 by Mr. C.P. Lyons, whose report and preliminary recreation plan is herein detailed. Sufficient information is now available to introduce planned management but it is still necessary to make further investigations before extensive developments take place.

For the time being commercial lodge and campsite privileges on Crown land should be restricted to a minimum and, if possible, confined to guides of hunting and fishing parties who now make use of the Park. It would be particularly advisable to limit locations for commercial enterprises to the specific regions detailed in this report and to stipulate a maximum value for construction and development work. By so doing adjustments could be more easily made to suit any detailed management plan which may be prepared in the future.

Existing private use on Crown land should be brought under a permit system and there is no reason why expansion in this direction should not be encouraged.

Adequate provision for public use is essential and consequently certain areas have been recommended as reserves for this purpose. Before any park use privileges are granted consideration should be given to present and future requirements of the public.

Initial steps should now be taken to do Park improvement work. At the present time the construction of public campsites, open fireplaces, and the remainder of the road to Dawson Falls warrant consideration. Essential trail maintenance should also be undertaken.

Fire protection has been at a minimum. Now that the recreational possibilities of this area have been recognized it is necessary that more consideration be given to fire detection and fire control if Park values are to be protected.

In view of the favourable position for developing this area as a Provincial Park it is recommended that steps be taken to introduce planned recreational management in line with the general policies indicated above and which have been further enlarged upon in this report. It is further recommended that a Park Ranger be appointed to facilitate planned management.

*H.J. Hodgins*

Assistant Forester

## TABLE OF CONTENTS

I. Location.....	I
II. History.....	I
III. General Character of the Area.....	2
A. Topography.....	2
B. Climate.....	2
C. Geological Features.....	3
1. Glaciations.....	3
2. Volcanics.....	3
IV. Access to Park	
1. Caribou Highway and Canim Lake.....	4
2. North Thompson and Clearwater River Road to Hemp Creek.....	5
3. Blue River Trail to Murtle Lake.....	5
4. Caribou Highway and Quesnel Lake.....	5
V. Forest Cover.....	6
A. Estimate of Mature Merchantable Timber.....	7
B. Classification of Areas, in Acres.....	7
VI. Use by the Public.....	8
VII. Improvements, Existing and Proposed.....	9
A. Roads	
1. Clearwater Valley and Hemp Creek Road.....	9
2. Canim and Mahood Lake Road.....	10
B. Trails	
1. Trail up Clearwater River from mouth of Hemp Creek.....	10
2. Placid Lake Trail.....	11
3. Trail from Hemp Creek Road to Dawson and Helmcken Falls.....	11
4. Trail from Dawson Falls to Clearwater Lake.....	11
5. Murtle River Trail.....	12
6. Blue River – Murtle Lake Trail.....	12
7. Quesnel Lake – Hobson Lake Trail.....	13
8. Mahood Lake – Clearwater Lake Trail.....	13
9. Trail from Mahood Lake to Sylvia and Goodwin Falls.....	13
10. Mica Mountain Trail.....	14

c. Campsites	
1. Dawson Falls.....	14
2. Helmcken Falls.....	15
3. Veronica Point (Horseshoe).....	16
4. Clearwater Lake.....	17
5. Azure Lake.....	18
6. Murtle Lake.....	18
7. Canim Lake.....	19
8. Mahood Lake.....	19
9. Quesnel and Hobson Lakes.....	21
10. Clearwater River above Hemp Creek.....	21
VIII. Pastures.....	22
IX. Fish.....	22
1. Canim and Mahood Lakes.....	22
2. Canim and Mahood Rivers.....	23
3. Lower Clearwater River.....	23
4. Upper Clearwater River.....	23
5. Clearwater River.....	23
6. Azure Lake.....	24
7. Hobson Lake.....	24
8. Murtle River.....	24
9. Murtle Lake.....	24
X. Game.....	24
XI. Mineral Springs and Analyses.....	26
XII. Fire Protection.....	27
XIII. Alienations and Reserves.....	28
XIV. Cabins in Wells Gray Park.....	29
XV. Recommendations.....	30
A. Administration.....	30
B. Park Use.....	30
1. Commercial enterprises.....	30
2. Public Reserves.....	32
3. Private Use.....	32
4. Alienated Areas.....	33
C. Park Improvements.....	33
D. Fire Protection.....	34
E. Game Management.....	34

## WELLS GRAY PARK

### I. LOCATION

100 to 175 miles north of Kamloops between west longitude 119° 30' and 120° 30' and latitude 52° and 53°. Embraces major portion of Clearwater River and drainage. Area 1,164,800 acres and 1,820 square miles.

### II. HISTORY

The first record of any travel was in 1883 when some prospecting was done along the Clearwater River. There is little doubt but that trappers have been frequenting the district since that date. In 1902 mining equipment was taken from Quesnel Lake to Hobson Lake for development of properties on Hobson Creek. Logging equipment was likewise taken from the east end of Mahood Lake to Clearwater Lake about 25 years ago. The first reliable information was gathered in 1912 and 1913 by surveyors working near Hobson, Azure and Clearwater Lakes. Later, surveys were completed along the benches and flats south of the Murtle River. Soil conditions, at first suitable for large scale mixed farming, led to a considerable influx of settlers locating from Clearwater Station to Hemp Creek, south of the Park, but large portions of the land proved very stony with the result that farms are rather scattered and only located in rich bottom lands.

The large number of waterfalls on Murtle River interested the Water Branch in possible power development and so brought to the attention of the public the scenic attractions of this river. It was not until after 1930 that hunting and fishing parties penetrated the area in any great numbers and publicized the outstanding attractions of the district.

The sources of the Clearwater and the North Thompson Rivers were reported to have been thoroughly explored for the first time in 1940. Mountain ranges and ice fields still remain unexplored and vast areas of unexcelled hunting and fishing are little frequented.

The main drainage of the Clearwater River was established as a park, and named Wells Gray Park, on November 28th, 1939. Named after the Honorable A. Wells Gray, Minister of Lands for the Province of British Columbia, it perpetuates the name of an athlete, conservationist, outstanding citizen and statesman. Always a staunch supporter of sportsmen, realizing the value of outdoor activities for British Columbia's own populace

and envisioning the value to the Province of setting aside outstanding features as tourist attractions, the Honourable A. Wells Gray in his administration has correlated the multiple use of our forested lands, lakes, streams and scenic resources.

### III. GENERAL CHARACTER OF THE AREA

A. **Topography:** Primarily in the Caribou Mountain Range, and comprising Mahood Lake and all but the lower portion of the Clearwater River drainage, the Park is bounded on the east by a high line of jagged peaks marking the height of land between the Clearwater and the North Thompson Rivers and on the west by the upland plateau.

The Park is divided into blocks by large deep valleys such as those of the Murtle, Clearwater, Azure, Hobson and Mahood Lakes. Mountain Ridges and peaks of from 7,000 to 9,000 feet elevation are common in all but the southern portion of the Park. In the northern part, Azure River, Hobson Creek and Clearwater River, north of Hobson Lake, with their valley floors near 3,000' altitude are bounded by peaks rising to over 9,000'. The lakes near the west boundary have elevations close to 2,500' and peaks east of these lakes rise to elevations of over 8,000'. The central part of the area stands at general altitudes of 7,000' to 9,000'. Some deep canyons enter this part but in most of the central part, ice fields lie between the peaks and ridges. In the northern parts of the area the upland surface is less cut into by large valleys, the general altitude is slightly higher than in the south and more extensive ice fields exist. A short range, about 12 miles long, paralleling Azure Lake stands out as a fairly definite topographic feature. Several miles from the west end a spur extends north and culminates in a magnificent peak over 9,000' high.

South of Azure Lake the peaks and ridges are irregular and deeply incised and still farther south there is an abrupt change, the surface dropping to the level of the lava flats and low ridges which continue south on down the Clearwater River valley.

B. **Climate:** During the spring and fall months precipitation is heavy, but usually July, August and September have fine summer weather. Typical coast underbrush is found in valley bottoms in the more northerly part of the park suggesting heavier precipitation than south of Clearwater Lake. The winter months are severe with lakes freezing completely and many feet of snow falling in the valley bottoms.

c. **Geological Features:** Any person entering the park will immediately wonder at the deep canyon below Helmcken Falls. Pyramid Mountain protruding from a level plain, the lava flow at the south end of Clearwater Lake and many such similar phenomena.

