ADDENDA

Master Plan Approval

The South Tweedsmuir Park Master Plan has been reviewed and is approved with the following conditions:

1. This plan will be reviewed in five years, or if and when required, for public distribution. At the time of review the plan may be re-drafted to conform to the format defined within the Master Plan Policy.

2. This approval does not include endorsement of specific annual operating cost details which are more appropriately dealt with in annual operations plans.

Recommended: ___________________________  May 29 1981
Manager, Planning Section

Approved: ___________________________  May 29/81
Director, Planning & Design Branch

GRS/nm
TO: Mr. R.W. Norrish  
Regional Director  
Skeena Region  

SUBJECT: South Tweedsmuir Park Master Plan  

Submitted herewith for your review and approval is the first draft original of the South Tweedsmuir Provincial Park Master Plan.

The plan is a joint effort of District Administrative and Regional Planning staff containing a brief analysis of the park resource and a presentation of development, operations and resource management policy.

The plan is to be reviewed formally every five years and revised accordingly. An informal review of the plan will occur annually by District and Regional staff and documentation of necessary changes will be kept by the District Superintendent to facilitate the five year review.

It is recommended by the undersigned that the plan be submitted to Victoria headquarters for executive review and approval in principle.

R.L. Heathman  
Master Planner

Recommended:  
Regional Systems Planner  

Recommended:  
District Superintendent  

Approved:  
Roger Norrish  
Regional Director  

RLH/wb
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1. INTRODUCTION
A. BACKGROUND

Tweedsmuir Park, for the purposes of planning and administration, has been divided into north and south halves because of its vast area and widely separated access points. The southern portion of Tweedsmuir Park, for the purposes of this plan, is defined as all those lands south of the Dean River including two small proposed additions at Knot Lake and the Rainbow Range.

Encompassing land masses of both the Interior Plateau and the Coast Mountain Range, South Tweedsmuir contains incredibly diverse landscapes and natural history features. High mountain and plateau systems with extreme relief caused by deeply incised valleys create a diversity of biogeoclimatic conditions found in few other parks. Elevation extremes of less than 300 meters in the Atnarko valley up to almost 3,000 meters at Thunder Mountain, create conditions suitable for a wide range of vegetative associations and animal habitats. On the Rainbow Mountain Range, alpine tundra is the dominant vegetation type and is summer range for a small herd of mountain caribou. In the Atnarko valley, dense stands of Douglas fir and cedar grow and black tailed deer and grizzly bear are common. The park is of great interest to students of natural history.

The park is traversed by Highway 20, and normally access is from Williams Lake, 366 kilometers to the east. Bella Coola, the nearest substantial community lies 51 kilometers to the west.
North of Highway 20 lies Rainbow Nature Conservancy, 48,760 hectares of spectacularly hued volcanic landscapes. Easily accessible for alpine hiking, horseback riding, cross-country skiing and wildlife viewing, it will ultimately become a provincially important alpine wilderness recreation area.

South of Highway 20 lies the Atnarko River, providing one of the best recreational fisheries in the province. Steelhead and cutthroat trout, chinook and coho salmon, and dolly varden char can be taken in season. As well, Lonesome Lake and Turner Lake chains provide opportunities for wilderness canoeing and hiking in magnificent surroundings including Panorama ridge and thundering Hunlen Falls.

Most recreational use of the park is in the highway corridor and is associated with the fishery. It is expected that this recreation will always predominate, although other forms of recreation such as hiking and canoeing are becoming increasingly important.

Tweedsmuir Park boundaries were reviewed in 1955 pursuant to the flooding of Ootsa Lake. As part of this revision process, that part of the park now within the Atnarko drainage was established as Class B Provincial Park land. The entire land area now referred to as South Tweedsmuir Park encompasses approximately 354,000 hectares.

The park was the site of many important cultural events, the most significant being Sir Alexander Mackenzie’s journey through South Tweedsmuir on his historic cross continent trek to the Pacific Ocean in 1793. Mackenzie Valley and Pass bear his name to this date.
THE DEAN RIVER FORMS THE PRESENT
ADMINISTRATIVE BOUNDARY BETWEEN
NORTH AND SOUTH TWEEDSMUIR PARK

MANAGEMENT OF THE ATNARKO RIVER
CORRIDOR FOR FISH, WILDLIFE AND
HUMAN USE IS THE MOST SIGNIFICANT
OPERATIONAL TASK FACING PARK
ADMINISTRATORS
Tweedsmuir Park was named after the 15th Governor General of Canada, John Buchan, Baron Tweedsmuir Elsfield, who visited the Park in 1937.

B. PURPOSE OF THE PLAN

The purpose of this plan is to direct future management, planning, information and facility development projects within South Tweedsmuir Park. The plan notes in general terms the biophysical and cultural features inherent to the park, defines the park goal and states recreation and conservation objectives related to that goal. Policy is designed to achieve those objectives, and outline responsibilities for implementation.

This plan will define programs which provide an adequate level of service to the majority of park users while conserving, protecting, and presenting the resources for which the park was established.

