

Chickens Neck Mountain

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ECOLOGICAL RESERVES COLLECTION  
GOVERNMENT OF BRITISH COLUMBIA  
VICTORIA, B.C.  
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# DEASE RIVER DEFERRED AREA STUDY

MINISTRY of LANDS, PARKS and HOUSING  
PARKS and OUTDOOR RECREATION DIVISION

## FOREWARD

BRITISH COLUMBIA WITH A GROWING POPULATION, IS MORE AND MORE EXPERIENCING COMPETING AND SOMETIMES INCOMPATIBLE DEMANDS FOR THE USE OF ITS FIXED BASE OF CROWN LAND. IN SOME INSTANCES, THE RESOURCES OF A SPECIFIC AREA CLEARLY INDICATE A PARTICULAR USE FOR THAT LAND. IN OTHER INSTANCES, COMPETING NEEDS FOR HOUSING, TIMBER, RECREATION, WILDLIFE, AGRICULTURE AND PARKS MAKE LAND USE DECISIONS DIFFICULT. TO RESOLVE THESE DIFFICULTIES, THE MINISTRIES OF FORESTS AND LANDS, PARKS AND HOUSING HAVE BEEN WORKING TOGETHER ON A PROGRAM FOR THOSE AREAS OF CROWN LAND WHERE PROBLEMS OCCUR. THIS PROGRAM IS CALLED THE DEFERRED AREA PLANNING PROGRAM.

THIS STUDY DOCUMENT IS THE RESULT OF ONE SUCH DEFERRED AREA PLANNING PROJECT. THE PRIMARY INTENT OF THIS PROJECT WAS TO PROVIDE CABINET WITH A REVIEW OF POSSIBLE LAND USE OPTIONS TO FACILITATE A DECISION ON WHETHER THE AREA SHOULD BE INCLUDED IN THE DEASE PROVINCIAL FOREST OR DESIGNATED UNDER THE PARK ACT.

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SUMMARY

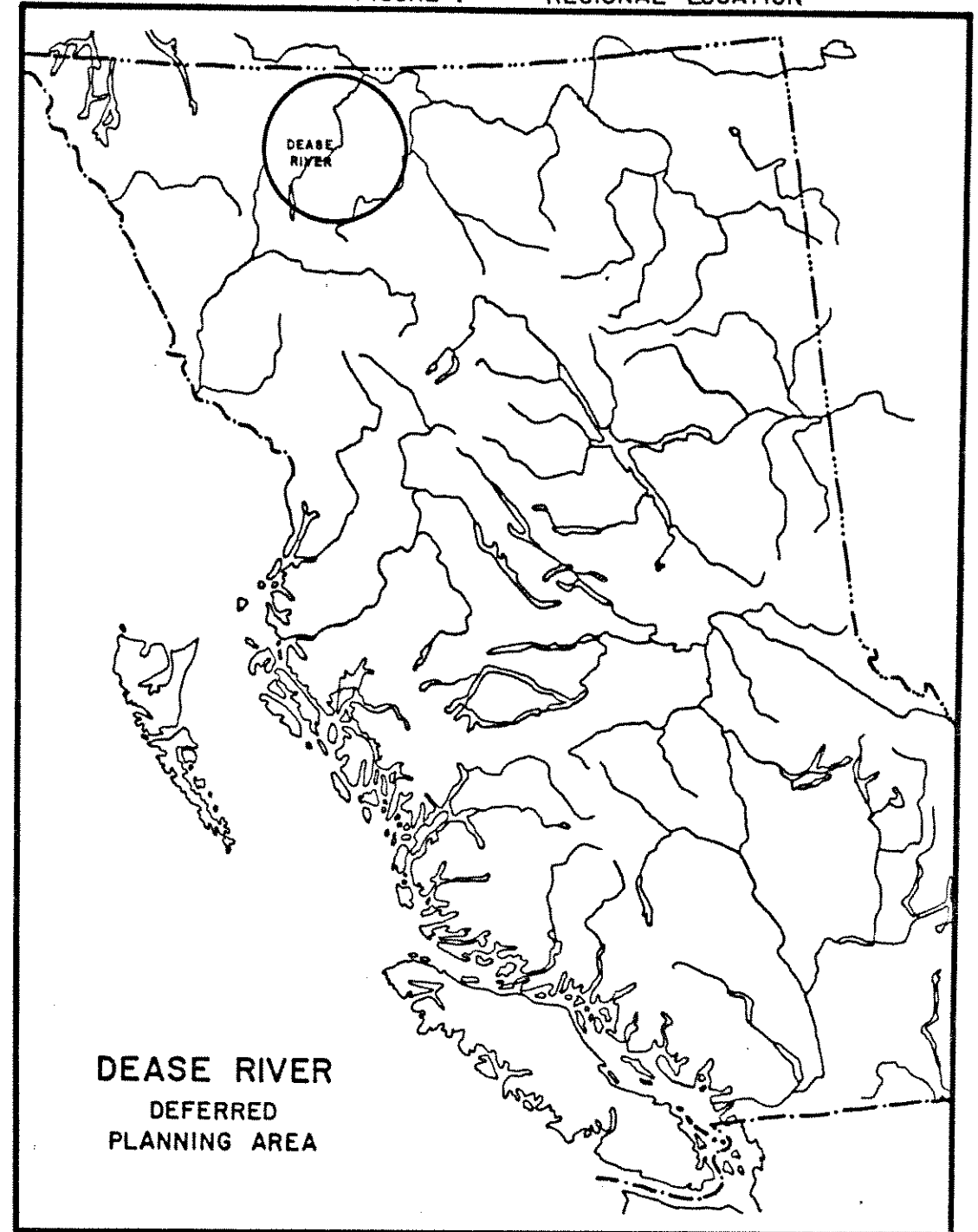
This report outlines the background leading to the designation of the Dease River Deferred Planning Area, the resource values of the study area, and four land status alternatives to manage the resources therein.