1. **Glaciation:** Two distinct phases of glaciations are evident. The most spectacular is the work of the active glaciers. Much of the upland surface is covered by ice fields and large glaciers which descend as low as 4,000' altitude. Above the ice, spire-like peaks rise to altitudes of 9,000'. At lower levels sharp ridges, pitted with glacial cirques or hollows are visible, especially from Azure and Hobson Lakes. The difference in development of cirques on the north and south slope is noticeable. On the north slope the cirques are deep and steep walled and glaciers exist at their heads. On the south, slopes are shallower, contain no ice, and grassy slopes extend from timberline to near the top of the ridges.

The Raush glacier at the head of the Raush River is the most magnificent one in the area. It is a hanging glacier with a great ice fall at the lower end bringing the ice to a low altitude. The glacier is receding and cutting down into its old moraine leaving cut banks 100' to 150' high in front of the ice. The glacier at the head of Hobson Creek has retreated to its rock basin leaving a deeply grooved and polished surface in front of the ice.

The greater extent of a former glaciation is shown by "U" shaped valleys, faceted spurs, over-deepening of lake basins, glaciated ridges, and glacial till and moraine on the valley floors. The valleys of the main drainage channels of the area are all "U" shaped. Many of the tributary valleys and most of the smaller valleys tributary to the lakes are hanging. None of the lakes show a drowned coast, which they would if an ordinary valley were flooded by damming. Many of the streams enter Azure Lake over waterfalls. Low rounded ridges, particularly in Clearwater Valley, are parallel to the valley floor. The most extensive glacial deposits are along the north half of the west shore of Clearwater Lake where deposits rise 400' above the lake. Deposits are being made at the heads of Azure and Hobson Lakes by large rivers which are slowly extending their deltas.

2. **Volcanics:** All evidence of volcanic action can be divided into two general time periods: namely Miocene volcanic and recent volcanic.

Miocene volcanics occur in the lower part of the Clearwater River Valley forming high benches some 900' above the present river bottom. In places the river has cut



down to the schists below, indicating that the lower part of the Clearwater valley has been flooded with over a thousand feet of lava. The extensive flats in the vicinity of Murtle River are the surface of these lava flows. The volcanics outcrop near the centre of Clearwater Lake on the east shore where they rise abruptly for 300' to 400' to form the surface of a swampy flat that continues south to the lower end of the lake. East of the south end of the lake they form a ridge which rises 600' above lake level. Tributary streams have cut deep canyons in the volcanic and enter the main river over great waterfalls. A fine example of this is the falls on Bear Creek where it enters the Clearwater River just south of the Park.

Volcanics of recent age are visible near the south end of Clearwater Lake. The source of these is Ray Mountain, a strikingly red peak which stands out prominently at the south end of a long glaciated ridge. The mountain is visible from the south half of Clearwater Lake and is approximately 4 miles east and 8 miles north of the south end of the lake. From this peak a stream of lava averaging about a quarter of a mile in width flowed southwest to the foot of Clearwater Lake raising the lake level about ten feet by a lava dam and then continued nearly a mile and a half down Clearwater Valley. The surface of the flow is clearly visible along the trails near the south end of the Lake. The lava is distinctly ropy and is best seen just south of Clearwater Lake at the falls on Falls Creek.

#### IV. ACCESS TO PARK

1. ***Caribou Highway and Canim Lake:*** Turning off the Caribou Highway one mile north of 100-Mile House, it is 25 miles by road to Canim Lake. Canim Lake Lodge offers splendid accommodation at the lodge itself or in its adjacent cabins, while Anderson's also have many tourist cabins.

B.H. McNeil and Sons, with tourist headquarters at Birch Park Ranch, one-half of the way along the south side of Canim Lake, make arrangements to meet tourists at the west end of the lake. McNeil's arrange trips to Mahood, Clearwater and Azure Lakes, with Mahood Lake Lodge on the west end of Mahood Lake as their last outpost. Boats with or without outboards are available on Canim Lake. Transportation from Canim Lake to Mahood Lake is available by hired car. A minimum of a week should be taken if the Clearwater, Azure Lake trip is planned. It requires at least a two day boat and saddle horse trip from McNeil's to the lower end of Clearwater Lake. With the exception of the attractions of Murtle Lake and River the major attractions of the Park are available on this trip.

2. ***North Thompson and Clearwater River Road to Hemp Creek:*** From Kamloops it is 100 miles by fair road up the North Thompson to Clearwater Station on the Canadian National Railway. It is 25 miles by a branch road from here up the Clearwater Valley to Hemp Creek and the south boundary of the Park. This stretch of road, while quite passable, is very narrow, has many sharp corners and requires careful driving. Nearly two hours of driving are required to reach the Forest Branch cabin at the end of the present road. The 6 miles of road needed to drive to Dawson Fall should be completed at an early date.

Reginald Small operates a lodge on the Clearwater River near the Junction of the Clearwater and North Thompson roads.

Dave Anderson, situated near the end of the Clearwater River road, caters to hunting and fishing parties but has very limited accommodation at his own ranch. He acts more as a guide to privately outfitted parties and provides horses. Fishing trips to “Stillwater” and Murtle Lakes in the summer and hunting trips in the fall are his specialties. Short trips by horse to Helmcken, Dawson and the other beautiful falls on Murtle River are readily handled by Anderson. The Forest Service and Anderson use the Dawson Falls, Horseshoe, Clearwater Lake trail for access to the northerly portion of the Park.

C.W. Mobley and Sons of Tappen, B.C., have horses available for the 16-mile trip to Murtle Lake where they have good camp accommodation for fishing and hunting parties.

3. ***Blue River Trail to Murtle Lake:*** Blue River on the Canadian National Railway can be reached by car by continuing some 70 miles along the road from Clearwater station. A good horse trail, 16 miles in length follows the Blue River to Murtle Lake. The C.N.R. guide, Mr. Renshaw, caters to tourists and operates a tent camp on Murtle Lake where fishing and camping offer the chief attractions. C.W. Mobley and Dave Anderson each have accommodation for tourists at the west end of Murtle Lake.

4. ***Caribou Highway and Quesnel Lake:*** This means of entrance is the least used of the four. A 65 mile boat trip from Likely P.O. to the head of the east arm of Quesnel Lake and then a 6 mile walk over a good trail affords access to Hobson Lake. There is no accommodation on the east arm of Quesnel Lake or Hobson Lake so parties must be fully outfitted. Fishing is not good in Hobson Lake and the only side attractions are mountain climbing trips in the vicinity. A good trail 15 miles long from the head of

Hobson Lake takes one into the headwaters of the Azure, Raush and North Thompson Rivers. Many magnificent glaciers and unclimbed peaks are found here.

## V. FOREST COVER

In 1926 fire swept up the Clearwater valley to the Murtle River. North of the Murtle River the burn, approximately 2 miles wide, followed the east side of the Clearwater River and Lake to the northern end of the latter. The northerly two-thirds of the west side of the lake has likewise been burned. These burns within the Park are restocking with deciduous species; namely, aspen, willow, alder and birch, at present some 15' high. Although not a potential stand of what is known as commercial timber the area with its scattered spruce and hemlock is not unattractive to the tourist during the summer and fall.

One of the least attractive sites in the Park is found in the burned territory on each side and near the centre of the Murtle River. Here countless standing snags and burned logs stand out in a sparse cover of aspen, alder and willow. The redeeming feature is that this area provides an excellent hunting ground in the fall.

A belt of timber is found around Azure, Hobson and Murtle Lakes extending to scrub line near an elevation of 4,000'. Narrow strips of timber follow the main rivers for several miles from the lakes, gradually petering out into scrub. The stands average 5 M.B.M. per acre, and are made up of Cedar 40%, Spruce 20%, Hemlock 20%, Fir 10% and Silver Fir 10%. These percentages are subject to considerable change in certain local areas. The timber is only fair to poor quality.

There is a fair stand of timber, approximately 1 ½ miles square, at the north end of Clearwater Lake and on the west side of the river averaging 10 M.B.M. per acre with Cedar 40%, Spruce 30% and Fir, Hemlock and Silver Fir making up the rest of the stand. Two patches on the plateau south of Murtle River, one near Helmcken Falls and the other half way along the proposed road to Dawson Falls, run 10 M.B.M. per acre with Cedar 40%, Spruce 30%, Fir 25% and some scattered Hemlock and Silver Fir.

