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Robson Bight (Michael Bigg)

Ref. No.:

**396**

ECOLOGICAL RESERVES COLLECTION  
GOVERNMENT OF BRITISH COLUMBIA  
VICTORIA, B.C.  
VBY 1X4

ROBSON BIGHT ECOLOGICAL RESERVE

UPLAND EXTENSION

Parks & Outdoor Recreation Division  
Ministry of Lands, Parks and Housing

November, 1985

H. B. B. B. B.

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## 1. Introduction

Robson Bight, formerly an unknown small bay midway between Kelsey Bay and Port McNeill on northern Vancouver Island, has become a household word in British Columbia in the last six or seven years. The killer whales residing here have in this time span obtained a high profile not only with the general public through news coverage in such widely circulating magazines as National Geographic, Nature Canada or B.C. Outdoors, in the dailies, radio and television reports, but they have also become renowned in scientific circles as objects of research studies well beyond the boundaries of British Columbia.

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not to overplay

The present report is concerned with the proposed addition of a land-based buffer zone to the existing Ecological Reserve established over the water portion of the Bight in June, 1982.

extends well beyond the Bight proper

## 2. Developments leading to the present proposal

In late 1978 the Tsitika Integrated Resource Plan <sup>1</sup> was submitted to the Environment and Land Use Committee of the provincial government. This plan, subsequently accepted by ELUC, included the provision to create seven ecological reserves, one of which covered the Tsitika estuary fronting on Robson Bight. After completion and acceptance of the Tsitika Plan, between late 1978 and mid-1979, scientists and, later, conservation groups and the general public pointed out the significance of Robson Bight for the killer whales.

As information on the whales became available, the Ecological Reserve Unit of the Ministry of Lands, Parks and Housing responded by enlarging the proposal for the Tsitika estuary reserve to include narrow coastal strips of water and shoreline. The modified proposal was presented to the Tsitika Follow-up Committee which had been set up in 1979 to coordinate the implementation of the Tsitika Plan.

In December, 1980, the Minister of Environment appointed the Robson Bight Study Team to advise the provincial government on the significance of Robson Bight to killer whales and on resolving conflicts between killer whale conservation needs and forest-industrial development of the lower Tsitika watershed.

On January 20, 1981, the Sierra Club of Western Canada submitted a proposal for a combination of a park and an ecological reserve over 4,500 hectares of the lower Tsitika Watershed and Robson Bight.<sup>2</sup>

On January 26, 1981, the Minister of Lands, Parks and Housing announced the creation of an interim reserve over 936 hectares of Robson Bight, including a 100 meter wide strip of upland along the shore.

In June, 1981, the Robson Bight Study Team submitted a report which recommended that a log handling facility at the estuary should not be built

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<sup>1</sup>All footnotes refer to references listed at the end of this paper.

and other forest-industrial activity along the shores of Robson Bight should not take place as originally approved following the 1978 Tsitika Plan.<sup>3</sup> The report stated also (p.vii) that "The present 3-year interim reserve over Robson Bight does not cover a sufficiently wide upland zone to buffer Robson Bight from the direct impacts (sights and sounds) associated with logging" and (p.28) that "The 100 meter upland fringe on the present ecological reserve proposal would not completely protect killer whales from the impacts of logging. Expansion of a buffer zone to eliminate direct impacts should consider topography and take full advantage of areas which cannot be logged economically".

On the basis of the Robson Bight Study Team's report, the Minister of Environment announced on June 29, 1981, that Robson Bight would not be used for log handling and that the Minister of Lands, Parks and Housing would proceed to establish an ecological reserve or park over the area. Subsequently, between July and November 1981, the Ministry of Lands, Parks and Housing conducted an in-house study to determine the most appropriate form of conservation for the area. The Ministry Executive decided to choose the option of an ecological reserve (map 2) over the options involving park - and combined park/ecological reserve status.

On June 17, 1982, the Minister of Lands, Parks and Housing announced the creation of an ecological reserve over the water portion of Robson Bight (map 2). The intention to add an upland portion to this reserve was expressed by the minister in response to numerous inquiries between 1982 and 1984.

Also in the summer of 1982, MacMillan Bloedel Ltd. requested the Ministries of Lands, Parks, and Housing and of Forests to either release the proposed Tsitika reserve areas or accelerate their establishment so that they could be compensated for their timber and land losses, as agreed to in the Tsitika Plan of 1978. The present proposed boundaries for Robson Bight upland buffer were jointly inspected in the field and agreed to by MacMillan Bloedel and Lands, Parks and Housing staff following this request in the fall of 1982.