The most significant resource values of the deferred area are timber, wilderness recreation and scenery. Mineral values are still somewhat unknown but the long, narrow nature of the deferred area could impact on access to both potential mineral and timber values beyond the study area.

The alternative management strategies available represent a range of emphasis from a resource extraction/economic priority through multiple-use approaches to a recreation/conservation priority.

Public response to invitations to submit comments on the future management of the deferred area has been minimal.

FIGURE 1 REGIONAL LOCATION



## BACKGROUND

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Located in northwestern British Columbia, the Dease River flows north approximately 260 kilometres from its headwaters at Dease Lake to eventually join the Liard River at the B.C.-Yukon border.

Flowing generally parallel to Highway 37, the river is accessible by road at its start, midpoint and end, but swings away from the highway enough that most visitors today consider the corridor a wilderness for much of its length.

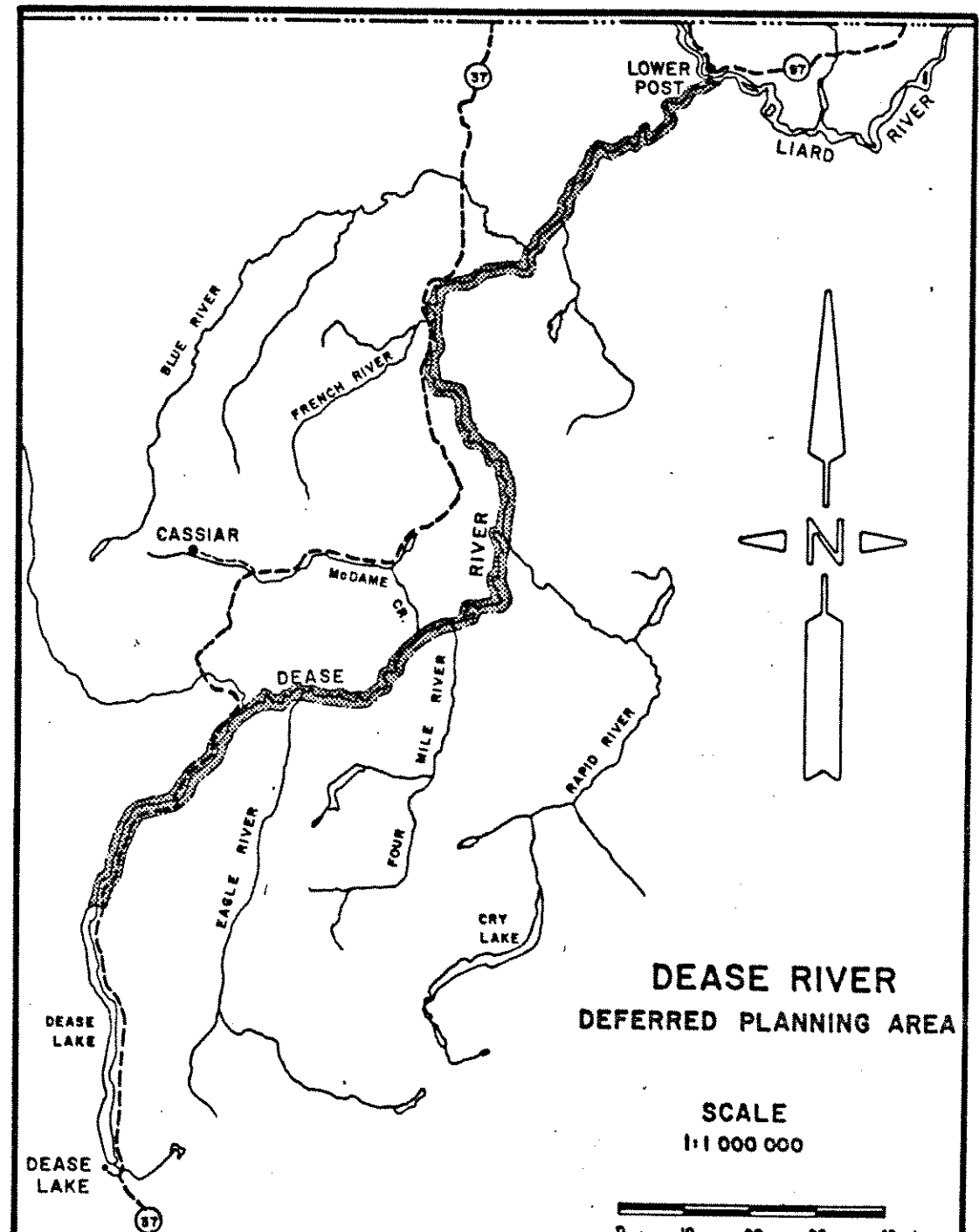
This area of the province was first explored by fur traders in the 1830's and then by gold seekers in the 1870's. More recently, the river served as part of a supply route from the B.C. coast to the Watson Lake airfield and the construction of the Alaska highway in the 1940's. The river route is now generally paralleled by a paved provincial highway.

