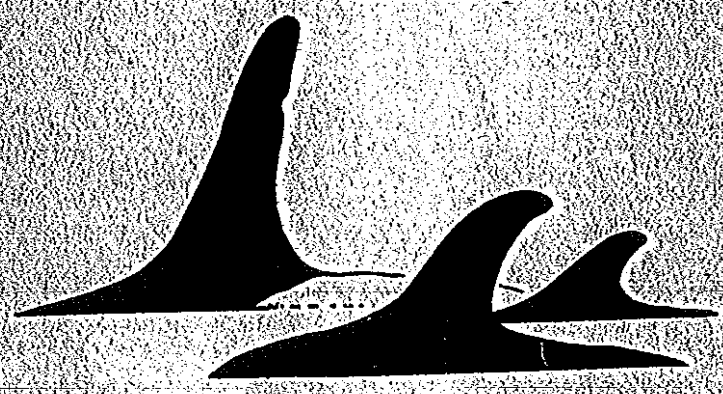


PAC 5227 Robson Tsitika 1-6-3-000

May 1963

TSITIKA PROVINCIAL PARK ROBSON BIGHT ECOLOGICAL RESERVE NO. III

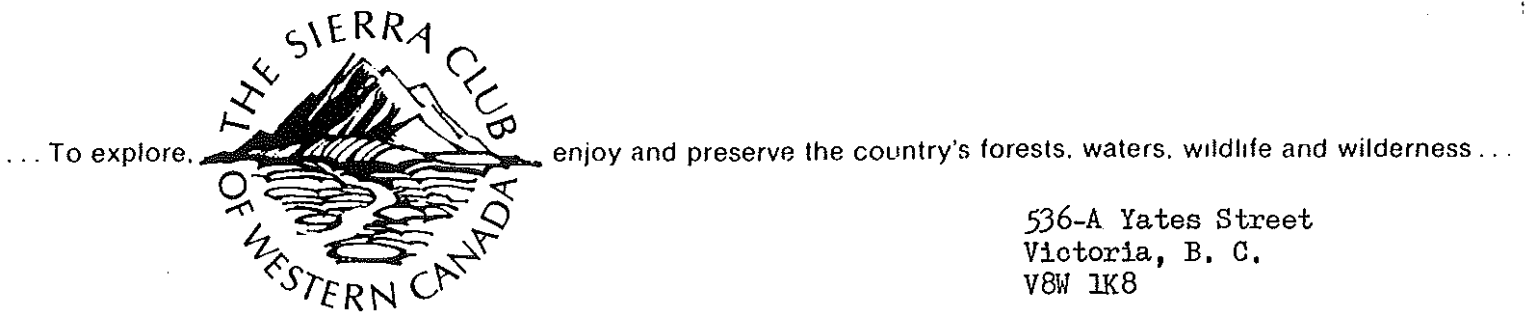
PAC 5227



A brief in support of their establishment
submitted by
The Sierra Club of Western Canada

PAC 5227
I. 9-1
Mell Box
R-4

m.d.r.v.



536-A Yates Street
Victoria, B. C.
V8W 1K8

Tel. 386-5255

January 20, 1981

The Honourable J. R. Chabot
Minister of Lands, Parks and Housing
Parliament Buildings
Victoria, B. C.

Dear Mr. Chabot,

The Sierra Club of Western Canada submits for your consideration this brief in support of the establishment on Vancouver Island of a provincial park covering the lower Tsitika River drainage and an ecological reserve covering Robson Bight.

We believe that a park back-to-back with an ecological reserve would not only preserve a superlative natural area for British Columbians but would also provide them with wilderness type recreation of a very high standard. As Robson Bight is the "home" of a population of killer whales, the park and reserve would offer opportunities for whale-watching unique in the world. In a province where tourism is playing an increasingly important role in the economy we should not fail to preserve an area that will have a strong attraction for out-of-province visitors.