In early 1983, the provincial cabinet decided that compensation for timber contained in the Tsitika ecological reserves and due to the timber companies according to the Tsitika Plan, should be mainly in the form of exchanges. In addition the decision was made to go ahead with the necessary timber cruises and appraisals.

In the summer of 1985 timber cruising and appraisals took place in the upland portion of Robson Bight Ecological Reserve as well as in five other reserve proposals which were part of the original Tsitika Integrated Resource Plan. These appraisals were conducted for the purpose of determining compensation to the forest industry for withdrawing the ecological reserve areas from their tenures.<sup>4,5</sup>

### 3. The proposed area

#### 3.1 Purpose and significance

As mentioned above, the prime purpose of the proposed upland portion of the Robson Bight Ecological Reserve is to shield the killer whales from disturbance by logging and other industrial activity related to it. A secondary purpose is to make the reserve, to the extent that is feasible, an ecological, functional and visual entity. As the proposed Tsitika estuary reserve from the original Tsitika Plan of 1978 is incorporated, another purpose of the upland proposal is to protect the biologically significant river estuary.

Robson Bight itself is significant for the whales as a "core habitat" for feeding, socializing and resting. Twelve pods of whales or a total of 150 animals utilize this core area and the bight is considered the world's best area for the observation of killer whales.<sup>3</sup> Another behaviour pattern of the whales which is highly specific to Robson Bight is that of "rubbing" on pebble beaches. This brings the whales into shallow waters and into immediate vicinity of the land where they are very susceptible to disturbance. Known rubbing beaches occur within 2 km to the west and 4.5 km to the east of the mouth of the Tsitika River. Any development for logging on the slopes immediately above the rubbing beaches would not only directly impact on the whales, but also make these locations, where the whales are most vulnerable, easily accessible to the public.

#### 3.2 Physical description

The existing reserve over the water, and thus also the proposed upland portion of it, extend from Sir John Creek 4 km west of the river mouth to Schmidt Creek 5.5 km east of the river mouth (map 2). The upland portion comprises 515 hectares and includes the flat Tsitika estuary area and mountain slopes facing Johnstone Strait to the west and east of it. To the east these slopes are very steep and rocky while more gentle grades prevail to the west of the estuary.

#### 3.3 Rationale of boundary location

As recommended in the report of the Robson Bight Study Team (3), the upslope boundary of the proposed addition is based on local topography and on the principle of minimizing loss of timber resources. Particularly in the eastern half the boundaries take full advantage of a series of small ridges paralleling the shoreline and representing the only natural break in the slopes rising from sea level to the 1600 m high Mt. Derby. The lowest timber values within the proposal are included in this eastern portion of the buffer strip which averages about 450 meters in width. As similar ridges are less continuous and timber values are higher in the western portion, the buffer strip narrows down to as little as 200 meters there.

#### 3.4 Land Status

The proposed area is within two different Tree Farm Licenses, T.F.L. 39 held by MacMillan and Bloedel Ltd. and T.F.L. 25 held by Western Forest Products Ltd. The T.F.L. 39 portion is additionally under timber licence

status under which the company owns the timber and only the land is owned by the Crown. Furthermore, the T.F.L. 39 portion encloses a Crown-granted private lot (lot 223, owned by MacMillan and Bloedel) including the mouth and lower part of the delta of the Tsitika River. The land status distribution is shown on map 2.

**4. Other Resource Values**

**4.1 Timber and privately held timber land**

Due to the above land status distribution and different tenure holders, the timber values occur on

- a) crown land under T.F.L. agreement
  - aa) in T.F.L. 39
  - ab) in T.F.L. 25
- b) timber licences in the name of MacMillan and Bloedel Ltd.
- c) private lot no. 223

The following table gives a summary of timber volumes for the proposed upland portion of the reserve. Compensation is also due for the land value of lot 223 and for the lost cutting rights.

Table 1. Timber, timber rights  
and timber land in the proposed upland portion  
of Robson Bight Ecological Reserve

		timber volume m3	Anticipated form of compensation
T.F.L. 39 M&B	timber licences	246,000	replacement of T.L. rights elsewhere in T.F.L.
	private land	27,000	timber exchange and cash for bare land value.
	lost cutting rights		exchange or cash
T.F.L. 25 WFP	T.F.L. Crown land	60,504	Is being withdrawn from T.F.L. without compensation under provisions of the Forest Act

## 4.2 Mineral Values

Geological mapping and geochemical sampling of the Tsitika area was carried out in 1974 by the Ministry of Energy, Mines and Petroleum Resources. A temporary mineral reserve expired in 1975 and no new mineral claims have been staked since.

By letter of December 22, 1975, all Tsitika ecological reserve proposals including the upland portion of Robson Bight were approved by the Ministry of Energy, Mines and Petroleum Resources.