Recreational interest in the Dease River was first recorded with a reserve for park study purposes over the corridor in 1972, then with a park proposal by the Regional District of Kitimat-Stikine in 1976, and continued Parks and Outdoor Recreation Division and Forest Service interest in protecting the recreation values of the river to the present time.

There has been significant mineral exploration and mining activity for the last century with both placer and mineral finds in this general area of the province. At the present time there are few claims and no active mines within the deferred area itself.

Although there have been no significant logging operations along the corridor to date, the river valley does provide some of the more productive forest land base in the Cassiar Forest District and was included in the newly established Dease Provincial Forest. Simultaneously, at the request of the Parks and Outdoor Recreation Division, an area 500 metres on either side of the centerline of the river was designated as a deferred area to address the question of whether the mix of values present along the corridor could be best managed as part of the forest or by designation under the Park Act.

FIGURE 2 DEFERRED AREA BOUNDARY



## PHYSICAL CHARACTERISTICS

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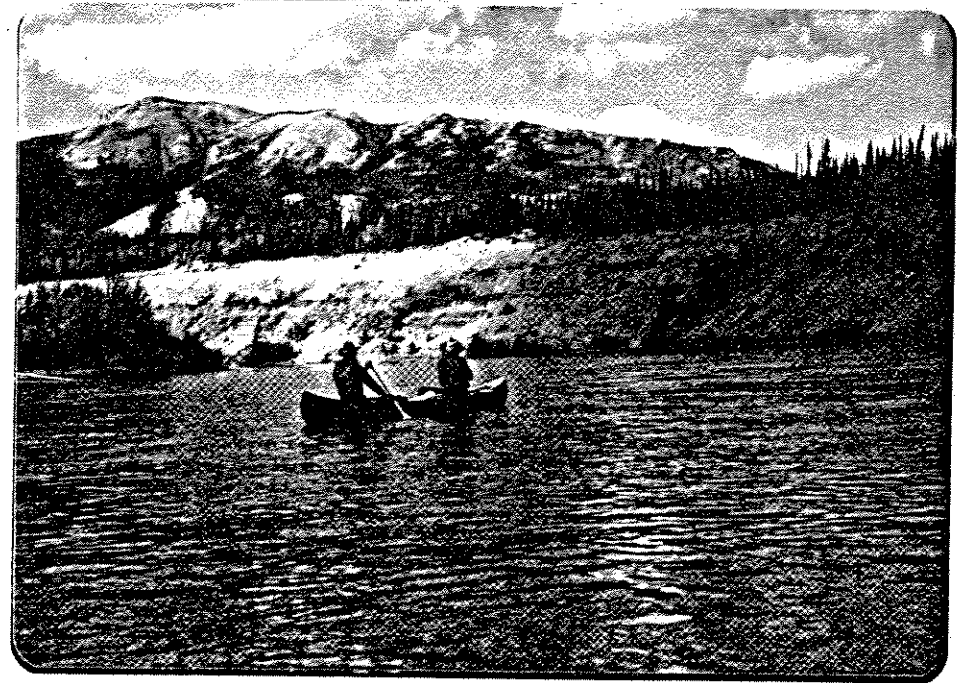
Flowing north from Dease Lake to eventually join the Mackenzie River system, the Dease River cuts through the Cassiar Mountains and then across the Dease Plateau and Liard Plain.

The Cassiar Mountains are of moderate relief, have been sharply scalloped by past glaciation, and are highly mineralized. With extensive continuous alpine occurring only 500 metres vertically above river level, these mountains are an outstanding scenic backdrop along the upper half of the river corridor.