Years ago the major timber stands of the park were alienated by timber licenses but these have been abandoned leaving practically all park timber as Crown timber. Possibly twenty-five years ago when driving of the Clearwater River was contemplated a donkey engine was taken from Mahood Lake to Clearwater Lake, the route being that of the present trail. Due to the poor type of timber encountered the proposed operation was

**A. Estimate of Mature Merchantable Timber:**

The following shows the estimated volume of timber by species within Wells Gray Park as obtained from the Forest Resources Inventory. It is all classified as inaccessible.

Engelmann spruce.....	355,300 M.B.M.
Western red cedar.....	268,100 M.B.M.
Silver fir (Balsam).....	155,900 M.B.M.
Douglas fir.....	140,100 M.B.M.
Western hemlock.....	128,200 M.B.M.
Lodgepole pine.....	15,700 M.B.M.
 TOTAL	 1,063,300 M.B.M.

**B. Classification of Areas, in Acres:**

Merchantable Timber		175,100
Immature Timber		
Over 25 feet	17,000	
Under 25 feet	17,400	
Total Immature Timber		34,400
Burned	30,400	
Non-Commercial Cover	83,400	
Total Not Restocked		113,800
Total Productive Forest Land		323,300
Barren	510,500	
Scrub	265,500	
Water and Swamp	65,500	
Total Non-Productive		841,500
 Total Area		 1,164,800 acres or 1,820 square miles

abandoned entirely. Actually all the timber within the Park is of more value for scenic purposes than commercial logging.

The trees around the lakes and rivers are not only high in scenic value caused by the mingling of deciduous and coniferous species but also provide shelter and wood for campers. Because concentrations of campers occur at certain points there is already evidence that some means of regulation is needed in these areas.

Salal, devil's-club and bracken are common in the more moist bottoms while huckleberry, blueberry and soapberry (Soap Oolalie) predominate on the open and better drained soils. The blueberries and huckleberries may become important from a recreational standpoint in the future for even now there is considerable local activity during berry season and many tourists have remarked on the abundance and quality of the berries. Actually berries are common throughout the park but there are two locations worth special mention due to their abundance. One is about one-third the way up the west side of the Clearwater Lake, the other in the vicinity of the Hemp Creek meadows near McLeod Hill.

## VI. USE BY THE PUBLIC

For so large a park and one with so many attractions, use by the public is almost negligible. Canim Lake, adjoining the Park on the west, enjoys a fair tourist business with 1300 visitors reported there in 1940. It is estimated that not more than 320 visited the Park during 1940 and that possibly two-thirds of these were deer and moose hunters in the burns near Hemp and Blackwater Creeks. The 1940 distribution of visitors to the Park itself is as follows:

1. Mahood Lake.....80 people  
(of these 25 extend their trip to Clearwater and Azure Lakes.)
2. Hemp Creek.....200 people  
(of these, 50 visited Dawson and Helmcken Falls, 12 continuing to Clearwater Lake, "Stillwater" and Murtle Lake were visited by 20 of the 200 people, whereas 10 traveled into the Lower Clearwater River Section.)
3. Blue River to Murtle Lake.....40 people
4. Quesnel Lake to Hobson Lake.....nil

Approximately 5 days is the average time spent in the park by tourists with the exception of the hunters at Hemp Creek who only stay 1 or 2 days. Most of the hunters at Hemp Creek are from near localities who only wish a few hours drive and 1 or 2 days hunting. Figures from Canim Lake indicate that one-third of the tourists visiting the region are Americans. Probably as high as 80% of those going to Murtle, Clearwater and Azure Lakes are Americans who hire guides and pack and saddle horses.

The Caribou District with its many fishing resorts is known to most tourists and the popularity of Canim Lake attests to the fact that wherever there is a passable road and some attraction, tourists will not be far behind.

Growing publicity from the Canadian National Railway should result in more visitors entering from the Blue River. Ultimate construction of the proposed road from Jasper down the North Thompson River will provide a marked impetus to travel. The problem is not one of competing districts but rather one of providing access to definitely known attractions. When this is done and suitable campsites provided, a small amount of advertising will see a marked increase in the use of Wells Gray Park.

## VII. IMPROVEMENTS, EXISTING AND PROPOSED

A. **Roads:** Only a few miles of road are found in the park itself, namely a short portion of the Hemp Creek road and some two miles of the road between Mahood and Canim Lakes.

1. **Clearwater Valley and Hemp Creek Road.** This road starts at Clearwater Station and follows the high bench along the east bank of the Clearwater River. It is a very narrow road, has many sharp curves and crosses several precarious bridges. In the fall of 1940 Hemp Creek was bridged near Anderson's ranch and the road extended for another half mile to the Forest Branch cabin.

The completion of approximately six miles of road to Dawson Falls will play a major part in opening up the park to the public. Road location and construction should not be difficult as large creeks or rock work are not encountered. When the road is completed to Dawson Falls it should probably be extended 3 miles to the impressive Helmcken Falls.

The completion of this road should warrant the replacing of old bridges and regarding of the Clearwater Valley Road by the Public Works Department.

2. ***Canim and Mahood Lake Road.*** Twelve miles of road connect McNeil's ranch on Canim Lake to the landing at the west end of Mahood Lake, except for a few steep grades and wet spots it is considered a fair road. McNeil and Buchanan are the only ones using this dead end road.

Several years ago a possible road was located from the west end of Canim Lake following the south shore to McNeil's ranch. Construction work was started west from the ranch and several miles of road built only to be later abandoned. It is now overgrown and only passable by foot.

A real increase in tourist trade might warrant the completion of this road because only when the road is built will Mahood Lake become available to the general public.

Because of the present limited use of the road between Canim and Mahood Lake, no recommendations for its improvement are made until such time as public travel demands.

B. ***Trails:***

I. ***Trail up Clearwater River from Mouth of Hemp Creek.*** A short trail near Shook's ranch leads to the Clearwater River at the extreme southern boundary of the park. The trail was built under Government supervision and has been well graded in the steep canyon fringing the Clearwater River.

The main Clearwater River Trail crosses Hemp Creek by way of a fallen tree which is rather insecure at high water. The Creek is easily forded by horses. For a mile and a half the trail closely follows the course of the river on a level grade as it passes through small patches of poor timber which partly helps to relieve the monotony of the burn. It then climbs fairly steep and becomes rockier as the trail goes over a narrow rocky pass.

For the next 4 or 5 miles the trail is dotted with boulders and overlaid with many windfalls as it winds through a dreary burn between  $\frac{1}{4}$  to  $\frac{1}{2}$  mile from the main river. Walking is very tiring and progress with horses is slow, due to the many windfalls. No running creeks are crossed in this stretch. About a mile below Whitehorse Bluffs the condition of the trail and scenic aspect improve considerably. The trail approaches the river and from here to its end, nearly 3 miles, closely follows the river through big timber and is quite easy to travel.

Present travel does not warrant immediate improvement. Future development should first consist of straightening and cutting out the windfalls on the 3 mile stretch of trail through the old burn. Right-of-way through lots 3047 and 3050 should be assured.

2. ***Placid Lake Trail.*** Branching off the Dawson Falls trail about 1½ miles north of the Hemp Creek Ranger Station, this trail leads to Placid Lake. It was an old surveyors' trail and has been cleaned out by the assistant ranger and patrolman during the past two years. Its primary importance is as a fire trail for it runs through green timber and quite heavy reproduction until approximately 10 chains past the lake where it enters a burn and becomes quite poor.

3. ***Trail from Hemp Creek Road to Dawson and Helmcken Falls.*** The 6 miles of trail to Dawson Falls and the 3 miles to Helmcken Falls are the most used of any in the park due to the scenic attractions of the Falls. It is a well located trail but crosses a few mudholes. A considerable portion of the trail is in heavy timber and helps to provide a scenic ride to the Falls.

It is hoped that in the near future a road will replace this trail. If the proposed road is not completed, trail maintenance work by the Assistant Ranger and Patrolman stationed at Hemp Creek should, as in the past, keep the trail in fair condition. Brushing out to a width of 8 feet and corduroying of mudholes should be undertaken. The 3 miles of trail from Dawson to Helmcken Falls should be cleared of windfalls and made more readily passable for horse travel.