The case for the establishment of the ecological reserve is already well-documented by the Ecological Reserve Unit of your Ministry. However, the park potential of the lower Tsitika as a separate entity has never been assessed. The Sierra Club requests that you instruct your staff to undertake a park study of the lower Tsitika.

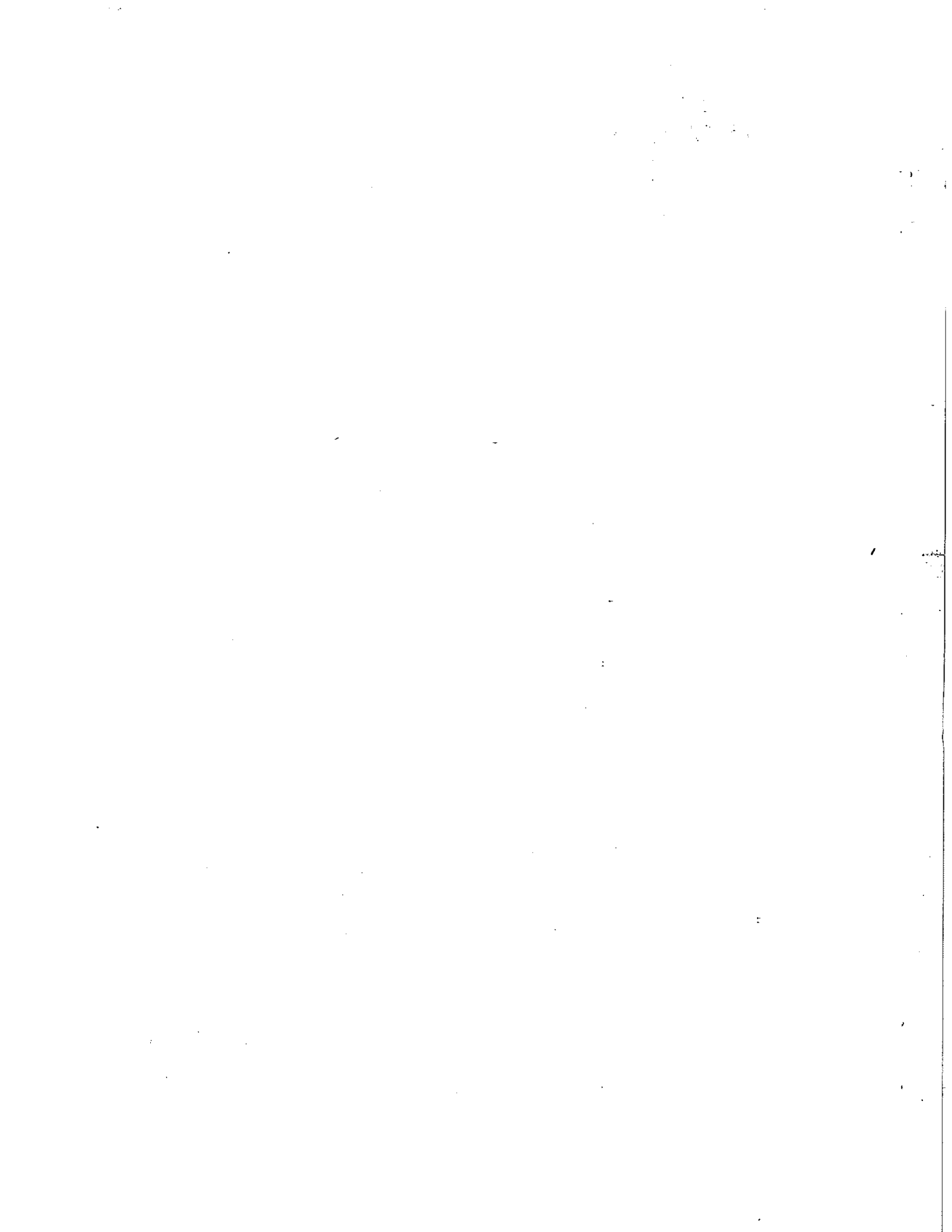
May we hear from you please as to your decision on this request.