The Dease Plateau and Liard Plain of the lower half of the river are a more gently rolling to flat landscape with a near continuous forest cover of small boreal spruce, pine, and willow.

The river itself is of intermediate size (approximately 30 metres wide at its start from Dease Lake and 100 metres wide near its confluence with the Liard River), is of low gradient (average current of 3 to 5 kilometres per hour), is exceptionally clear, and has no significant obstacles to navigation. Valley bottom areas vary from marshy ox-bow lakes to rock outcrops, to well drained gravel terraces.

Climate here is characterized by short summers and severe winters. Annual precipitation is low (30 to 100 centimeters) with about one-half falling as snow in the winter months.



DEASE RIVER WITH CASSIAR MOUNTAINS IN BACKGROUND

## RESOURCE VALUES

Resource values within the deferred planning area are varied, though most have not yet achieved their full economic or social potential because the area has only recently become accessible by highway and remains a great distance from major market and service centres.

### Timber

The Dease River deferred area is situated in the northeastern portion of the Cassiar Timber Supply Area and contains 191 square kilometres of forest land. The majority of this forest is considered non-commercial at present, but 44.45 square kilometres support stands of merchantable mature timber. These stands are primarily white spruce and lodgepole pine, with some subalpine fir present as well.

The volume of merchantable mature timber contained in this study area is estimated at 943 000 m<sup>3</sup>. This volume of timber would provide a three-year wood supply for a typical medium sized interior sawmill. The harvesting and processing of this volume of timber could be expected to generate approximately 1 040 man-years of direct employment.

The productivity of the forest land in this deferred area is high relative to average sites in the Cassiar T.S.A., as it is located entirely in a valley bottom. Assuming a productivity of 2 cubic metres per hectare per year, the area could be expected to contribute approximately 9 000 m<sup>3</sup> per year to the Long Run Sustainable Yield (LRSY) of the Cassiar T.S.A. The harvesting and processing of this volume of timber annually would support 9.9 forest sector jobs indefinitely.

There is no immediate pressure to harvest timber in the deferred area, however, it does contain high quality, relatively accessible stands which are among the most desirable in the Cassiar T.S.A. It is worthy of note that a recently awarded Timber Sale Licence authorizing removal of 350 000 m<sup>3</sup> of timber lies within 20 kilometres of the north end of the study area.

Timber concerns relative to the deferred area cannot be confined to the deferred area itself. Significant volumes of timber outside the deferred area, particularly on the east side of the Dease River between Eagle River and Horseranch Lake, are probably accessible only through the deferred area. The precise extent of these additional timber impacts cannot be quantified without detailed engineering or accessibility evaluation, but the area in question may have an equal or greater potential for timber production than the deferred area itself.



MIXED FOREST COVER TYPICAL OF UPPER DEASE

## Wildlife

The Dease River deferred area itself is confined to the river and near shore areas and as such encompasses primarily valley bottom habitat types. Moose and wolves are very common along the valley bottom. Grizzly and black bear and many furbearing species are also present but less frequently seen. Geese and ducks nest along the marshy, meandering sections of the river in great numbers.

The deferred area corridor traverses several traplines and guiding territories. The traplines within the deferred corridor are active; however, guided hunting activity is limited along the river itself.

The Cassiar Mountains and Dease Plateau landscapes of the upstream half of the river contain significant populations of caribou and some sheep and goat. These mountain species are the main focus of the guided hunting in the area. The Liard Plain landscape of the lower river supports a relatively heavy population of moose.

## Fisheries

As part of the Arctic drainage, this river system does not support a salmon population.

Sport fishing for grayling and Dolly Varden char is excellent, with good populations of both species present along much of the river. One small resort located on the river provides limited services to sports fishermen.



MOOSE ARE COMMON THROUGHOUT STUDY AREA



GRAYLING FISHING IS EXCELLENT



### Minerals

Mineral and placer values in the Dease River area have been sporadically explored during the last century. The only claims within the deferred area at the present time are a small area of placer claims and a block of mineral claims, both at Macdame, the old trading post site halfway up the river. There are no active mines or current activities within the corridor, although ultimate potential is still unknown.

The deferred area does, however, as with timber values, control access to an extensive area of unknown mineral value both to the west and east of the study area.