C. DEMAND

Accurate statistical figures for tracing historical (and predicting future) patterns of recreational use do not exist. However, it can be easily surmised that recreational use of the park is bound to rise because of improvements in accessibility due to continuous upgrading of Highway 20 from Williams Lake. Additionally, proposed development and advertisement of the Mackenzie Grease Trail will generate a further increase in visitation.
Fishing is becoming an increasingly important recreational activity and, province-wide, over 40% of the population participates annually. The highly prized game fish, steelhead trout and spring and coho salmon, so abundant here, ensure a continued influx of anglers to the Atnarko and Bella Coola valleys.

The Division has recently received several requests and applications for permits to guide hikers and fishermen throughout the park and it appears that this is a response to an increasing demand for this type of service.
II. BIOPHYSICAL RESOURCES
II  BIOPHYSICAL RESOURCES

It is an objective of the Parks and Outdoor Recreation Division to include outstanding special natural features and representative samples of the major natural landscapes of British Columbia in the park system. Southern Tweedsmuir Park includes excellent representation of the South Coast Cascades - Wet landscape of the Coast Mountain Natural Region and several special natural features including Hunlen Falls and the spectacular Rainbow Mountains.

The following is a short description of the biophysical resources found in the park that contribute to the fulfillment of the Division’s objectives.

A. PHYSIOGRAPHY

South Tweedsmuir Park lies in the area of physiographic transition between the Interior Plateau and Coast Mountain Natural Regions and is dissected by two major drainages leading from the plateau through the mountains to the Pacific.

The eastern portion of the park is the western extreme of the Interior Plateau. This is a rolling and hilly landform with large areas of dissected relief. Within the park, the plateau is warped sharply upward to almost 2,000 meters and largely covered with glacial drift.

One of the most outstanding features of this area is the Rainbow Range, a large dome of lava and fragmented rock projecting above the plateau. Reaching an elevation of 2,478 meters at Tsitsutl Peak, the range has been considerably eroded leaving spectacular, brightly coloured bands of oxidized rock. Because of the ease of access and incredible scenery, the Rainbow Mountain area is one of the most outstanding alpine hiking areas in the province.
HUNLEN FALLS DROPS 260 METRES IN A SINGLE CASCADE, 366 METRES OVER ALL.
The western portion of the park lies within the Coast Mountain Natural Region with good representation of the *South Coast-Cascade-Wet* landscape in the southern portion of the park. These are essentially granitic mountains with extreme relief, rugged peaks, and numerous glaciers and icefields. Drainage in these mountains is to the coast and the deeply incised valleys divide the area into large mountain blocks.

Another special natural feature of the transition area between the physiographic regions is the spectacular Hunlen Falls with its 260 meter single drop over a sheer rock face in the upper Atnarko watershed.

Both the plateau and mountains have been deeply incised by the Dean and Atnarko drainages leading east-west through the park. The highway from Williams Lake enters the Atnarko Valley in the park and therefore the focus of a large part of the recreational use in the park is in this deep valley corridor whose physiographic and biological characteristics are notably different than the bordering plateau and mountains.

**B. GLACIOLOGY**

The area encompassed by South Tweedsmuir was the starting point for glacial activity proceeding in two directions with an eventual buildup of ice from 1,500 to 2,700 meters thick in this area. The glaciers flowed both northeasterly, over the Nechako Plateau, and westerly, to the Pacific, creating the deeply entrenched fiord and valley systems.
Most of the higher mountains in South Tweedsmuir have been sculptured by cirque glaciation. Many peaks protruded through the glacial ice as nunataks while the lower peaks were completely covered and show resultant rounded summits.

After the ice sheets waned, a period of intense cirque and alpine glaciation commenced leaving the landscape appearing much as it does today.

C. CLIMATE

The climate of South Tweedsmuir ranges from somewhat moderate to severe from west to east.

The Atnarko valley is the warmest part of the park due to coastal influences. Winter temperatures range between +2°C to -20°C; summer temperatures between +10°C to +25°C. This area receives approximately 900mm of precipitation annually. Summer rainfall accounts for approximately 25% of this moisture.

In the eastern part of the park, on the Fraser Plateau, temperatures are more severe with an average annual extreme of -20°C in January to +18°C in July. Up to 40% of the annual precipitation of approximately 600mm, is in the form of snow and up to 35% of this occurs in the summer as rain.

D. FLORA

South Tweedsmuir Park falls within four distinct biogeoclimatic zones according to Krajina. These include:
1. Alpine Tundra Zone
2. Engelmann Spruce – Subalpine Fir Zone
3. Cariboo Aspen – Lodgepole Pine Zone
4. Coastal Western Hemlock Zone

In travelling the highway corridor, park visitors pass through the lower reaches of the Engelmann Spruce Zone at Heckman Pass, then descend quickly through the dry Lodgepole Pine stands on Young Creek Hill to reach the Atnarko Valley with its Fir and Cedar forests.

The park has this tremendous range of vegetative associations due to its topographic and climatic diversity.