4. ***Trail from Dawson Falls to Clearwater Lake.*** Murtle River is crossed on a good substantial horse bridge about ¼ mile below Dawson Falls. The trail slowly climbs through patches of limby conifers and aspen-birch-willow type to a ridge 300 feet above the river crossing. Approximately 3 miles south of Veronica Point (The Horseshoe) the trail comes close to the edge of the Clearwater River canyon from where a natural vantage point gives a view of many miles of river valley. The next mile and a half is on a slight downgrade through a beautiful stand of young birch about 8" to 10" in diameter and 50 feet high. This is one of the loveliest parts of the whole ridge and should be preserved as such. Three small creeks are passed in the next mile and a half and all have good water. From Veronica Point to John Ray's ranch the country is open, providing fair grazing under the trees. After skirting Ray's farm the trail passes into a dense grove of cottonwood and evergreens. Several hundred feet east of the trail there is a mineral spring. Three creeks are crossed in the next mile and then small ridges and hollows are followed for several miles. Dense



patches of lupine provide excellent feed for horses. Interest is quickened by a marshy water-lily covered stream leading to Shadow Lake. The lake is about 1 mile long and presents a very attractive appearance from the trail. Zeller's Lake is then skirted and the remaining 1½ miles to Clearwater Lake is through patches of small shady evergreens and over almost bare lava rock sparsely covered with small aspen, birch and spruce.

General maintenance work by the patrolman and assistant ranger should be continued, and if the opportunity arises, the width of the trail should be increased to 8 feet. The scenic beauty of the trip along this trail could be enhanced at little cost by first, thinning the trees and making a horse trail to the lookout at the edge of the canyon overlooking Clearwater Valley and secondly, slashing clumps of decadent willow growing on the lower side of the trail which hinder a view of Shadow Lake.

5. ***Murtle River Trail.*** This trail was built during 1930 and 1931 by Anderson and Mobley. From the Hemp Creek Road to the eastern slope of McLeod Mountain the trail is good, but from there to Stillwater, the trail follows a very circuitous route and is covered with large boulders. An old burn follows along this latter portion of the trail and for three miles east of Stillwater presents a picture of low scenic value. From the burn three miles east of Stillwater the trail drops into a stand of mature timber. Here numerous mudholes exist and are encountered until Murtle Lake is reached.

Estimated distances are 14 miles from Anderson's to Stillwater, a six hours ride, and 10 miles from Stillwater to Murtle Lake, a five hours ride.

As appreciable improvement of this trail would require much relocation, rock work and corduroying, no recommendation in this regard is made but ultimate development and protection of the park will necessitate such work.

6. ***Blue River – Murtle Lake Trail.*** 12 of the 16 miles of trail between Blue River and Murtle Lake were located and built during the summers of 1937, 1938 and 1939 by Youth Forestry Training Plan crews. This distance has been carefully built at an even grade and offers a first class tourist as well as fire protection trail. The last 4 miles, or that nearest Murtle Lake, follows a swampy area and needs relocating, although it is definitely passable at present. Unlike most trails in the park, this one passes through green timber for its entire length and makes a fine hike or day's horseback ride. The completion of work planned for this trail is strongly recommended, as it is one of the

important trails into the park, and protection of tributary standing green timber alone warrants its construction.

7. ***Quesnel Lake – Hobson Lake Trail.*** Many years ago a wagon road was built between these lakes by Mr. Hobson but it eventually became overgrown and practically useless. In 1930 and 1931 a new road was constructed for the hauling of mining equipment and supplies for the Hobson Creek Placers and the Blue Ice Property. The location is through a low pass with less than 400 feet climb in the distance of 6 miles. The valley is typical west coast in appearance with cedar and hemlock forming the main tree species. Devil's Club, bracken and salmon berry have encroached on the road until only a narrow foot path is left. The main difficulty in road location appears to be the numerous swampy spots encountered.

Although only slight use has been found for this trail, it is important as a fire trail, providing the only quick access to Hobson Lake and much of the surrounding country. Plans for placing a boat and building a boathouse on Hobson Lake during the summer of 1941 will result in brushing out of this trail. Future maintenance work can possibly be done by regular Forest Service summer employees.

8. ***Mahood Lake – Clearwater Lake Trail.*** Constructed about thirty years ago to permit transportation of a donkey engine from Mahood Lake to Clearwater Lake; this trail is maintained by its chief users, the McNeil's. Maintenance of this trail by Forest Branch employees is difficult due to its inaccessibility, but it should be kept open for both forest protection and recreational purposes.

9. ***Trail from Mahood Lake to Sylvia and Goodwin Falls.*** This short trail will become very important if it can be brought into shape. Not only does it start at a concentration point of recreationalists but leads to scenic Falls and opens up a virgin fishing ground.

The proposed establishment of a small lodge at the east end of Mahood Lake by McNeil will draw attention to this portion of the Park, and for that reason the preparation of a public camping place, together with improvement of nearby trails, becomes a pressing problem.

The main work to be done is the reblazing of the very old trapping trail and the clearing out of one-half mile of small windfall. No trail exists between the two Falls, but one should be constructed because of the dense windfall in that vicinity.

10. ***Mica Mountain Trail.*** The McNeil's are about the only users of this trail from Mahood Lake and travel is confined to hunting parties in the fall. It is a poor trail and is only mentioned because at some future date it may become important as a link in a circle trip. An old trail leads up to Daniel Creek several miles north of the south end of Clearwater Lake and little construction is needed to produce it to Mica Mountain and the Mahood Lake trail.

c. ***Campsites.***

1. ***Dawson Falls.*** Dawson Falls is probably the most visited spot in the park and when the Hemp Creek road is extended to the falls a large increase in visitors can be expected. The falls itself is approximately 300 feet across with a drop of 60 feet. It is particularly impressive because it exaggerates the amount of water coming over and the natural setting is unimpaired. The nature of the river bank makes fishing difficult if not impossible for most of the river's length. There is an accessible spot one quarter mile below the falls at a bridge crossing of the river known as the "Mushbowl" or "Punchbowl". This name is derived from several bowls scoured out of rock by the river at high water. The fish are rather small and are soon fished out. For the above reasons fishing, in Murtle River, near the falls cannot be classed as a tourist attraction. A concentration of fishermen at the accessible areas would soon deplete the available stock.

The greatest problem in establishing a campsite at Dawson Falls is to provide a suitable water supply. There are no creeks in the vicinity and the possibility of a suitable well being located appears remote. The plateau dips sharply to water level making it impossible to have a camping place near the water's level, unless the area above the falls is used. Here the ground is swampy with a very dense cover of spruce. About 400 feet below the falls a camp could be made on the plateau. The ground is dry and well aired. Cover consists of 4" Aspen and 6" Lodgepole Pine very few of which would have to be cut as the stand is open. Quite a number of windfalls would have to be removed from this proposed campsite. The moist accessible water for one quarter mile below the falls is directly below this camping site where there is a small rocky beach at water level contrasting with almost perpendicular cliffs elsewhere. From here water would have to be carried up a pitch of about 80 feet to the level of the campground.

Improvement work on this camping area should be done as a part of a definitely planned and permanent program of development. The central portion of the proposed

camping area should be built first and consist of fireplaces, tables, benches, and toilets, with further improvements as use of the area indicates. The short trail to the river should be built to provide a means of access to water until a ram is installed. Other trails to lookout points should be located for permanency as well as safety, and the natural setting disturbed as little as possible. The complete removal of several dead trees jutting out over the river near the base of the falls will add to the beauty of the site.

The accompanying plan shows the approximate ten acres it is proposed to reserve for the general use of the public and the suggested development of the Dawson Falls campsite.

As regards pasturage in this vicinity there are several meadows, totaling over 160 acres, one or two miles south of the falls and it is believed horse pasture could be developed here.

2. ***Helmcken Falls.*** Helmcken Falls has a sheer drop of 450 feet and defies description. One should see Dawson Falls first to appreciate the amount of water that skyrockets over Helmcken Falls. The water spills into an immense bowl and during high water spray is shot for hundreds of feet into the air and is visible from vantage points as far as ten miles away. The sun provides a perpetual rainbow and patches of green grass and varied colored rock on the steep sides of the canyon add a further touch of colour. From vantage points on the old foot trail down the south side of Helmcken Canyon many beautiful views of the falls are obtained. Near where the trail drops down to the Clearwater River one sees not only the confluence of the Murtle and Clearwater Rivers but likewise several miles up and down the Clearwater River and valley.