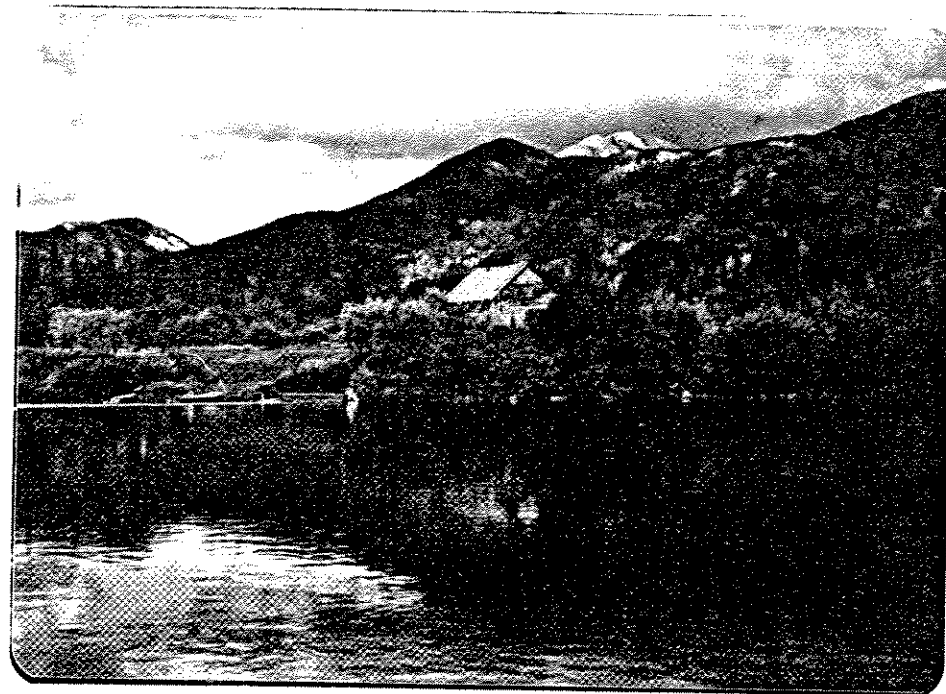
### Hydroelectricity

The lower half of the deferred area is part of the Liard River flooding reserve. The most recent prospectus of this potential project, however, does not include any flooding of the Dease River.

### Transportation Corridors

The Highway 37 right-of-way lies close to or overlaps the deferred area for much of the first 40 kilometers of river and again comes close to the deferred area at approximately half way down the river. This right-of-way, particularly along the first portion of the river, may not ultimately be wide enough to accommodate maintenance of slumping road cuts at some locations.

The current Northwest Economic Development Study of the provincial government also proposes a possible extension of the Dease Lake railway as one alternative expansion of a northern railway system. If such an extension were chosen it would come close to and cross the deferred area in a number of locations.



OLD TRADING POST AT MACDAME

### Recreation

Potential recreation values of the Dease River are of provincial significance. With access at both ends and midpoint, a low gradient and no significant hazards on its entire length, the Dease River represents outstanding wilderness opportunity for the beginner to intermediate canoeist. Associated fishing, hunting, and scenic values are very high.

Canoe or boat trips can be made over varying lengths of the river offering opportunities for experiences of anywhere from one day to two weeks on the river.

Current use, however, is very low. There are no commercial operators on the river to date. Traditional use has been mainly hunters and fishermen in the past with canoeists only beginning to discover the area.

General tourism traffic in this area along the Highway 37 corridor is growing rapidly with volumes doubling in the last four years and now comparable with the northern B.C. section of the Alaska Highway.

### Natural and Human History

Conservation values of the corridor are of local or regional significance only. The river itself, although of high scenic value, does not contain any outstanding natural features that are not presently well represented in the provincial park system. The variety of water conditions, nearshore habitats and landforms and associated wildlife are in fact very similar to those of the Spatsizi River in Spatsizi Plateau Wilderness Park. The difference of the Dease River is its access and therefore significantly higher recreation use potential.

Human history conservation values are of regional and possibly provincial significance when the early exploration, fur trading, and gold rush activities of the Dease River are considered collectively. Remaining evidence of early events can be seen in the buildings and graveyard at the trading post settlement of Macdame and the gold mine equipment that remains at Laketon on the outlet of Dease Lake.



GRAVEYARD AT MACDAME

## Land Status

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The Dease River deferred area is defined as all lands within 500 metres of either side of centreline of the Dease River from Dease Lake to the B.C./Yukon border.