The low lying Atnarko and Bella Coola valleys have the least severe climates and the vegetation here is of a more coastal nature. The most outstanding floristic element of the Atnarko valley is the remaining stands of large Douglas fir growing on the valley floor.

For a complete explanation of the above, see Krajina, 1970.

E. WILDLIFE

Because of the great floristic and climatic diversity, the wildlife community of South Tweedsmuir Park is diverse as well. The species list for the park is extensive including most major B.C. game species, with the exceptions of mountain sheep and elk.

Possibly the most interesting and certainly most significant species to man is the grizzly bear, which inhabits the Atnarko and Bella Coola valleys. Estimated at approximately forty animals, this healthy population congregates along the rivers to feast on the annual salmon migrations. Most dense during the fall coho and pink salmon runs, these bears often “fish” the same areas as human anglers and some of them have become quite bold. Little is known of their range or habits, but it appears this creature is on a collision course with man, since both species are competing for the same resource.
Another significant population is the mountain caribou of the Rainbow Range. Little is known of the number or habits of these animals, as official sightings have been rare in recent years. The highest count occurred in 1972 with 172 animals being observed. The most recent count of 41 animals occurred in 1977. The herd is protected from hunting in a portion of their range by Nature Conservancy Area legislation, however, it is suspected that these animals migrate outside the conservancy to the Ilgatchuz Mountains to the east of the park.

For more complete explanation of the wildlife values inherent in South Tweedsmuir Park, see Hazelwood, et. al. 1975.

F. **FISH**

The Bella Coola River system is one of the most productive fisheries on the coast, remarkable from both a recreational and commercial viewpoint.

To the recreationist, the clear waters of the Atnarko River abound with a variety of game fish almost year round. In January through April, steelhead are the most sought after game fish; in April, May and June, chinook salmon become the quarry; from August to October, coho are taken. A fall run of steelhead commences again in November and cutthroat trout and dolly varden char are resident almost year round.
FEDERAL FISHERIES TEMPORARY HATCHERY NEAR STUIE. THE SITE HAS NOW BEEN ABANDONED.

FISHING IS THE MOST SIGNIFICANT RECREATIONAL ACTIVITY IN SOUTH Tweedsmuir PARK. THE COMBINED COMMERCIAL AND RECREATIONAL VALUE OF THE FISHERY IS OVER $15,000,000 ANNUALLY.
FLOATING THE RIVER IS THE MOST PRODUCTIVE METHOD OF FISHING

STEELHEAD, CUTTHROAT, DOLLIES, RAINBOW, SPRINGS AND COHO CAN BE TAKEN IN SEASON. THE RIVER ALSO SUPPORTS RUNS OF PINK, CHUM AND SOCKEYE SALMON.
According to Fish and Wildlife Branch statistics, the value of the recreational steelhead fishery alone is $164,000 annually, as of 1976. The total value of the sport fishery is likely quadruple this figure.

To the commercial fishermen, the Atnarko River produces sockeye, coho, chinook, chum, and pink salmon with an estimated annual wholesale value of approximately $15,000,000.

The waters of the backcountry lakes and streams are also of importance to the recreationist. Rainbow trout is the usual game specie and the Dean River possesses the most significant fishery.

Fishing constitutes the most prominent recreational pursuit of park visitors and this activity is responsible for generating most park use. Its management is an extremely important factor in determining park operational criterion.
III. CULTURAL RESOURCES
III. CULTURAL RESOURCES

Historical aspects of Southern Tweedsmuir Park are primarily related to the river corridor along the Atnarko and Bella Coola Rivers. As outlined by Suttill, the human history can be broadly grouped into three categories: Indian Culture, European exploration, and European settlement.

A. INDIAN CULTURE

The Bella Coola valley is of significance in that it formed a trade route between coastal and interior Indians. The river, with its important salmon runs, had several villages along its length. Trade goods from the interior, chiefly furs and leather, were exchanged for salmon and ooligan grease and transported on foot along what is not known as the “Grease Trail”.

Significant remnants of Indian culture within the park now include the site of Friendly Village, where Sir Alexander Mackenzie visited in 1793, pictographs near Big Rock, a burial grounds and smokehouse near Stuie and aboriginal trade trails.

B. EUROPEAN EXPLORATION

The history of European culture in the park commences with one of the greatest feats of Canadian exploration – the crossing of the North American continent by Sir Alexander Mackenzie.

Mackenzie, with his small group of French-Canadian voyageurs, used local Indian guides for knowledge of the country he was exploring, and largely followed aboriginal trade routes. Most of the journey was accomplished by canoe, however, fearing hostile Indians and impassable river conditions, Mackenzie left his canoes on the Fraser River at Quesnel and hiked overland across the “Grease Trail” to Friendly Village in the Bella Coola Valley.
Sir Alexander Mackenzie.

This rock is the western terminus of the first journey across the continent of North America.

It was made by Alexander Mackenzie of the North West Company, who, with his nine companions, arrived at this spot on the 21st July, 1793.

Mackenzie, by observations, ascertained his position, spent the night here, and, after writing on the southeast face the words now cut therein, retraced his course to Lake Athabaska.