From the top of a perpendicular cliff at the canyon's edge, several hundred feet below the falls, one obtains the best view of the falls. The desire of everyone to record their name has led to the blazing on three or four sides of over fifty percent of the trees in the immediate vicinity of this vantage point. These trees have an average of 50 names to the tree and are either dead or dying, causing a permanent blot on an otherwise attractive site. The rocks at the edge of the canyon are split off from the main rock body and would be hazardous if any number of sightseers were on them.

Access to the river in the canyon below the falls is difficult and dangerous. At present one has to go about 3 miles along the canyon rim to get down to the river and then

trek back up the canyon bottom over rock slides and boulders to the falls. Another possible means of access is down a small ravine on the north side of the river, fairly close to the falls. This route necessitates being lowered by a rope but the possibility of providing a short stairway appears feasible. The value of development work on the north side of the canyon is problematical because of the loose sand formation along the rim and the scarcity of vantage points in the immediate vicinity.

The accompanying plan shows the area near Helmcken Falls it is proposed be reserved for the use of the public and the following is the development work suggested to be undertaken there:

- A. A campsite should be established about 300 feet up the river from the falls. Here water is readily obtainable and the erection of small fireplaces, tables, and benches would do away with visitors camping at the most popular vantage point on the canyon rim.
- B. The scenic trail down the south side of Helmcken Canyon should be improved and made safer by moving it back in places from the canyon edge. Natural vantage points should be made accessible and safe as possible.
- C. Some means of registering visitors should be provided before the natural beauty is spoiled by further disfiguring of trees.

3. ***Veronica Point (Horseshoe)***. Because of the distance between Dawson Falls and Clearwater Lake some intermediate camping place is needed. Veronica Point on the Clearwater River is not only near the halfway point and close to the trail but provides fine fishing in the back eddies of the river. Crossing of the river at this point provides the most direct route by trail from Dawson Falls to the east end of Mahood Lake and although a reconnaissance of the Clearwater River south of this point was made in an endeavor to locate a shorter route a better crossing was not found. The Forest Service has a cabin and boat here. Due to its key position it is recommended a reserve be placed on the camping site in this vicinity to prohibit exploitation by private interests. Suitable camping facilities should ultimately be provided.

Fair pasturage is found about one half mile north of the Forest Service cabin on the east side of the river. On the west side of the river and in the "horseshoe" itself pasturage is abundant. By fencing the narrow neck a large grazing area could be controlled.

4. *Clearwater Lake.* The ranger station reserve on the east side of Clearwater Lake embraces the best site for development. There is no reason why some part of this reserve cannot be made available to a suitable applicant when applied for. The importance of this location is that it is a starting point for trips on Clearwater or Azure Lakes and provides excellent fishing nearby in the fast water at the lake outlet.

The present Forest Branch cabin will have to be rebuilt and the area cleaned up. The boathouse is in fair shape and should serve for several years. A small float where boats can be conveniently launched is required. A small creek 100 feet north of the cabin supplies cold water the year round but a present overhanging brush makes it difficult to obtain clean water. Some means of supplying water by a trough or pool would be a real convenience.

Recommendations as regards an area to be held as a public reserve and an area to be made available for concessions and cabin sites is difficult and controversial. Good sites must be available for those wishing to erect a cabin or lodge and a key area must be reserved for the general use of the public and Forest Service administration. A detailed plan of the area has been drawn with the area recommended for public reserve shown so that as tourist travel increases and local needs are better known adjustments can be made.

When Park Use Permits have been granted to applicants for cabins over the area available for such purposes, permission should be granted for their constructing a float on the public reserve if a suitable site is not available on their own area.

There is no grazing on the west side of Clearwater Lake and horses brought in from Mahood Lake must be taken back to Veronica Point to graze.

On the east side at the foot of the lake some grazing is found. It has been the practice to turn horses loose and hope that the gate on Falls Creek and the several hundred yards of wire extending up the creek would stop the horses from heading down the trail. The method is fairly reliable in high water but is very poor during low water. A small pasture on Falls Creek could be developed by slashing, piling and burning several acres of young alder, willow, and spruce. When planted with timothy and fenced an excellent pasture would be assured at a cost of about \$100. The exact location of this pasture would depend on finding the most suitable area of rich soil with moisture holding possibilities. A natural strip of trees 200 to 400 feet wide would and should be left between the trail and the near edge of the pasture. No disfiguration

would be visible from either trail or lake. When required similar pastures could be developed by private parties across the creek.

A sandy beach, very favourable both for its location and attractive qualities as a camping place is located about one half way up the east side of the lake. This 400 foot shallow water beach has a background of scattered large cottonwood in a stand of fir and cedar. There are no beaches at the northern end of the lake so that trips are usually planned so that the camp may be made on Azure Lake.

5. **Azure Lake.** The first good beach on entering Azure Lake is better than one-third of the way along the north shore or about 8 miles from the outlet. Two fine gravel beaches in close proximity, both over 100 feet long, are backed by a stand of hemlock, cedar, and fir. Another choice location is a small beach just west of Angushorne Creek from where Rainbow Falls may be seen. While no development work is justified on Azure Lake at present these several beaches may become important in the future.

6. **Murtle Lake.** Many fine beaches and camping spots are to be found on Murtle Lake some of the better ones being marked on the map.

The main access to the lake is over the sixteen mile trail from Blue River but Anderson and Mobley who pack in from Hemp Creek have private cabins on the west end of the lake which is their headquarters for hunting and fishing parties.

The most controversial and key beach is that at the east end of the lake, north of the lagoon. This beach is approximately 500 feet long. Two cabins have been erected here, one by a Blue River group and the other, a combination camping shelter and boathouse, by Renshaw & Son of Blue River. This beach is rapidly deteriorating in value due to careless methods of refuse disposal and it is recommended that the present squatters be prohibited from undertaking further construction here and that all applications for cabin permits be directed to the area south of the lagoon. Tentative plans are underway for the construction of a Forest Service cabin and Boathouse on this site so although these squatters should not be removed immediately they should be given to understand that they will ultimately have to remove their present buildings.

The mile long beach on the south side of the lagoon is ideally suited for the cabin and home sites and this area should be made available for that purpose with the exception

of the site adjoining the lagoon and including the present dilapidated Forest Service cabin, for tent campers could use this to advantage.

There is fair grazing at the west end of Murtle Lake under the old growth timber and the scattered meadows adjoining the lake. A dense belt of timber acts as a fence and the only precaution that needs to be taken is to bar the trail.

At the east end of the lake, horses are forced to swim or wade the narrow neck of the lagoon to the south side where a large grazing area of swampy lowland is available.

7. **Canim Lake.** At the east end of Canim Lake, on the south shore, there is a fine sandy beach over 400 feet long with water under five feet in depth extending 200 feet from shore. The beach makes a right angle turn at the mouth of the river and safe anchorage and shelter is available in the river from lake winds. From this shelter fishing and sightseeing trips are made down the river and to Canim Falls. The beach is protected by a belt of alder and cottonwood 20 feet high with scattered large cottonwoods.

This campsite although outside the park in Lot 1254, a reverted pre-emption, is a much frequented campsite which should be reserved from alienation for it will become increasingly important from year to year. That portion of Lot 1254 south of Canim Lake and River has therefore been reserved by the Forest Branch for future purposes.

8. **Mahood Lake.** The west end of Mahood Lake, where the Canim Lake road terminates, is important as it is the western entrance to the park. McNeil owns the lot that embraces the main beach which is over one quarter mile long. A right of way of 66 feet was obtained when the road was constructed to Mahood Lake but the camping space available on this is entirely inadequate for an appreciable number of tourists. An additional 200 feet of beach north of the road should possibly be acquired and would meet the needs of the camping public for many years.

This fine beach has a fringe of scattered cottonwood immediately adjacent and an aspen and willow flat extending to a stand of heavy timber about 400 feet from the lake. The setting of this still attractive beach was marred in 1928 when the area was cleared for a proposed farm.



Near the northern end of the beach there is a barn and boathouse and the remains of an Indian tent camp. At the southern end of the beach McNeil's have a partially completed lodge which when finished should prove a popular resort in the park. The road from Canim Lake ends just 300 feet north of this lodge.