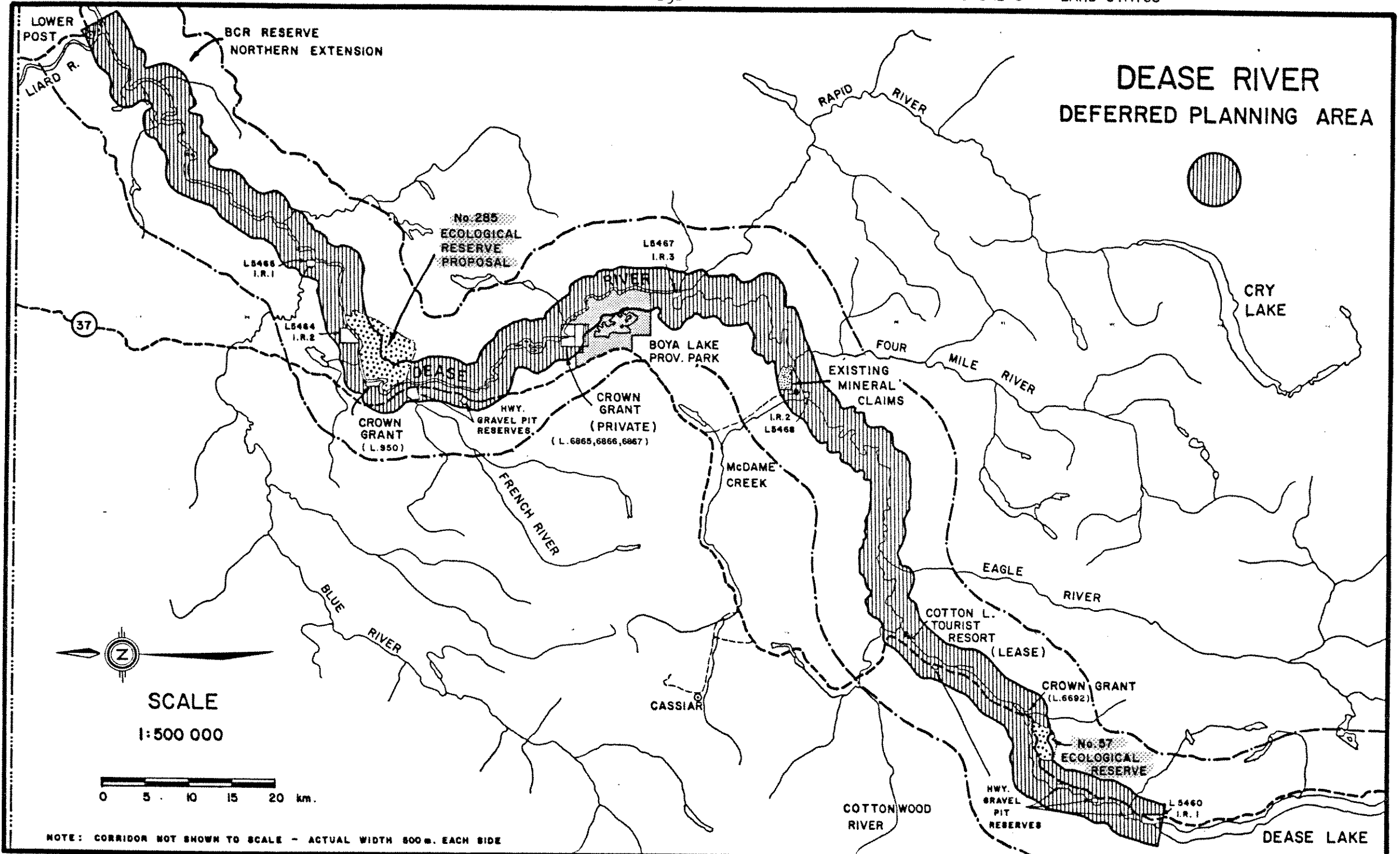
Of this 26 000 hectares of land and water all is provincial crown land within the Dease Provincial Forest except for 240 hectares in Indian Reserves and 225 hectares of crown granted private property.

As indicated on the land status map (figure 3) there are a variety of reserves and leases adjacent to or overlapping into the study area. Of these the B.C. Railway reserve over the entire study area, and a flooding reserve over the northern half of the study area are the only extensive land alienations. The flooding reserve is not being considered for use at this time and the railway reserve is considered to be one of several possible alternative expansions to the northern railways system. The Highway 37 right-of-way overlaps the study area in several places along the first 40 kilometres of river.

Mineral resource tenures consist of small areas of both placer and mineral claims near Macdame halfway along the river corridor.

A small tourist resort lease on Cotton Lake also lies within the boundaries of the study area.

An existing and a proposed Ecological Reserve lie adjacent to and overlap into the deferred area.



## ALTERNATIVES

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Four alternative administrative strategies have been defined as potential solutions to management of the mix of resource values present in the Dease River Deferred Planning Area. These alternative strategies range from a resource extraction priority through multiple-use options to a recreation/conservation priority.

### Alternative 1 - Provincial Forest/Resource Extraction Priority

This option assumes the designation of the deferred area as Provincial Forest with a resource extraction priority for the entire corridor. Measures to protect recreation and aesthetic values in the corridor would not be expected to exceed those encountered in normal timber harvesting practice; consequently, the deferment or reservation of timber for recreational purposes would be minimal.

Mineral exploration and development and access construction could proceed with normal fisheries, wildlife, water quality, and pollution precautions.

Other existing or proposed land dispositions or uses compatible to forest policy could occur. Indian reserves and private land would be excluded from the forest.

### Alternative 2 - Provincial Forest/Recreation Priority

This option assumes the designation of the deferred area as Provincial Forest with a recreation priority for the entire corridor. Recreation management would be the responsibility of the Forest Service. Detailed management prescriptions for the corridor would be established by the Forest Service according to the recreation management process (including landscape management) as developed by the Ministry of Forests Recreation Management Branch.