This transcontinental journey preceded by more than ten years that of Lewis and Clark.
Within the park, Mackenzie passed through the Tanya Lakes area, then left the trail and headed south through what is now known as Mackenzie Valley and Mackenzie Pass. He then ventured down the rock gorge of Burnt Bridge Creek to its confluence with the Bella Coola River, the site of Friendly Village.

Mackenzie then travelled down river out to salt water where he inscribed on a rock promontory on Dean Channel, “Alexander Mackenzie, from Canada, by land, the twenty-second of July, one thousand seven hundred and ninety-three!”

Other important elements of European exploration through South Tweedsmuir include attempts in the 1860’s to establish routes to the Cariboo gold fields and early railway surveys.

C. EUROPEAN SETTLEMENT

Settlement by Europeans was minimal throughout the 19th Century. The first Hudson’s Bay Company trading post was established in 1867, at Bella Coola, however, it was not until the mid 1890’s that settlement began to flourish with an influx of Norwegian immigrants. In the early 20th Century farms were established and the lumbering and fishing industries grew.
THE CONSTRUCTION OF THE BELLA COOLA ROAD WAS A TREMENDOUS ACHIEVEMENT BY THE VALLEY RESIDENTS. NOW UNDERGOING CONTINUOUS UPGRADEING, HIGHWAY 20 WAS ONCE A SIGNIFICANT BARRIER TO RECREATIONAL USE.
One of the most significant events in the development of the area was establishment of communications with the outside world. In 1915 the Dominion Government Telegraph Line was established between Bella Coola and Clinton via the Hotnarko River. Later, in 1941-42 the line was upgraded to permit voice communications. The telephone line through Tweedsmuir Park is still clearly visible with old stumps showing springboard notches from the days of hand falling.

The construction of the present road out through Heckman Pass was possibly the most significant event in the historical development of the area. Completed by local labour under a succession of small government grants, the road meant a continuous series of supplies were available from the outside. Crossing a large steep slide area with rock outcroppings, the road is a monument to the resourcefulness and determination of the valley residents.

One of the most interesting stories of early settlement is the pioneering tale of Ralph Edwards of Lonesome Lake. In 1912, Edwards claimed a quarter section of land from the Government and carved a homestead out of the wilderness. Eventually creating a barn, sawmill, house, and raising a family in this remote part of the Atnarko Valley.

THE LATE RALPH EDWARDS AND HIS HOMESTEAD ON LONESOME LAKE
IV. PARK POLICY
IV. PARK POLICY

A. PARK GOAL

The goal for South Tweedsmuir Park is to conserve a representative sample of the natural diversity of the Province to provide public opportunities for a variety of outdoor recreational and educational pursuits.

As a component of the Provincial Park system, South Tweedsmuir provides a variety of outstanding recreational opportunities based on its inherent attractions. It harbours a variety of biological and geological phenomena of Provincial significance and furthermore, its importance in Mackenzie’s journey makes it of National historical significance.

B. PARK OBJECTIVES

a) Conservation Objective

To conserve a representative example of the complex transition between natural landscapes, several special natural features, and associated physiographic, ecological and cultural phenomena.

Specifically, the transition between the West Tweedsmuir-Chilko Ranges, the West Fraser Plateau, the Western Kitimat Ranges and the rugged Western Pacific Ranges landscapes is represented by this portion of Tweedsmuir Park. However, the area is not necessarily an adequate representation of any one of these landscapes. In addition, features associated with the Mackenzie Grease Trail will be conserved.

b) Recreation Objective

To provide for a variety of outdoor recreation pursuits by developing appropriate facilities and interpreting, presenting, and protecting the physical, cultural, and aesthetic resources of the park.
THE RAINBOW RANGE IS AN EASILY ACCESSIBLE ALPINE HIKING AREA OF GROWING SIGNIFICANCE. THE BRIGHTLY COLOURED BANDS ARE THE RESULT OF STAINING OF THE LAVAS BY MINERAL SALTS DISSOLVED IN BOILING SULPHUROUS WATER.
Specific activities to be provided for will include hiking, camping, horseback riding, canoeing, fishing, sightseeing, ski touring, and nature and historical study.

c) Information Objective

*To interpret and present information pertinent to the understanding of inherent park themes.*

Specifically, riverine ecology, aboriginal and European culture, exploration and settlement, physiographic transitions, grizzly bear ecology, and park management will be presented.

C. ZONING

The park has been zoned into three basic land classifications, as defined on the attached map.

*Recreational activities generally associated with the type of access are used as the criterion for defining zones.*

a) Development Zone

*In this area the primary emphasis is the provision of recreational opportunities, within the constraints of protecting park resources.* This will be the most intensely used and managed area of the park. Activities will be those directly associated with motorized access; administration and development will be attuned to manage the recreational activities generated by the type and scale of use this form of access brings. Facility development, resource management, and visitor services will reach their apex in this area of the park.
Park Zoning

DEVELOPMENT ZONE 1

NATURAL ENVIRONMENT ZONE 2

WILDERNESS ZONE 3
b) Natural Environment

Within this area the provision of intermediate levels of outdoor recreation activities and use in a natural setting is the primary objective. Visitor access will be restricted primarily to non-motorized forms. Facility development, resource management and visitor services will be consistent with providing adequate visitor safety and comfort with minimum disturbance to natural conditions.

c) Wilderness Zone

Within this area, the provision of an untouched, wild landscape for the purposes of primitive wilderness recreation is the primary emphasis. Recreational activities associated primarily with primitive forms of access are deemed appropriate. Facility development, resource management, and visitor services will achieve park objectives.