Yours respectfully,

George A. Wood: 721-3276
M.E. Kay Wood

George A. Wood
M.E. Kay Wood

Sierra Club



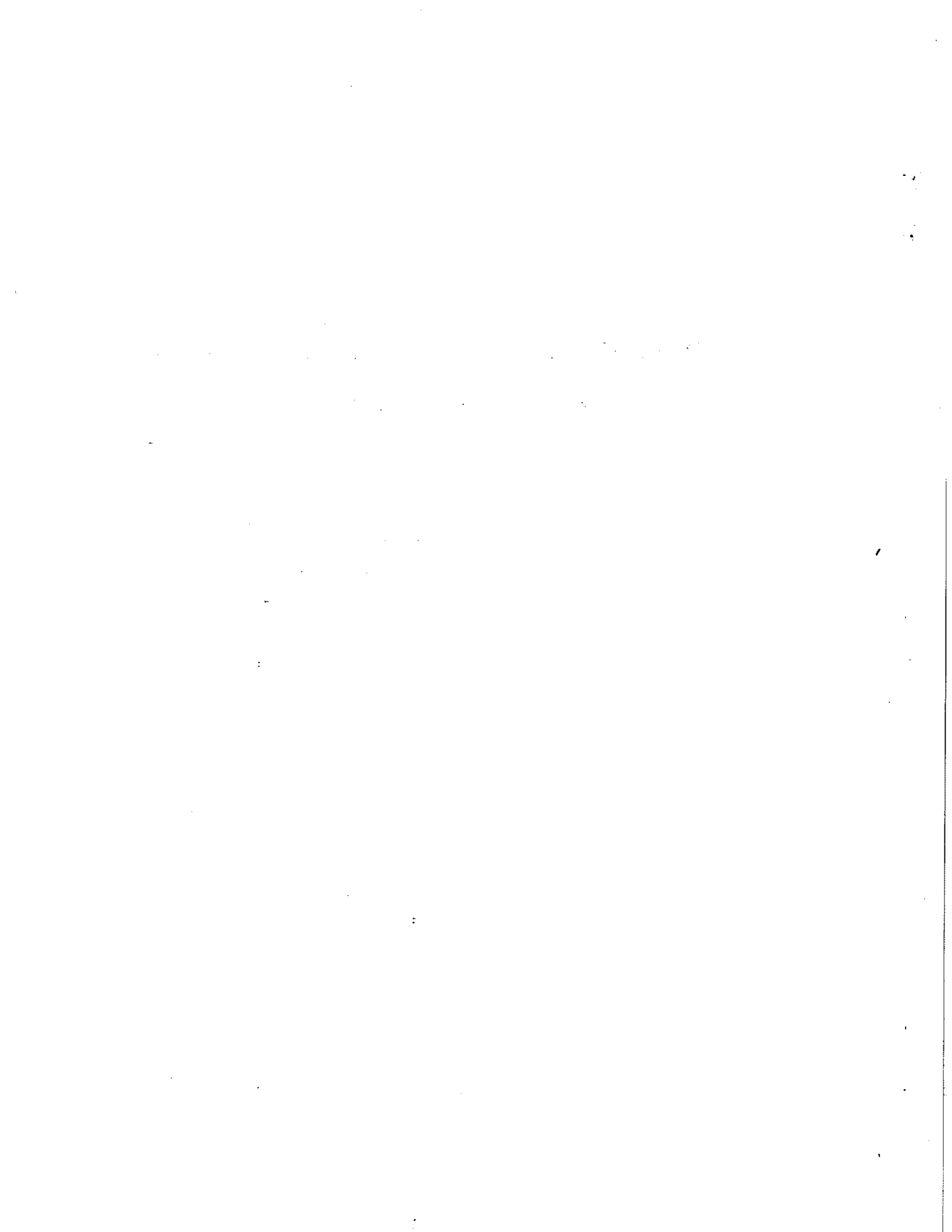
TSITIKA PROVINCIAL PARK - ROBSON BIGHT ECOLOGICAL RESERVE NO. 111

A Brief in Support of their Establishment

submitted by

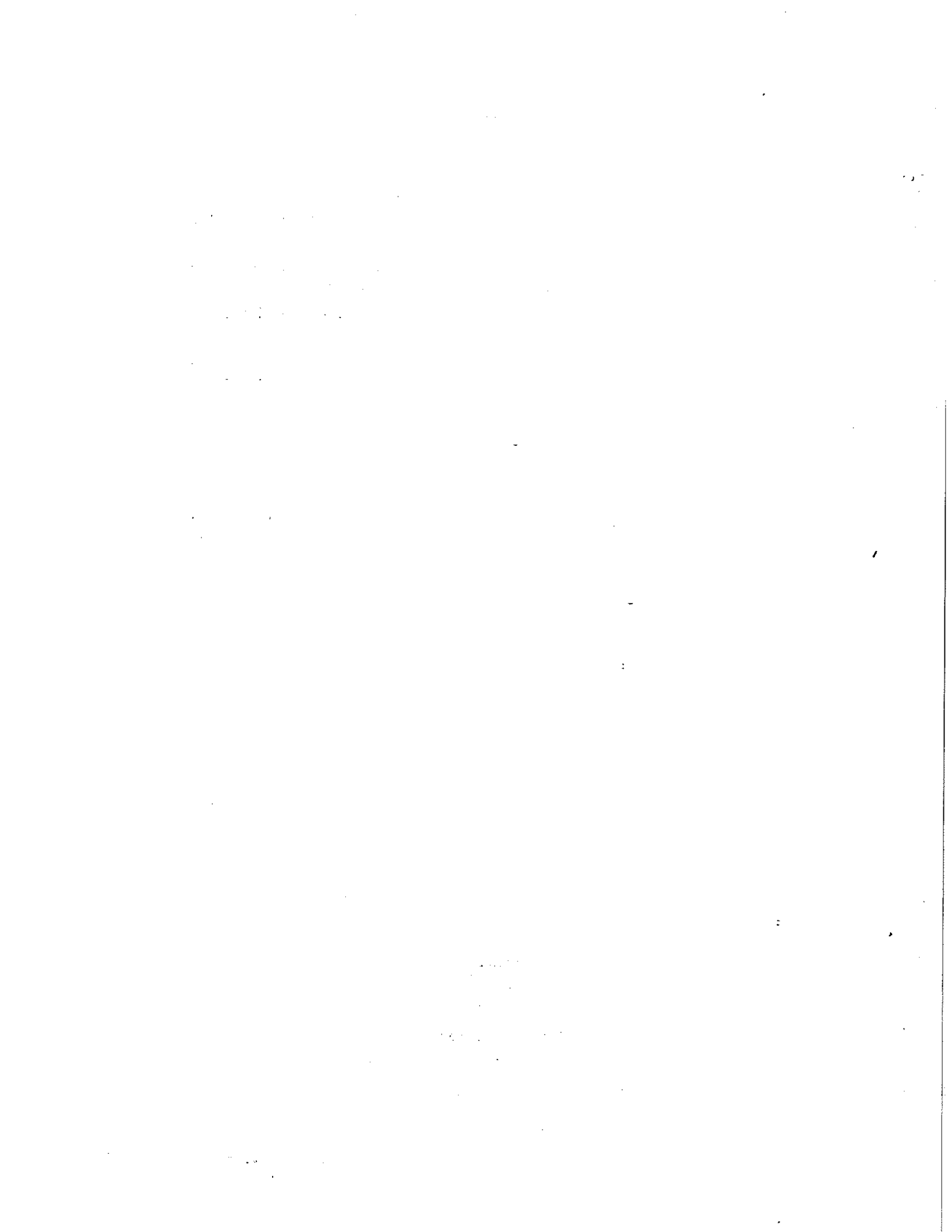
The Sierra Club of Western Canada

January, 1981



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I. CONCEPT

The concept (Map No. 4) is that of a wilderness nature area covering the lower Tsitika Watershed and some closely adjoining small watersheds fronting on Robson Bight and Johnstone Strait, henceforth referred to in this brief simply as Lower Tsitika. It would comprise a provincial park of 4,461 hectares and three contiguous ecological reserves. One of these (Ecological Reserve Proposal No. 111) would cover the estuary of the Tsitika River and extend as a strip along Robson Bight and part of Johnstone Strait where it would also include a water reserve. The land portion of Ecological Reserve Proposal Number 111 amounts to 152 hectares. This wilderness would encompass the full range of ecosystems from salt water to alpine snow peaks.

The park and reserves would set aside a superlative natural area and at the same time provide for high standard wilderness recreations. Because Robson Bight is the "home" of a population of killer whales, it would offer opportunities for whale-watching unique in the world.