For administrative purposes, a Forest Service Recreation Map Notation would be established to include those areas identified as being of high or moderate visibility as viewed from the Dease River. The Forest Service would be committed to maintaining a minimum Visual Quality Objective of "partial retention" with significant areas being managed for Visual Quality Objective of "retention" or "preservation" (see Forest Landscape Handbook, Ministry of Forests). The amount of timber available for harvesting would be substantially reduced in order to attain the desired Visual Quality Objectives. Harvesting activities would occur provided the established Visual Quality Objectives could be met. Under extenuating circumstances (e.g. fire, blowdown, insects) increased harvesting of effected areas would be considered. Road access development and bridge construction within the corridor would be designed to minimize impacts upon recreation.

Mineral exploration and development could proceed with environmental precautions and specific planning to reduce conflicts with recreation values.

Other existing land uses would continue and any proposed uses compatible to forest policy would be evaluated on an individual basis with specific concern to recreation impact. Indian Reserves and private land would be excluded from the forest.

Alternative 3 - Provincial Recreation Area (Park Act)

This option assumes designation of the deferred area as a Provincial Recreation Area under the Park Act. Such status implies protection of the recreation/conservation values with interim recognition of existing resource uses or commitments and consideration of future non-conflicting resource uses. All non-recreational uses would be by permit issued by the Parks and Outdoor Recreation Division.

Minimal timber extraction could occur in areas not visible from the river. Road access development within the corridor would be designed to minimize impacts upon recreation values, and river crossings could be restricted in number and location.

Mineral exploration and development could occur only in a manner controlled to minimize impacts upon recreational values. Existing placer and mineral claims would remain valid.

Trapping and guiding rights would be continued. Other existing leases would be continued under permit with incompatible leases phased out over time. The highway right-of-way, Indian Reserves and private property would be excluded from the Recreation Area. The Recreation Area would be subject to the established flooding and railway reserves.

All proposed future land uses compatible to Parks and Outdoor Recreation Division policy would be evaluated on an individual basis with specific concern to recreational impact.

Alternative 4 - Provincial Park

This option assumes designation of the deferred area as a Class A Provincial Park under the Park Act. Such status implies complete protection of the recreation/conservation values, with elimination of incompatible uses and no future resource extraction unless necessary to protect the recreation values involved.

No timber extraction or road access development would occur except for recreational purposes (i.e., campsite development or boat access to the river).

No mineral exploration or development would be permitted. Existing placer and mineral claims would have to be acquired, excluded, or otherwise eliminated.

Trapping and guiding rights would be continued under permit. Other existing leases would be continued under permit with incompatible leases phased out over time.

The highway right-of-way, Indian Reserves and private property would be excluded from the Park. This option would necessitate cancellation of the existing flooding reserve and either cancellation or exclusion of portions of the existing railway reserve.

## EVALUATION OF ALTERNATIVES

The four alternative administrative strategies depict a clear range of costs and benefits to recreation/conservation values and resource extraction values.

### Alternative 1 Provincial Forest/Resource Extraction Priority

This option places heavy emphasis on resource extraction and as such the timber, mineral, and any other extractive resource values could be realized to their fullest extent. Economic potentials are optimized.

Provincial government and public interest in protecting the recreation values of the corridor would not be ensured although some recreation values would remain through the very existence of the river itself. The existing quality of wilderness recreation and superlative scenery would be forgone if and when resource extraction proved economically feasible. Tourism values would be greatly reduced.

### Alternative 2 Provincial Forest/Recreation Priority

This option places emphasis on a multiple-use approach with both resource extraction and recreation/conservation values given significant consideration.

The option would allow for resource extraction in areas or under conditions that would not significantly degrade the wilderness, recreation, or scenic values. This option would result in a reduction in potential timber harvest of approximately 50% to 75%.

In addition to recreation value protection within the specific study area itself, this option gives consideration to all areas of high to moderate visibility as seen from the Dease River. This consideration ensures some protection of the total recreational environment of the river corridor on an ongoing basis without immediate identification and special protective designation of vast areas of visible lands beyond the actual deferred area boundaries.

This option, to be successfully implemented for a long term, would require a clear commitment by the Forest Service to a specific management objective.

### Alternative 3 Provincial Recreation Area

This option places emphasis on a multiple-use approach where resource extraction is clearly subordinate to recreation/conservation values. Timber harvesting and mineral development would be restricted to areas which would not degrade recreation values. This option would result in a reduction in potential timber harvest of approximately 75% to 100%.

This option would provide for protection of wilderness recreation values within the deferred area; however, it does not protect the total recreational environment of the river corridor as extensive areas of mountain slope beyond the deferred area are visible from the river. The likelihood of developments occurring in these areas is unknown at this time and it is not considered appropriate to incorporate such extensive areas into Recreation Area status under the Park Act without knowing if conflicting uses would ever occur.