D. ZONE PLANS

a) Development Zone

This area includes all those lands associated with the highway corridor. Park management will be appropriately suited to the type of use associated with vehicular access. Refer to Fig. 5, p. 39, for location of specific sites.

i) Recreational Activities

The Atnarko Valley has long been a destination for tourists and fishermen. Most use in the valley is associated with either riverine past-times or staging activities for entering the park interior. Appropriate recreational activities in the corridor have been defined to include: vehicle based camping, boat launching, canoeing and boating, picnicking, fishing, nature study and viewing, cross country skiing, snowshoeing, photography, climbing, hiking and horseback riding.
Access

*The use of motorized means of access will be restricted in this area of the park, to developed roads.* All terrain vehicles will be prohibited from off road use in this area of the park. Landing of aircraft will not be prohibited.

Camping

*Camping will ultimately be restricted to designated sites only within vehicle campgrounds.* Random camping will not be permitted along the river due to bear hazard. Provision will be made for both tenting and self-contained recreation vehicles in the campgrounds.

Day Use

*Traditional day use experiences will be provided for mainly at Big Rock, Burnt Bridge, Fisheries Pool and Hunlen Trail head.* Incidental use may occur elsewhere. Provision for picnicking and other associated recreation pursuits will be made.

Boating

*Provision for launching of light boats, and canoes will be made at convenient locations along the river corridor.*
Nature and Culture Study

This activity will be encouraged through use of interpretive facilities in campgrounds, day use areas, and major stopping places.

Fishing

Fishing, regulated by Federal and Provincial Fisheries agencies, is the most popular recreation pastime the park has to offer. Occurring primarily in the river stretches along the highway corridor, this year round recreation will be facilitated through the development of river trails and parking lots at popular fishable stretches of river.

Viewing

Observation of inherent natural wonders, as viewed from the highway will be facilitated.

Hiking

A network of trails will be constructed throughout the valley for purposes of providing access to significant interpretive and recreation features.

Riding

Horseback riding will be a permitted recreation activity in this zone of the park except where user or environmental conflicts arise.

ii) Visitor Services

To accommodate the previously mentioned recreational activities, management and operations will be relatively intensive compared with the remainder of the park.
Firewood

*Campfires will be permitted only in designated sites within vehicle campgrounds and picnic areas.* Firewood will be supplied to centralized woodlots.

Garbage

*Garbage servicing will take place at centralized areas in the campgrounds and picnic sites only.* A “pack it in – pack it out” policy will prevail throughout the remainder of the park.

Information

Within this zone *the central focus for the dispensation of information will be at interpretive centers at Rainbow trail head, Burnt Bridge, Fisherman’s Pool, and Headquarters.* Visitors will be informed of park recreation opportunities and briefed on park management topics such as safety, park ethics and regulations, fish and wildlife regulations, etc.

iii) Facilities

The following section contains brief descriptions of the existing facilities and proposed new developments for this zone of the park. Facilities will be listed in order of their occurrence, east to west, along the highway corridor.

Park Entrance Portals

Presently the park entrances are undeveloped with only a Type A sign denoting the eastern boundary. *Entrance portals, befitting the stature and character of Tweedsmuir Park, will be designed and constructed on the east and west boundary juncture with Highway 20.*
The Atnarko Youth Crew Camp accommodates up to 24 youths.

Upper Atnarko Trail. An 8 to 10 hour hike from the highway leads to the Turner Lake Chain and Hunlen Falls.
Rainbow Mountains Trail Head
Currently, a small parking lot, wood corral, and pit toilets are in place, near the highway, at the southern terminus of the Rainbow trail. *The only additional facility foreseen, at this time, is an information shelter.*

Viewpoint
*A viewpoint will be constructed at the top of the Atnarko hill* looking out over the valley and mountain ranges to the south.

Hunlen Trailhead
Present facilities at this point consist of a small parking lot with toilets and tables. *No improvements are foreseen at this location.*

Atnarko Campground
This twenty-five unit campground is presently considered to be of adequate size and design. *No additions are required at this time.*

Information Pullout
*The key information center for dispensation of general park information will be located across the road from park headquarters.* A system of information kiosks will be constructed here for informing visitors of park recreation opportunities, regulations, ethics, hazards, and safety precautions.
Headquarters
Within the park headquarters compound, a Youth Crew is based out of a modern camp. The camp contains a residence, office, two storage sheds, a cookhouse, four bunkhouses and a wash house. *The only additions to this area will be a workshop/storage building and a winterized cabin.*

Big Rock
*Traditional day use activities will be provided at Big Rock.* Facilities will include picnic tables, fire rings, water and self-interpretive trails.