The Park and Ecological Reserve No. 111 would complement each other in an ideal way, as the Park would provide the land base for people who will come to see the whales in the water reserve. In this way, the land reserve can be left as undisturbed as possible.

II. BACKGROUND

Our purpose here is to set down only the background information which bears directly on the present park and ecological reserve proposals, not to retrace the involved history of the Tsitika controversy (Appendix A. Brief History).

1. The Tsitika drainage area has been the subject of much public controversy over land-use policies as it was the last unlogged watershed on the east coast of Vancouver Island.

In essence, the argument was on the one side to preserve it in its virgin state for its benchmark, wildlife and other values. On the other side, the argument was to log it for the benefit of the economy while at the same time protecting as many other values as possible.

2. After input from provincial and federal government agencies, industry and the public, an Integrated Resource Plan was prepared which is now in the hands of the Tsitika Follow-up Committee (TFC) to implement.
3. The Integrated Resource Plan did not settle the matter of industrial activity at the biologically sensitive estuary of the Tsitika River. MacMillan Bloedel Limited originally proposed a log dump and booming ground (West Delta Site) at a gravel beach west of the outlet (Map #3). This proposed development would fall mainly outside the company's private holding D.L.223 (Map # 2). The Plan calls for the exploration of alternative dump locations and log handling procedures. An