Tourism values and commercial recreational guiding opportunities would be enhanced.

Alternative 4 Provincial Park

This option places total emphasis on recreation/conservation values. The deferred area would be completely protected; however, as in alternative 3, the total recreational environment of the river would not be ensured protection.

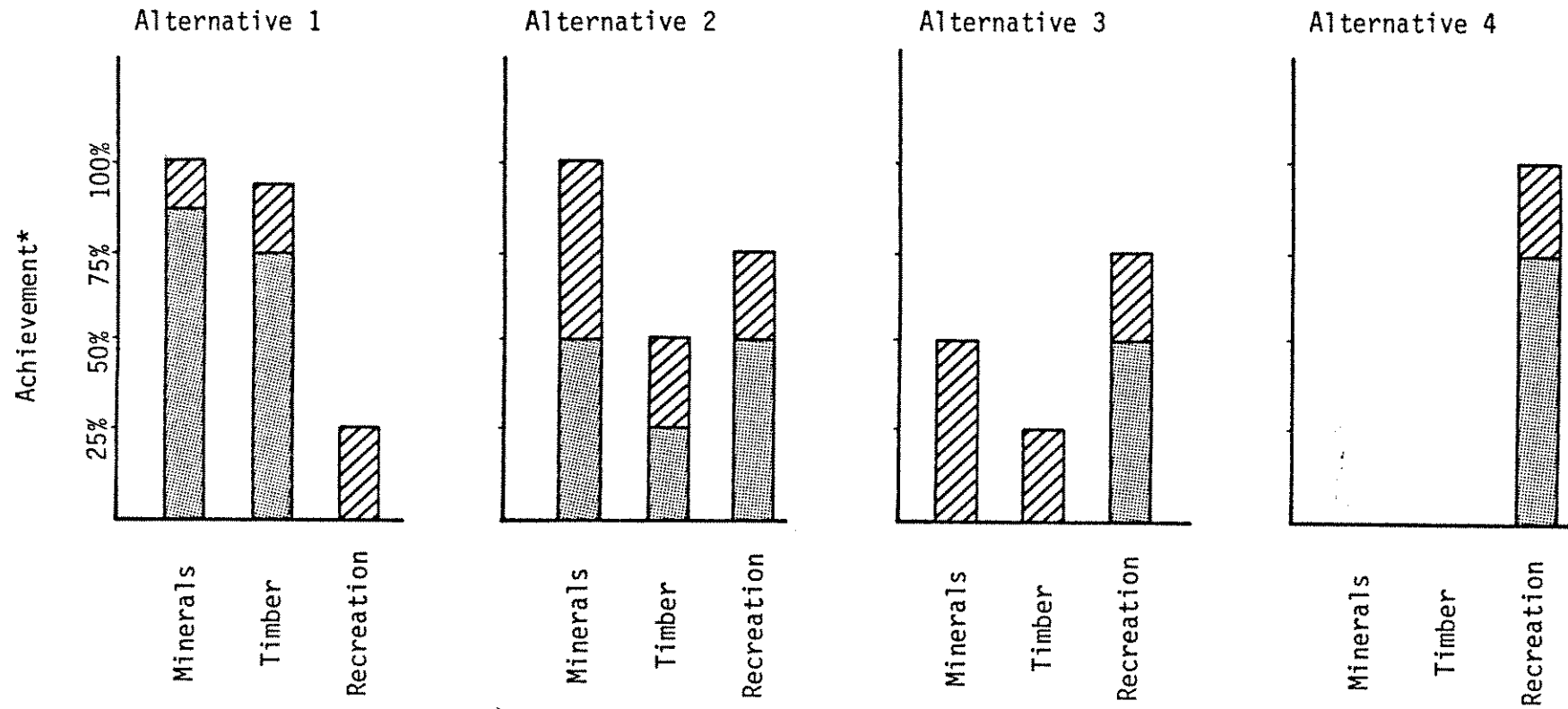
Timber, mineral and other extractive resource values are forgone.

Tourism values would be enhanced and commercial recreational guiding opportunities increased.

Park status would preclude opportunities for access to potential timber and mineral resources to the east of the river unless specifically planned and excluded before park establishment.



REALIZATION OF RESOURCE VALUES



\*Achievement or realization of resource values for each alternative is expressed as an approximate potential for the main variable resources. The hatched upper section of bar graphs represents the range of uncertainty due to resource management unknowns (eg: Feasibility of landscape logging, need for future access across river corridor).

RECOMMENDATION

On November 18, 1982 the Skeena R.R.M.C. unanimously endorsed this document as an accurate and complete analysis of the resource issues relevant to the Dease River Deferred Area and recommended that Alternative 2 - Provincial Forest/Recreation Priority be considered as the most appropriate management strategy for the area.