One of the most important beaches in the park is that at the east end of Mahood Lake which is far superior to anything in the vicinity and commands the entrance to fishing in Mahood River. The boundaries of the 300 foot beach are sharply defined on the ends by large boulders and on the east by a rockslide from adjacent lava cliffs. The central portion has been used as a campsite for years because it is the only cleared spot with several large firs which provide shelter. The areas behind the northern and southern portion of the beach have definite possibilities of development and when cleared of the windfall and brush will prove attractive campsites. The old firs are not as plentiful as near the central portion but the thrifty thirty foot fir and birch will provide excellent cover and the ten year old fir and spruce when thinned will quickly enhance the value of the area.

Bearing in mind that a portion of this beach must be reserved for the use of the general public and that concessionaires from Canim Lake and Dawson Falls will require permanent sites the available 300 feet of beach and adjoining camping area has been divided into three portions, namely, the northern 150 feet, the central 100 feet and the southern 50 feet.

The northern portion, of approximately one half acre, should be reserved as a campsite for the general use of the public. At present with very little clearing of windfall and brush there are three good camping spots, each with suitable privacy and shelter. Emphasis should be placed on the preservation of the thrifty young trees from those campers wishing to use them for boughs or tent poles. A little development work on this area at once, such as clearing the camping sites, erecting small stone fireplaces and one toilet with the placing of several instructional and directional signs, will preserve this important camping area for otherwise it will deteriorate very quickly and the damage will be permanent.

The central portion, of approximately one third acre, has been tentatively set aside for McNeil of Canim Lake as he has already made application for the whole beach. The area should readily serve his purpose and is actually the portion he wished to develop.

The southern portion, although only containing 50 feet of the beach, can be augmented by adding an equal or larger portion to the south. The whole area embraces several fine cabin sites and at least one of these should be retained for applicants making headquarters on Hemp Creek or Dawson Falls with pack trains transporting to Mahood Lake and return. This presupposes the construction of a bridge over the Clearwater River near the junction with Murtle River.

9. ***Quesnel and Hobson Lakes.*** The southern half of the beach at the east end of Quesnel Lake is part of Block B, Lot 5192, which area was made a public reserve some years ago and includes the start of the road to Hobson Lake. The lake is too shallow for several hundred feet from shore to permit launches approaching, thus necessitating their anchoring well off shore. There is an unoccupied cabin on the debris covered beach which is used freely by the public.

Two reserves were established on Hobson Lake several years ago, one at the terminus of the Quesnel Lake Road and the other at the north end of the lake at East Creek where there is a deep water landing.

Tentative plans are that a Forest Service cabin be built near the terminus of the road, but off the reserve, necessitating the construction of a short trail and the reservation of the cabin site.

Due to shallow water, sunken logs and shifting channels a landing during a storm at the north end of Hobson Lake is impossible but a rock promontory south of East Creek provides shelter from the wind.

10. ***Clearwater River above Hemp Creek.*** There is exceptionally good fishing in Clearwater River above Hemp Creek and private interests (Harby) have monopolized two of the best campsites along the river where they have erected shelters and practically ruined the site for proper and future development. One open shelter 36' × 16' required the clearing of nearly an acre of young growth to erect it. Applications for these sites were made prior to the creation of the park but have since been dropped. Good campsites are scarce on this portion of the river and permission to erect further shelters should prohibit the despoliation of the acres required.

## VIII. PASTURES

It is usually the responsibility of a guide to provide feed for his horses but some mention of the problems involved, or likely to be encountered are made under the heading of "Campsites", specifically the following: Dawson Falls, Veronica Point, Clearwater Lake and Murtle Lake.

Pasturage for horses is provided on several farms in the vicinity of Hemp Creek and the Forest Service has a fenced pasture for its own use adjoining the Hemp Creek Ranger Station.

## IX. FISH

Fishing undoubtedly ranks as the major attraction in Wells Gray Park. Except in the vicinity of Dawson and Helmcken Falls all scenic areas, such as the five main lakes and their rivers, offer excellent lake and stream fishing. The proper control of all matters pertaining to fish stocking, concentration of fishermen and purity of water are important in a recreation plan for the park. To keep fishing as a first class attraction and allow established fishing guides or concessionaires protection on their investments, it is recommended that permits for commercial lodges and cabins be restricted to the number whereby owners will be able to make a fair living at their work and sport fishing will not be unduly depleted. Fishing possibilities with some recommendation as to administration are outlined under the headings of the more important and better patronized lakes and rivers. There are in addition many small lakes which reportedly offer first class fishing. Nearly all are naturally stocked from the larger lakes, are near the main trails or lakes and have only been fished by passing trappers. Some of these smaller lakes are Strait, Twin, McDougall, Anderson and Overflow. For those wishing the thrill of fishing in comparatively virgin waters, these lakes are recommended.

1. ***Canim and Mahood Lakes.*** Fishing is offered as the main inducement to tourists by resorts on Canim Lake. While there are a number of them, McNeil has pretty well control of Mahood Lake fishing and it is problematical whether other resorts could be developed there. Lake trout or char weighing up to 25 pounds are caught on a deep troll. Kamloops and Dolly Varden trout up to 5 pounds are caught on the fly and troll.

2. ***Canim and Mahood Rivers.*** A favorite area for fishing on Canim River is the fast water below the falls. The fish are smaller than in the lake but provide excellent fly fishing in swift water.

On Mahood River, about ¼ mile below the lake, a small falls with a large pool at the base of it is very popular with fishermen. Fish appeared to be under 12 inches in length but are probably larger during the early part of the season. Stream fishing below this falls is possible for a short distance until a canyon is reached. By following the trail to Sylvia and Goodwin Falls an unfished stretch of stream is available below the canyon.

3. ***Lower Clearwater River.*** A ten mile stretch of fast water fishing is possible in the Clearwater River between Mahood River and Hemp Creek. Kamloops trout up to 5 pounds in weight are caught. Once a year during high water this section of the river is stocked from the lakes but a few small parties could fish out the better portion of it during a season so that the establishment of more than one commercial outfit should not be considered.

4. ***Upper Clearwater River.*** Reports on the fishing in Clearwater River between Murtle River and Clearwater Lake are not available except at Veronica Point where there is fair fishing in the eddies and backwater proving that fish must be moderately abundant throughout the river. Only overnight stopping cabins should be permitted at Veronica Point.

5. ***Clearwater Lake.*** Fishing is excellent in the several hundred yards of fast water immediately above and below the falls at the foot of Clearwater Lake. Probably no better fishing exists in the park. Kamloops trout from 1 to 5 pounds readily take spoon or fly. The personal danger of fishing in the area above the falls must be emphasized. Once caught in too swift water it is impossible to keep from being swept over the falls so that one man is kept busy rowing all the time and extra oars must be carried.

Fishing is good the entire length of the lake and especially good at the north end near the river mouth.

McNeil brings some of his tourists through to fish in Clearwater and Azure Lakes and should be granted a concession if he so wishes. Because of the small number of tourists at present patronizing this area no serious overcrowding would result if

another or possibly two concessions were operating from Hemp Creek or Dawson Falls. With a large influx of tourists another concession could be granted at the north end of the lake from where considerable fishing would be done in Azure Lake.

6. **Azure Lake.** Good fishing is found at the numerous creek outlets along the lake. The eastern end is too muddy from stream sediments for good fishing. Difficulties of access would limit one fishing concern to this lake although parties from Clearwater will use this lake on side trips.

7. **Hobson Lake.** Several falls prevent fish coming up from Clearwater and Azure Lakes and fishing was reportedly exceptionally poor until 1939 when an appreciable number were seen rising in the lower half of the lake.

8. **Murtle River.** A three or four mile stretch of slow water on Murtle River offers the only good fishing in over 30 miles of river. This piece is called "Stillwater" and is about 10 miles below Murtle Lake. It is stocked every year during high water with Kamloops Trout from Murtle Lake. "Stillwater" is at present an overnight stopping place and it will possibly remain as such although the adjoining Overflow Lakes might add to the ultimate value of this site as an attraction to fishermen.

9. **Murtle Lake.** Fishing is excellent with the better known locations being near the outlets of File and Anderson Creeks, around the small islands and just at the edge of deep water at the southeastern end of the lake. Fish are too plentiful for the supply of food resulting in rakiness and stunted growth but steps to overcome this food shortage are being investigated by the Game Branch who plan introducing Kokanees or land locked salmon. On a lake of this size where fish are so plentiful it is impossible at present to limit the number of concessionaires from a fishing standpoint. The number of tourists will be the limiting factor here.