## 4.3 Wildlife and Fisheries

Besides protecting the core habitat of killer whales, the proposed reserve area will have a positive effect on wildlife in the form of providing winter range, shelter and escape cover. This is applicable to black-tail deer throughout the area and to Roosevelt elk in the delta portion of the Tsitika River. Black bear feeding habitat is also provided in the estuary area. Good bald eagle nesting sites occur all along the forested shore and will assume particular importance once the old growth is removed from adjacent sections of coastline.

A modest cost to society will be the loss of public hunting opportunities to the reserve. Protection of the estuary will be of great benefit to the fishery as a great deal of food production and fish rearing takes place there. But, again, public freshwater angling in the Tsitika delta will have to be sacrificed under the regulations of the Ecological Reserve Act. Marine fishery will not be affected by the extended ecological reserve except in the above positive fashion.

## 4.4 Recreation

The objectives of ecological reserves are primarily in the fields of research and conservation. In the case of Robson Bight, the overriding consideration is the continued well-being of the killer whale population. By definition, recreational values must then be sacrificed to the extent of fulfilling these objectives.

Recreational values of the area are concentrated along the marine shoreline and will therefore have to be counted largely as a cost of the ecological reserve. However, through the creation of the water portion of the reserve in 1982, this is already an established fact. The scenic qualities which are quite considerable along this section of Johnstone Strait, due to the backdrop of snowy mountains behind the Tsitika estuary, will be enhanced by the retention of the forested buffer area.

## 5. Discussion of Alternatives

### 5.1 Alternatives for killer whale protection

It is made clear in the report of the Robson Bight Study Team that there is no known area in British Columbia and possibly in the world where killer whales can be studied so readily as is the case in Robson Bight. It

is also made clear there that an upland buffer area is required if we do not want to risk driving the whales out of this core habitat.<sup>3</sup> Alternative locations for killer whale protection therefore do not exist.

## 5.2 Boundary and size alternatives

The east-west extent of the proposed upland portion of the reserve is largely pre-determined by the extent of the already created water portion of the reserve, which in turn is based on the advice by whale researchers and particularly on the distribution of the "rubbing beaches" (see 3.1). Alternative boundaries with a narrower buffer strip are those of the interim environmental reserve declared by the Minister of Lands, Parks and Housing in 1981 and of the 1980 and earlier versions of the Tsitika Estuary/Robson Bight ecological reserve proposals. Both these alternatives were deemed insufficient by the Robson Bight Study Team (compare section 2). There are no logical alternative boundaries with a greater width of the buffer strip when considering the topography of the area, short of those proposed in 1981 by the Sierra Club.<sup>2</sup> The latter proposal would have required compensation (cash or exchanges) in order of 25 to 30 million dollars.

## 5.3 Alternatives in protection status and administration

Alternatives raised in the past history of the Robson Bight issue include the status of protection as provincial park or as Natural Site of Canadian Significance, a federal form of conservation. In addition to the latter, Canadian Landmark status has been considered.<sup>6</sup>