environmental impact assessment of the use of the estuary was to be undertaken if viable alternatives were not found. The Company submitted interim studies* to the TFC early in 1979. The studies identified an alternative site, Mile West Site, (Map #3) behind a rocky projection about a mile west of the estuary. The Minutes of the April 14, 1980 meeting of the TFC indicate that the Company rejected the West Delta Site but had not yet made a decision as to the Mile West Site. The Company has also investigated a number of possibilities for taking logs to tidewater east of the Tsitika Watershed. These would require either backhauling up the Tsitika Valley or using a beach route along Johnstone Strait.
4. The Integrated Resource Plan includes three proposed ecological reserves (Map #2) in the lower watershed of the Tsitika River. Number 2 (554 hectares) and #3 (557 hectares) are on opposite sides of the valley mostly on higher slopes. Number 1 (131 hectares) covers the estuary.

* Study of Booming Alternatives for Timber in the Lower Tsitika Drainage, March 1979, and Evaluation of Potential Booming and Barge Loading Sites in the Vicinity of Tsitika River, Feb. 1979

III. RATIONALE

This section gives the Sierra Club's reasons for:

- (a) request to re-open land-use questions in the Tsitika
- (b) support of a proposed ecological reserve at Robson Bight (No.111)
- (c) advocacy of the establishment of a provincial park covering the Lower Tsitika

Why is the Sierra Club taking this stand in the face of the following facts?