## X. GAME

The greatest concentration of hunters is found in the area between Hemp Creek and Murtle River where a deer is usually obtained the first day. Some of the more accessible areas are burned over and their lack of scenic attractiveness is balanced by the fact that the same areas are the ones in which the best hunting is found. About two thousand deer winter in the southern part of the park where food is plentiful. Wolves and coyotes

account for a large number of deer either by driving them out on the ice on lakes or running them down by packs.

As the snow increases on the mountains, moose are driven down to Hemp and Blackwater Creeks where they winter in considerable numbers. The slow southern migration of moose in the province is causing an annual increase in numbers throughout the park. About twenty of these animals are shot by hunters every season.

Grizzly bear and mountain goat are comparatively common throughout the park.

About ten years ago caribou were very plentiful but now appear to have either migrated or been driven northward. According to game officials the number of caribou in the park is far less than popularly imagined. Scattered animals or very small bands are reported throughout the park with concentrations in the vicinity of Mica Mountain, Angushorne Lake and Battle Mountain. Visiting hunters annually account for about 10 animals and residents about the same number.

Because caribou offer the main attraction to visiting hunters, means for their perpetuation should be considered. Two methods are suggested, the simpler but more unpopular being to have a closed season until a reserve is built up. Unlawful shooting by residents minimizes the effectiveness of this method. The second method would be to establish a game reserve near the headwaters of the Thompson River, adjacent to the park boundary. This reserve would act as a feeder to the park itself and would not only benefit the caribou population but would help the deer, moose and goat to increase in numbers and thereby establish the reputation of the park as a big game hunting area.

Too many guides and packers should not be permitted in the park otherwise its game attractiveness will be materially reduced. Possibly specific areas or portions of the park should ultimately be assigned to each outfit established there, thus encouraging the proper management of such a unit for the perpetuation of game.

With its deep lakes and fast flowing rivers Wells Gray Park offers very few resting places for wild fowl. Duck and geese hunting is negligible except on Mahood Lake where the nearby wheat fields at Canim Lake are an attraction in the fall and on Murtle Lake where a few flocks were noted.

## XI. MINERAL SPRINGS

Several tentative plans have been advanced for the commercialization of the two mineral springs in the vicinity of John Ray's farm. Broadly, these have called for a tourist camp near one spring or the other.

One spring bubbles out of a gently sloping piece of ground several hundred yards from Ray's house. The flow is quite small and trickles through a shallow ditch partly filled with an unattractive red sediment. The water has a distinct soda water taste and while not particularly pleasant to drink is reputed to mix well with fruit juices etc.

### *The chemical analysis is as follows:*

	Parts per million
Sodium (Na).....	157.69
Calcium (Ca).....	243.00
Magnesium (Mg).....	86.00
Iron (Fe).....	2.20
Aluminum (Al).....	0.53
Bicarbonic acid (HCO <sub>3</sub> ).....	1,499.73
Sulphuric acid (SO <sub>4</sub> ).....	37.32
Chlorine (Cl).....	27.90
Silica (SiO <sub>2</sub> ).....	1.00
Oxygen for aluminum.....	0.47
	<u>2,055.84</u>
Carbonic anhydrite free (CO <sub>2</sub> ).....	594.00

### *Hypothetical combination:*

	Parts per million
Sodium bicarbonate (Na(HCO <sub>3</sub> ) <sub>2</sub> ).....	444.14
Calcium bicarbonate (Ca(HCO <sub>3</sub> ) <sub>2</sub> ).....	984.15
Magnesium bicarbonate (Mg(HCO <sub>3</sub> ) <sub>2</sub> ).....	517.38
Iron bicarbonate (Fe(HCO <sub>3</sub> ) <sub>2</sub> ).....	6.99
Sodium Sulphate (Na <sub>2</sub> SO <sub>4</sub> ).....	55.20
Sodium chloride (NaCl).....	45.98
Silica (SiO <sub>2</sub> ).....	1.00
Alumina.....	1.00
	<u>2,055.84</u>
Carbonic anhydrite free (CO <sub>2</sub> ).....	594.00

*The analyses of the rust stained material:*

	Parts per million
CaO.....	40.02
Fe <sub>2</sub> O <sub>3</sub> .....	13.01
Al <sub>2</sub> O <sub>3</sub> .....	1.00

The second spring, about three-quarters of a mile above the farm appears to be of a similar chemical nature but is much more attractive than the first spring. A scaly cone has been built up nearly 4' in height with a 6" core in the center. The water rises through a fine red mud about 1' below the top of the core and although it apparently overflowed at one time it now leaks out and appears some 10' from the cone. Numerous deer and moose have made a lick of this area.

This spring would be of interest to passing tourists and could easily be made more attractive by patching the leak in an inconspicuous manner so that water would flow out of the top of the cone. It is a poor location for a campsite because of the swampy nature of the surroundings and the absence of fresh water for one quarter of a mile. No other attractions exist nearby so the establishment of a tourist camp appears to be not even slightly warranted.

## XII. FIRE PROTECTION

Fire protection is chiefly carried out from the Hemp Creek Assistant Ranger Headquarters. Lookout is maintained on Green Mt. and patrols are made to Clearwater Lake. From the Green Mt. Lookout an area roughly from the east end of Mahood Lake to "Stillwater" and extending north to Clearwater Lake can be seen. Patrols are also made into Mahood Lake from the west and Murtle Lake from Blue River.

The northern end of the park is seldom visited and although it contains by far the greatest amount of green timber, very few fires occur. This may be accounted for by the scarcity of travel and the wetter conditions which prevail.

An increase in tourists will add greatly to the fire risk because nearly every concentration point has quantities of inflammable debris close by. The recommended campsites and fireplaces in the vicinity of Dawson and Helmcken Falls will lessen the hazard considerably by providing a safe place to light fires and by concentrating people on these camping areas.



The present trail system appears sufficient for protection work since there is a trail to all the lakes and thus water transportation is assured. One decided inconvenience is the lack of a crossing either a short distance below the junction of the Murtle and Clearwater Rivers or a few miles above. To investigate a fire on the west side of Clearwater River means riding to the "Horseshoe", crossing by boat and then walking back down to the river to the fire. A possible site for a suspension bridge was located approximately 30 chains below the junction.

XIII. ALIENATIONS AND RESERVES

1. *Areas reserved for water power plants.* Reserves have been placed over Lot 3195, N. ½, Lot 3196, and Lot 3208. These are adjacent to Dawson Falls, Helmcken Falls, and the rapids below the last mentioned.

2. *The following areas are alienated, assessed ownership given as:*

- E. ½ L.2721 ).....John B. Ray, Clearwater P.O., B.C.
- E. ½ of E ½ and S.W. ¼ of E ½ of L. 2722 )
- E. ½ L.2881-2882 )
- N.W. ¼ L.2882 ).....B.H. McNeil. Canim Lake, B.C.
- L.3545-3546 )
- L. 3061.....Arthur Harby, Clearwater, B.C.
- S.W. ¼ L.3205.....N. Booth, 23 Savoy Mansion, Victoria, B.C.
- L. 3210 W. 810 ft. 50 acres.....H. Faith, Redmont, Wash.
- L. 3210 - W. 710 ft. of easterly 1830 ft. - 45 acres....H. Palmer, Douglastown, Ohio
- L. 3210 - W. 610 ft. of easterly 1120 ft. - 45 acres....D.M. Griegg, Como, Colorado  
(The easterly 510 of this lot has reverted.)
- N.E. ¼ L. 3465.....Michael Majerus, Clearwater
- L. 4673.....Lease for a period of 21 years dating from  
Sept. 21/38 for grazing and summer  
homesite purposes - Chas. W. Mobley
- L. 4141.....Buchanan - Mahood Lake



McNeil.....Lodge on west end Mahood Lake. Private property.  
Buchanan.....Several cabins and bldgs. On Mahood Lake. Private property.  
John Ray.....Farm bldgs. Near horseshoe. Private property.  
M. Majerus.....Farm bldgs. Near Murtle River. Private property.

## XV. RECOMMENDATIONS

For the time being and as a preliminary guide to Park management the following are recommended:

A. **Administration:** The appointment of a Park Ranger for the months of April to October inclusive is suggested. His duties should consist of directing tourists, fire prevention and park improvement work, inspecting and reporting on Park Use Permits, and the studying of park problems in general with the object of developing a detailed recreation plan.