Fisheries Pool
*Federal Fisheries has now abandoned its camp at this location, and a day use area will be constructed in its place.* Facilities will include a picnic shelter, information center, boat ramp, and standard park furniture. The existing campground will be phased out on completion of the new facility due to tree and bear hazards. *Regional planning will investigate the possibilities of providing an alternate campground elsewhere.*

Interpretive Centre
*As part of the Mackenzie Grease Trail project, a major interpretive centre will be constructed at Burnt Bridge Creek to interpret and present the story of Mackenzie’s momentous trek across the continent.* This will be the westward terminus of the trail and become a trail head for hikers staging journeys into the interior of the park along Burnt Bridge trail. *Facilities will include an interpretive building, parking lots, picnic grounds and river access trail. A trail following Mackenzie’s original route will be constructed, if feasible.*
Development Zone

1. Entrance Portal
2. Rainbow Trail Head
3. Viewpoint
4. Hünlen Trail Head
5. Atnarko Campground
6. Information Pullout
7. Headquarters
8. Big Rock
9. Fisheries Pool
10. Interpretive Centre
Boat Launching

Facilities for boat launching will be provided at Brynildsen’s, Steep Roof, the Crown Zellerbach bridge and Fisheries Pool.

River Access

At major fishing areas, river access trails will be constructed and signed, and vehicle pull-offs will be constructed where necessary to reduce traffic hazards.

b) Natural Environment Zone

This area includes all those lands associated with the upper Atnarko River and the Turner Lake chain. It will be non-accessible to vehicle based recreation and uses will be primarily those associated with backcountry use.

i) Recreation Activities

Appropriate recreation activities are deemed to be: canoeing, camping, fishing, hiking, viewing, cross country skiing, riding, nature study, and photography.

Access

In this zone access will be restricted to foot, canoe, horseback, and airplane travel only. All other forms of access, specifically snowmobiles, and ATV’s for recreational purposes, will not be permitted. Vehicular access by the landowners will be permitted along the old road from Young Creek to Hotnarko.
THE TURNER LAKE CHAIN AFFORDS AN EXCELLENT CANOE ROUTE IN MOUNTAINOUS WILDERNESS CONDITIONS

NEAR THE OUTLET OF TURNER LAKE, HUNLEN FALLS PLUMMETS TO THE BOTTOM OF ITS ROCK GORGE
Camping
Camping within this zone will take place in designated sites at rustic wilderness campsites.

Horseback Riding
This will be a permitted activity in this area of the park on specifically designated trails only.

Canoeing
This activity will be appropriate on all navigable lake systems and rivers in the area.

ii) Visitor Services

Firewood
Campfires will be permitted throughout the area except during times of high fire hazard. Firewood will not be supplied.

Garbage
A “pack it in – pack it out” policy will prevail in this area.

Information
Information services in this part of the park will be in the form of brochures dispensed at the wilderness entrance and static displays in the Turner Lake/Hunlen Falls area. Wilderness ethics, safety and an explanation of nearby natural phenomena will be the main topics stressed.
iii) Facilities

The only development will be primitive campsites along the trail and Turner Lake chain, a viewing platform at Hunlen Falls, and minor interpretive facilities.

c) Wilderness Zone

This area includes all those lands within the park outside the river and highway corridors. These areas are non-accessible to vehicle based recreation and traditional uses are those associated primarily with primitive backcountry travel.

i) Recreational Activities

Appropriate recreational activities are deemed to be: canoeing, camping, fishing, hiking, viewing, cross-country and alpine skiing, nature study, and photography. Park management consists primarily of resource conservation and is oriented toward the preservation of the wilderness landscape character.

Access

In this zone access will be restricted to foot, canoe, horseback and airplane travel only, with the exception of snowmobiles in specifically designated areas.

Camping

Dispersed backcountry camping will be the established order. Wilderness camping will be unrestricted with no special provisions made for it, except where environmental degradation occurs from overuse.
Fishing
This activity will be permitted throughout the wilderness areas, subject to regulations, however, no special provisions will be made for it.

ii) Visitor Services
Firewood
_Campfires will be permitted throughout the area_ except during times of high forest fire hazard. Firewood will not be supplied.

Garbage
_A “pack it in – pack it out” policy will prevail_ throughout the wilderness areas of the park.

Information
_The only information service which will be provided in this part of the park will be in the form of brochures dispensed at the wilderness entrances._
Wilderness ethics and parks features will be the main topics stressed.
Visitors will be informed of what they might expect while travelling the backcountry and adequately briefed on the topics of safety, rescue, regulations, and bear encounters.

iii) Facilities
_With the exception of access trail construction, signing, and wilderness campsites along the lake chain, no facilities will be constructed in this zone of the park._ A trail plan has been prepared and will be implemented.
E. RECREATION MANAGEMENT

a) Objective

*Recreation management in South Tweedsmuir Provincial Park will be designed to retain quality recreation opportunities while ensuring public safety and conservation of the park resource.* Regulation, development, and visitor services will be the minimum necessary to ensure quality experiences.

i) Interpretive Themes

Themes in South Tweedsmuir will revolve around the following four basic themes:

1. Aboriginal Culture, European Exploration and Settlement

   Elements of this theme will include Mackenzie’s journey, the Edwards story, early road construction, Indian village life, and Indian trade. *Delivery of this theme will occur primarily at Burnt Bridge.* The Edwards story and road construction will be delivered at the headquarters information centre.