1. Public hearings have already been conducted on the Tsitika.
2. The B.C. Government has attempted to meet regional park needs by the establishment of an 8,170 hectare provincial park at Schoen Lake and the inclusion of 3,540 hectares surrounding Gold Lake into Strathcona Park.
3. The area has already been intensively studied:
 - (a) The North Island Study Group co-ordinated by Howard Paish produced the Tsitika-Schoen Resources Study which assembled the basic information, and
 - (b) The Tsitika Planning Committee produced an Integrated Resource Plan for the Tsitika. This plan went through a public involvement stage, was approved in principle by government and is now being implemented by the Tsitika Follow-up Committee.

Why indeed? BECAUSE:

1. No account was taken of killer whales in the Integrated Resource Plan. In all the hearings and all the studies no mention was made of the existence of the killer whales (*Orcinus orca*) at Robson Bight. The Plan does not acknowledge them. The whales swim into the planning process for the first time when they are mentioned in the March 3, 1979 Minutes of the Tsitika Follow-up Committee. The omission of this extremely important piece of wildlife information means that there is a significant defect in the Plan.

It is stated in the covering letter for the Plan that "...availability of new data may require revision of plan components at a future date..." The Sierra Club submits that a revision is now in order.

The importance of Robson Bight to the orcas is well documented in four letters to the government (Appendix B. Whales).

Three of the letters are from scientists:

- Dr. Michael Bigg, Head, Marine Mammal Research, Pacific Biological Station, Nanaimo, B.C.
- Dr. H. Dean Fisher, Professor, Department of Zoology, University of British Columbia, Vancouver, B.C.
- John Ford, graduate student working under the direction of Dr. Fisher, Department of Zoology, UBC

The scientists point out that about 150 whales consisting of 12 pods make use of the Robson Bight and adjoining shore as their "core area" - a geographical focal point and a centre of recreational activity.* Up to 50 whales have been observed at one time, much of their activity taking place only about 30 metres from shore. They rest, laze, swim and interact socially. They frequently rub themselves on rocky out-cropping or on pebble beaches within and to the east of the Bight. The concentration of killer whales is described as the largest known anywhere, and it is pointed out that Robson Bight is the most reliable place on the West Coast to view killer whales in the wild. Northern Johnstone Strait has become internationally famous with whale-watchers.

Further information on the importance of Robson Bight to the killer whales is being gathered by the Top Island Econaut Society, a diving club with members mostly from Port McNeill and Port Hardy. The members are doing much diving in the area and are conducting a data collection program to assess the importance of the Robson Bight marine ecosystem. Two members of the Club's Robson Bight Preservation Committee, Jim Borrowman and Bill Harrower, presented their case for an ecological reserve to the Tsitika Follow-up Committee on April 14, 1980. The Robson Bight Preservation Committee is now actively mounting a public campaign which includes a petition, public showings of a film made at Robson Bight, and distribution of an informative poster (Appendix B. Whales).

The importance of the killer whales to the native people should be noted. The killer whale is a recurring motif in Indian mythology and culture. It is frequently represented in totem poles and other art work. Anything that can be done toward preserving the whales' habitat and therefore the animals themselves also helps to preserve the distinctive culture of the West Coast Indians.

* Appendix B. Whales, Sketch map, Use of Robson Bight by Killer Whales

2. The proposed expansion of Ecological Reserve No. 1 cuts off industrial use from Robson Bight. (Maps No. 3 & 4). To offer a measure of protection for the whales, the Ecological Reserve Unit of the Ministry of Lands, Parks and Housing has recently expanded the boundaries of the proposed ecological reserve on the Tsitika River Estuary by incorporating a fringe 100 metres in depth above mean high tide. The strip takes in the remainder of the shore of Robson Bight and extends for about 5 kilometres to the eastward along Johnstone Strait. The land area of this proposed reserve is 152 hectares, but in addition a 936 hectare water reserve including all of Robson Bight and a portion of the adjoining Johnstone Strait (conforming with the eastward land extension) is being sought from Federal Authorities. The Sierra Club strongly supports this proposal (Tsitika Ecological Reserve Proposal No. 111).