### B. **Park Use:**

1. **Commercial Enterprises:** With improved access and suitable publicity the number of tourists will greatly increase. Until the extent of facilities needed for their convenience can be more clearly seen the scope for commercial enterprises must be limited.

In view of the fact that commercial use has been made of the Park for several years, in fact prior to the creation of the Park, consideration should be given to the present guides of hunting and fishing parties. It may be some years before a detailed management plan has been developed, and in the meantime it will be necessary to either permit or prohibit commercial use. It would be unreasonable to suggest prohibition. For the present it is therefore suggested that the policy governing commercial use be one of restricting development to minimum requirements and if possible confining such use to what might be considered as legalizing existing use through the medium of Park Use Permits. No extension of such a policy would be desirable until a more detailed management plan is available. Permittees should be required to limit improvement expenditures to about \$500.00 unless specially authorized by the Chief Forester, and to locate within definite regions in order to avoid expensive complications in the future when it may be necessary to make such adjustments as may be required when a final development plan has been prepared. All

concession permits should be on an annual basis and should have a special clause providing for unrestricted public access to the permit areas. All improvement plans should also be submitted to the Chief Forester for approval before any construction work is undertaken.

At the present time and in line with the remarks in the above paragraph, commercial ventures should be limited to the following locations:

***East end of Mahood Lake:*** The southerly portion of the 300' beach adjacent to Mahood River exclusive of the public reserve and the area applied for by B.H. McNeil, is recommended for one additional concession other than McNeil's. This area should only be developed as a stop-over headquarters.

***Dawson Falls:*** No development should be allowed on the south side of the Murtle River within 500 feet of the recommended public reserve. This will allow for flexibility in road location and the possible expansion of the camping ground as indicated when the road is completed.

The scenic attractions of the "Punchbowl" and the Murtle River crossing should be safeguarded. Building locations on the north or south sides of the river should not be conspicuous from trails or the bridge crossing. Therefore, for any permit locations in this vicinity it is recommended that they be at least 400' from the trail on the north side of the river and 300' east or west of the crossing on the south side of the river. A maximum of two concessions are recommended. This area is suitable for headquarter accommodation for fishing, hunting and tourist parties.

***Helmcken Falls:*** All applications for park use privileges should be disallowed at present.

***Veronica Point (The Horseshoe):*** Any location could be made available in this vicinity except the following two areas:

1. The area on the west side of the river lying within the "Horseshoe".
2. An area on the east side of the river described as follows: Commencing at a point on the bank of the Clearwater River, 200 feet south of the Forest Branch cabin, thence east for 500 feet, thence north for 800 feet, thence west for 500 feet more or less to the bank of the river, thence in a southerly direction along

the bank of the river to the point of commencement. No more than two concessions, with stop-over facilities only, are recommended.

**Clearwater Lake:** Any area on the east side of the Lake, except within the recommended public reserve, and any area on the west side of the Lake, except a portion 300 feet wide starting at Triangulation Station #1 and extending north for 600 feet, could be made available for permittees. Two concessions on the east side of the Lake and one on the west are the present maximum requirements. Clearwater Lake would provide strategic locations for headquarter lodges.

**Lower Clearwater River:** One fishing lodge only should be allowed on this River in order to provide for proper fish conservation. Such a lodge could be located wherever convenient on the River, however in the event applications are received for either of the two partly improved camp grounds, one-half the area should be reserved for the public.

**Murtle Lake:** Any part of the long sand beach south of the lagoon below a point 200 feet south of the Forest Branch cabin is suitable for a commercial recreation lodge. Until there is a noticeable demand for more accommodation a maximum of two concessions are recommended in this area.

In all other portions of Murtle, Clearwater, Azure and Hobson Lakes not previously mentioned, applications for commercial sites should be judged on their individual merits and as far as possible no commercial venture shall command a whole beach or favorable campsite.

2. **Public Reserves:** An attempt has been made to provide for the future needs of the public and at the same time locate the campgrounds in the most attractive places throughout the Park.

Recommended reserve areas are found at Dawson and Helmcken Falls, Veronica Point, Clearwater and Murtle Lake, east end of Mahood Lake and the southern part of Lot 1254 at the east end of Canim Lake which is not in Wells Gray Park at present time. Detailed plans and descriptions of these areas are found in the report pages 14-22.

3. **Private Use:** Private use should be encouraged where it will in no way conflict with desirable public or commercial use areas. Each application should be judged on

its own merits and only an area enough for the purpose intended should be granted the applicant. Tenure should be by annual Park Use Permit and all plans for development work should be approved by the Chief Forester before any work is undertaken.

4. ***Alienated Areas:*** There are only two alienated areas in the park that might affect proper recreational development. One is part of Lot 3210 near Helmcken Falls and the other is Lot 3546 at the west end of Mahood Lake.

The northern half of Lot 3210 fronts on Murtle River a short distance above the falls. The westerly 810 feet of the northern half of this lot has its closest corner approximately 200 feet southwest from Helmcken Falls. Part of this lot may eventually be needed for campgrounds and possible for a road right of way. It is therefore recommended that the necessary steps be taken to secure this land prior to undertaking any development work in the vicinity of Helmcken Falls.

Lot 3546 is obviously a Key lot and is recognized as such by Mr. B.H. McNeil, its owner. Public access is limited to the road with a 66 foot right of way. At least 200 feet more water frontage is needed for a suitable public camp ground. The area adjoining the road and north of the right of way is recommended and at the first signs of public need some arrangement should be made with Mr. McNeil to secure this property.

c. ***Park Improvements:*** During the summer of 1941, necessary camp ground and trail improvement work were done at the east end of Mahood Lake. Maintenance and further development work is essential for this area.

Some means of registration is urgently needed at the lookout near Helmcken Falls. In conjunction with this, a campsite should be built approximately 300 feet above the falls, fireplace and privy erected and table and benches built.

The completion of the road to Dawson Falls is not an expensive project and plans for its location and construction should be kept in the forefront.

Other recommendations of secondary importance covering roads, trails and campsites are otherwise dealt with in the report.

D. **Fire Protection:** At the present time fire protection is at a minimum. Greater numbers of tourists will increase the fire hazard. It is therefore imminent that a more intensive system of protection be developed if the recreational values of this Park are to be maintained. The appointment of a Park Ranger would greatly facilitate a protection plan and until this is done and the matter of fire protection can be thoroughly studied for this area, the following points are mentioned as requiring consideration for the immediate present, exclusive of existing facilities for protection:

The southern portion of the Park has a large area of standing snags and brush which constitute a high fire hazard. Every effort should be made to keep fires from getting a foothold in this area in order to prevent what might develop into a disastrous conflagration.

The extremely valuable stands of timber (from the recreational standpoint) around Dawson and Helmcken Falls are and will be increasingly subject to fire from negligent travelers. Constant checks from the Green Mountain Lookout and the construction of fireplaces at the falls will lessen the danger.

A similar danger point is at the east end of Mahood Lake which is relatively remote from a lookout patrol. Construction of fireplaces and a more frequent patrol is recommended.

Increasing travel to Clearwater and Azure Lakes will eventually warrant a lookout on some northern mountain. Hobson Lake and the northern one-third of the Park present a low fire hazard but should be patrolled in the fire season.

Emphasis is placed on the fact that most travelers are with guides or outfitted by tourist camps. These guides should be impressed with the fire danger and made responsible for the careful behavior of their guests. The few well defined entrances to the Park should become the places for a carefully planned system of public education on the danger of fire.

E. **Game Management:** A large portion of the southern part of the Park has been burned thereby greatly lessening the scenic value but at the same time creating conditions favourable to wildlife productivity. Hunting and fishing are the main attractions in the Park and these must be maintained or increased of possible.

Therefore it is recommended that the administration policy of the Park include instructions to the Park Ranger or other persons concerned in said administration to make

note of the abundance of fish and game, their condition, the number and concentration points of fishermen and hunters, the number of trophies secured and similar data.

This information will provide the basis for recommendations to the Game Commission and will also lay the foundation for a future game management plan. Emphasis should be laid on the ecological aspect of increasing game productivity as well as the now used methods of predator control and limited hunting seasons.

Approved:

*C.P. Lyons*  
Parks Engineer.

Assistant Forester.

Date: *May 1st, 1942*