2. Physiographic Transitions

   Elements of this theme will include explanations of the transition from the Interior Plateau to the Coast Mountains Natural Regions including explanations of climate and elevation influences on the biological community, as viewed from the highway.

3. Biological Phenomenon

   The main elements of this theme will include grizzly bear ecology and general riverine and salmon ecology. *Delivery of this theme will occur primarily at Fisherman’s Pool Campsite.*
4. Park Management

Elements of this theme will include park regulations, park recreation opportunities, safety, bear encounter information, fishing regulations, etc. *Delivery of this theme will occur at the information pull-off near park headquarters.*

ii) Communications

*The present communication system* with a land based telephone at park headquarters and portables in vehicles and fly camps is *adequate* at this time.

iii) Fee Policy

When the Fisheries Pool Campsite is complete and the Atnarko campground is upgraded, *camping fees will be collected, provided that use levels are sufficient to warrant it.* No fees will be charged for backcountry use.

iv) Youth Crew

Presently a 24 member youth crew has been operated out of base camp at park headquarters. In the next few years crews will upgrade the existing facilities along the highway corridor and develop a system of wilderness campsites along the upper Turner Lake chains. *No expansion in the Youth Crew program is anticipated at this time.*

v) Carrying Capacity

At present no severe environmental destruction has occurred due to overuse, simply because of the park’s remote location. Use levels which are anticipated at this park are not likely to cause any serious environmental degradation. The only areas of the park which may witness overuse are the Turner Lake chain and some of the major fishing holes. *The social capacity will be measured, in terms of complaints received, through direct interviews with participants to determine their perceptions and experiences,* by District Staff.
vi) Group Use

Use of the park will remain open to organized guided and unguided groups. *Should group size become a problem, an upper limit on size will be determined, regulated and enforced.*

vii) Rainbow Mountain Ski Hill

*Tweedsmuir Ski Club, operating under P.U.P., has requested that a snowmobile area be established associated with the ski hill. Investigation has found this activity to be compatible with park values. An area will be designated and posted for snowmobile use when an appropriate boundary has been determined.*

viii) Private Enterprise

Private Enterprise will affect South Tweedsmuir Provincial Park in two basic ways – through various forms of guiding and through commercial campground operation.

Guiding

Guided hiking is now being conducted out of the Sierra Club’s Talchako Lodge at Stuie. Fishing guides operate throughout South Tweedsmuir, particularly along the Bella Coola and Atnarko River systems. This type of enterprise will not be discouraged, however, an effort will be made to achieve control over this activity through monitoring use and designating permits or letters of authority for use of specific areas at specific times in order to reduce overlaps and overuse by operators. *A guiding operations plan will be created through the District offices to direct future administration of this activity.*
Camping

A private campground is nearing development approximately eight miles west of the park boundary at Robins Nest Lodge. Tentative plans include a seventy-five unit campground serviced with power and water, laundry, showers, store and recreation facilities, and a twenty-five unit unserviced campground. The Division will advise and assist this operator as much as possible to ensure the business is viable. To this end he will be given planning guidance and operations advice, as requested. Furthermore, no public camping facilities will be constructed in the western end of the park in order to avoid direct competition. In addition, fees will ultimately be charged in the existing public facilities and visitors will be compelled to camp in designated sites only.
ix) Annual Operating Costs

Annual operating expenditures include:

<table>
<thead>
<tr>
<th>Department</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Park Headquarters</td>
<td>$41,500</td>
</tr>
<tr>
<td>Youth Crew Program</td>
<td>57,600</td>
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<tr>
<td>District Office Support</td>
<td>24,200</td>
</tr>
<tr>
<td><strong>TOTAL:</strong></td>
<td>$123,300</td>
</tr>
</tbody>
</table>

The above figures include wages, materials, supplies and services for 1979 fiscal year.

E. RESOURCE MANAGEMENT

a) Objective

Resource management policy in South Tweedsmuir will be generally designed to permit natural processes to progress uninfluenced by the activities of man, wherever possible. Policy will be designed to meet park objectives within the obligations of ensuring public safety and convenience while protecting the park resource.

i) Water Quality

Maintenance of water quality is fundamental to the preservation of aquatic environments. The Parks and Outdoor Recreation Division will oppose developments which will jeopardize water systems draining the park. Furthermore, the Division will liaise with other Government Agencies, chiefly Ministry of Highways, to ensure sedimentation or chemical spraying does not occur in sensitive areas.

ii) Land and Boundaries

Status

It is proposed that the outstanding recreation and natural features of South Tweedsmuir warrant the distinction of Class A Provincial Park.
status. The combination of excellent fishing, hiking, scenery, wildlife populations and nationally significant historical values can be found in few other parks. Currently Class B park designation does not provide complete protection from possible resource exploitation and the superlative park values adequately justify upgrading the status.