If the reserve becomes a fact, and it hardly meets the barest minimum requirement for the whales, any plans by MacMillan Bloedel Company for use of Robson Bight for industrial purposes are nullified. Furthermore, any use of a beach route by the Company would likely have an adverse effect on the whales protected only by a 100 metre strip along the shore. In any case, this route does not seem to be a viable alternative for the Company as it is described as "extremely expensive capital road construction".* Under these circumstances back-hauling up the Tsitika Valley is the only logical method of getting logs to tidewater.

3. No previous assessment of park values in the Lower Tsitika yet very high values are present. If an ecological reserve covers the estuary and Robson Bight, and back-hauling becomes mandatory in the Tsitika Valley, we are looking at an entirely new situation in regard to recreational values in the lower valley. In all the studies no consideration was given to a park covering this area.** Consideration was given to the Tsitika Watershed as a whole, but this was judged to be basically a forest-land with only "a modest" recreational potential. Moreover, the

* Study of Booming Alternatives for Timber in the Lower Tsitika Drainage, March 1979

** Folio Map No. 4 (Recreation) of the Plan does show recreational features with capability ratings, but these are site specific and do not take into consideration overall park values.

establishment of Schoen Lake Provincial Park and the inclusion of Gold Lake within Strathcona Park seemed to satisfy park requirements in the region. Yet the park potential of the Lower Tsitika adjacent to Robson Bight with its killer whale rendezvous area unique in the world is utterly different from that offered by the two lake areas. It is a potential which must be included in the provincial park system.

This system is far from overloaded on northern Vancouver Island (Map No.1) as there are only two provincial parks north of Campbell River - the aforementioned Schoen Lake Park (8,170 hectares) and Cape Scott (15,054 hectares). Yet northern Vancouver Island is in the midst of a major industrial and population expansion. Only recently has it been provided with a public highway that gives tourists access to its many attractions. The Lower Tsitika can be one of the most outstanding of these if it is appropriately preserved.

The main reasons for setting aside the Lower Tsitika as a provincial park are the very high recreational values there:

- (a) It is a magnificently scenic area extending from the proposed ecological reserve on beautiful Robson Bight through a primeval forest to alpine snow peaks above 1,500 metres. (The only place on Vancouver Island where a park extends from saltwater to the alpine is in the Moyeha watershed of Strathcona Park, but that is on the west coast of the Island in a different biotic zone). The strong-flowing Tsitika River is also part of the scenic appeal. With the provision of trails there are high recreational potentials for hiking, mountaineering, viewing, bird-watching and photography.
- (b) The Tsitika River, which has both summer and winter steelhead runs as well as cutthroat trout and Dolly Varden char populations, offers excellent fishing. In addition, the river has annual runs of all five species of salmon. A large proportion of the salmon are confined to the lower reaches below the falls. Therefore salmon-watching as on the Adams River and the Goldstream would be an important recreation in the park.
- (c) Killer whales (within the adjacent proposed ecological reserve), Roosevelt elk and blacktailed deer are the high-profile animals of the area. If their habitat is preserved, the whales are certain to be the premier animal attraction. It is clearly predictable that

the park will become famous as a base for whale-watching and will attract large numbers of nature-oriented people. Diving and under-water photography amongst the killer whales is a highly specialized and limited recreation which may be possible for a few. It must never be allowed to become a barrassment.

- (d) An area for camping on the lower reaches of the Tsitika River is designated in the Integrated Resource Plan. Picnicking and berry picking are other possibilities. Hunting is not listed as it is felt that this recreation would be in conflict with the nature study opportunities.
- (e) Boating (probably limited to non-power boats) from the park base may be possible in the waters of the proposed ecological reserve, but only under extremely stringent management controls.