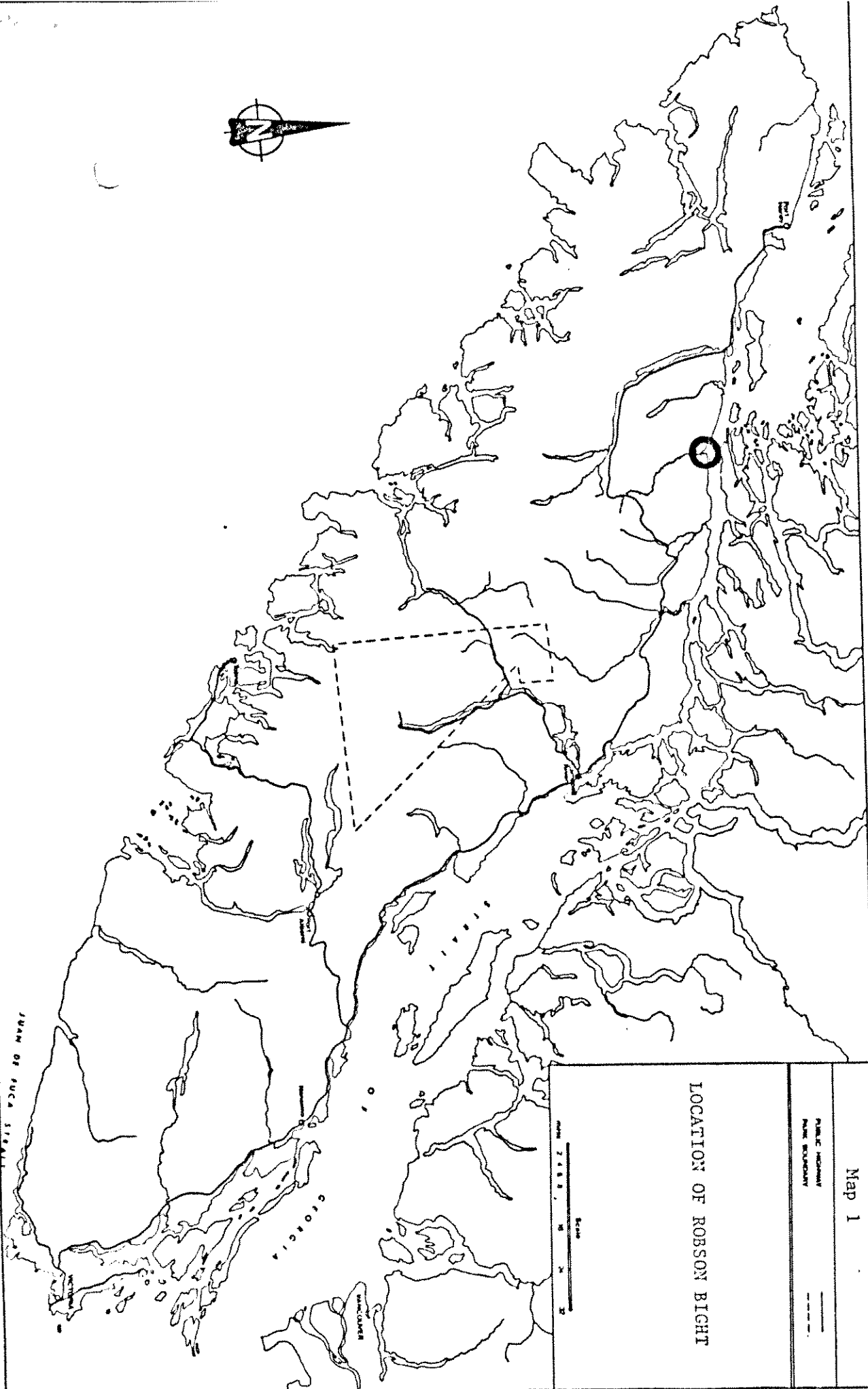
Provincial park status has been rejected by the Ministry of Lands, Parks and Housing as it would have served, even more than the present ecological reserve, to draw visitors to the area rather than protect the whales. On the other hand, it was reasoned that park status would have carried with it more management capabilities than ecological reserve status. The latter point is not valid any more as the two administrations within the ministry are now united.

A point was made for the above-mentioned federal status by reasoning that the control on the waters of Robson Bight lies with the federal government in any case, in the boating regulations and in the Fisheries Act. Even the killer whales themselves have their strongest protection under the federal Marine Fisheries Act (Section 71, A 1 & 2). Thus it could be argued that greater coordination of protective measures would be possible if a federal conservation status was chosen.



## References

- (1) Tsitika Planning Committee. 1978. Tsitika Watershed Integrated Resource Plan. Ministry of Forests (chairmanship), Victoria, B.C. 52 pp., map folio.
- (2) Sierra Club of Western Canada. 1981. Tsitika Provincial Park, Robson Bight Ecological Reserve No. 111. 25 pp.
- (3) Robson Bight Study Team. 1981. Killer whales and coastal log management: An overview of future uses of Robson Bight, British Columbia. British Columbia Ministry of Environment, Victoria, B.C. 45 pp.
- (4) Holmsen Forestry Ltd. 1985. Tsitika Watershed proposed timber exchange between the Province of British Columbia and MacMillan Bloedel Ltd. Appraisal Report prepared for the Ministry of Lands, Parks and Housing. 20 pp., appendices, maps.
- (5) Reid, Collins and Associates. 1985. Ministry of Lands, Parks and Housing Tsitika Exchange. Western Forest Products Reconnaissance Cruise. Volume of summary tables; 19 pp.
- (6) Parks Canada. 1982. National Significance of Robson Bight, British Columbia. Parks System Planning Division, Ottawa. 66 pp., appendices.



Map 1

PUBLIC BOUNDARY  
PRIVATE BOUNDARY

LOCATION OF ROBSON BIGHT

Scale  
0 20 40 60 80 100 Miles  
0 20 40 60 80 100 Kilometers

MAD 2 ROBSON BIGHT

LEGEND

- SPECIAL TIMBER LICENCES
- T.F.L. 39
- PRIVATE HOLDINGS

1982 Ecological Reserve  
(southern boundary: mean high tide)

boundary of proposed  
upland buffer area

JOHNSTONE STRAIT

Scale: 1cm = 500m