Highway Rerouting

It has for some time been proposed that the Bella Coola Highway be rerouted to the east, through the Hotnarko drainage. The Parks and Outdoor Recreation Division will oppose this project on the grounds that it will cause irreparable ecological damage to an extremely sensitive area of the park and conflict with park use. The route proposed will cut through approximately eight miles of the Atnarko valley, an area of extreme importance to wintering steelhead stocks and a spawning and rearing area for pacific salmon. The valley walls in this area are steep with many talus slides and it is anticipated that much sedimentation and erosion will occur, to the detriment of the fishery.

Boundaries

It has been proposed that two areas be added to South Tweedsmuir Park, one taking in the remaining easterly portion of the Rainbow Mountains and one in the southern extremity taking in the remainder of Knot Lakes system. Pursuant to the status upgrading procedure, these areas will be reviewed through interagency study and added to the park, if appropriate. For a more complete explanation see King, 1976.
TWO ADDITIONS ARE PROPOSED FOR
FOR THE PARK - AT THE RAINBOW
RANGE (above) AND AT KNOT LAKES
(below)
Inholdings
Within the park a number of private inholdings exist ranging from fee simple lands to pulp leases. *The amount of land covered under these statuses is extensive and it is not feasible for the Division to acquire all the lands, given other priority acquisitions elsewhere in the province, at this time.* Furthermore, within the context of direct operating requirements, the Parks and Outdoor Recreation Division does not need any of these lands as a base for recreation facilities. However, *should properties be offered for sale they will be reviewed on their individual merit for preservation of environmental values.*

iii) Forests
Park forests will be used for recreation purposes and generally permitted to follow natural successive patterns. *However, it will be necessary from time to time to suppress such forces as fire, insects and disease.* Control may take place in circumstances where maintenance of healthy stands is fundamental to protecting important aesthetic qualities or public safety. Firewood, for recreation purposes, may be cut from within the park boundaries.
Fire

*Wild fire will be suppressed outright throughout the park in accordance with existing Division policy.* A fire suppression plan has been worked out with the Forest Service for the park.

iv) Fishery

The tremendous economic and recreation importance of the fisheries associated with South Tweedsmuir Park is recognized as the single most significant factor in determining park management practices. *Since fishing is responsible for generating the majority of park visitation, every effort will be made to maintain or enhance both the recreational and commercial fish populations.* Park management staff will liaise closely with the Fish and Wildlife Branch and Federal Fisheries to ensure a coordinated approach is taken toward fish management projects. *Habitat improvement projects and artificial propagation methods of stock improvements will be permissible* throughout the Atnarko drainage provided that other recreation values are not unduly flawed.

v) Wildlife

*A no hunting policy will be adopted in South Tweedsmuir along the highway corridor with the possible exception of a spring and fall black bear hunt. All commercial trapping will be phased out through acquisition of the lines as they become available,* where possible. Habitat manipulation will be an acceptable management tool where it does not seriously flaw other park resources and recreation opportunities. *It is intended that biological studies of both the Rainbow Range caribou and the Atnarko grizzly are to be carried out as soon as possible.* These two populations are of great significance to park and recreation values and detailed knowledge of their habits is necessary for proper management.
V. PLAN IMPLEMENTATION
# PLAN IMPLEMENTATION

**HQ** - HEADQUARTERS  
**R** - REGION  
**D** - DISTRICT  

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>TASK</th>
<th>RESPONSIBILITY</th>
</tr>
</thead>
</table>
| 1. INFORMATION   | A. Develop information packages for Headquarters and Fisheries Pool Centres  
B. Liaise with Parks Canada re Centre at Burnt Bridge Creek  
C. Write interpretive brochure  
D. Develop interpretive trails | HQ, R  
HQ, R  
R, D  
R, D |
| 2. PLANNING      | A. Ongoing liaison  
B. Upgrade status to Class A  
C. Establish additions  
D. Investigate alternative to Fisheries Pool Campsite | R  
HQ, R  
HQ, R, D  
HQ, R, D |
| 3. DESIGN        | A. Fisheries Pool day use area  
B. Entrance portals | HQ  
HQ |
| 4. ENVIRONMENTAL MANAGEMENT | A. Grizzly bear study  
B. Caribou study  
C. Status Upgrading  
D. Rainbow Snowmobile Study | HQ  
HQ  
HQ  
HQ |
| 5. OPERATIONS    | A. Implement management policy  
B. Incidental construction projects | D  
D |
| 6. CONSTRUCTION  | A. Construct information centres  
B. Implement trail plan  
C. Develop Fisheries Pool day use area  
D. Winterize cabin at Park headquarters | R  
D  
R  
R |
VI. BIBLIOGRAPHY
IV. BIBLIOGRAPHY


Kopas, C., *Bella Coola*.