4. According to the Integrated Resource Plan significantly large areas of the Lower Tsitika are already set aside or have logging constraints. About 65% of the Tsitika Watershed below the south boundary of the proposed park falls within these two categories (Appendix D, Areas, and Map No. 3).

| | <u>Area in Hectares</u> |
|--|--|
| Tsitika Watershed (below S. boundary of proposed park) | 4,455 |
| (a) Set aside | |
| - Ecological Reserves 1, 2 & 3 | 1,243 |
| - protection forests | 556 |
| (b) Logging constraints | 1,080 |
| - deer and elk wintering ranges | |
| - windfirm leave strips or deferred areas to protect fisheries sensitive zones | |
| - soil sensitive areas | |
| - areas with a potential for recreational activity | |
| | Total 2,879 |
| | (or approx. 65% of the Tsitika Watershed below S. boundary of proposed park) |

A further constraint on logging covers 1,640 hectares which overlap the above two categories (a) and (b) as "an area of visual importance from Johnstone Strait".

The proposed park covers only about 8% of the entire Tsitika Watershed. Its establishment would have the effect of consolidating into a single wilderness the areas already set aside or which have

logging constraints. It would be a wilderness that would preserve the full range of ecosystems from tidewater to alpine.

5. Creation of the park would be extremely important to the protection of the fisheries resource. About 6,000 pink salmon and about 1,200 chum salmon spawn annually in the lower reaches of the Tsitika River as far as the canyon and waterfall. Coho, chinook and sockeye salmon also make use of this section as do steelhead and cutthroat trout and Dolly Varden char. There is a run of oolichan in the Tsitika River. Even carefully regulated logging in the upper watershed will result in heavier flows probably damaging to fish. Large lakes able to absorb run-off from snow-melt and rain are absent. Leaving the forest in a completely natural condition at least in the lower valley is the best guarantee of maintaining this valuable spawning and rearing area.

6. Great value in complementary relationship of proposed park and proposed Ecological Reserve No. 111. There is a compelling logic in establishing a provincial park in a back-to-back relationship with the proposed Robson Bight ecological reserve. (Map No. 4). Not only would there be much more adequate buffers around the fringe area, but also there would be the land base to provide management controls. These will be needed for the people who will come to watch whales in the ecological reserve. The visitors will need campgrounds, well-screened blinds on the shoreline, and trails to link blinds and campgrounds. Also vitally important will be a thorough-going interpretive program to familiarize the public with the special features of the whale "core-area". Surveillance will be needed to preserve its highly vulnerable features. Clearly, a provincial park and a provincial park organization are indicated.

It is important to stress that the park and ecological proposals cover a virgin area which remains as a microcosm of natural conditions on the northeast coast of the Island. If the "Discovery" had put in to Robson Bight on her exploration of Johnstone Strait in 1792, the pristine sight that would have met Captain Vancouver's eyes would have been much the same as one sees today. He would have seen virgin forest growing close to the clean gravel beaches, salmon schooling to ascend the clear stream, and eagles watching them from the tops of snags. Seals and killer whales would probably have splashed in the water around his ship. The ecological reserve and the provincial park will preserve this superb natural heritage for British Columbians.

7. It would be a serious land-use mistake to implement the Integrated Resource Plan in the lower part of the Tshitika Watershed. If the proposed Ecological Reserve No. 111 does not become a fact and the Bight is used industrially, the killer whale habitat will be adversely affected. If it does become a fact but we fail to establish the park the loss will not be only in recreational values. To a considerable extent the effect of the ecological reserve will be nullified. Instead of the pristine conditions, close behind will be roads and logged-over valley and hillside lands. From time to time there will be the sights and sounds of logging machinery. Also lost will be the opportunity to make provisions for public use through appropriate park facilities and interpretation.

The Sierra Club pleads that government and the forest industry will not let slip the final chance to save the last part of our last valley.

IV. PUBLIC USE - Planning Considerations

The following themes deserve consideration in planning for public use:

1. The park should remain roadless with trail access only.
 - road access to end close to the southern park boundary in the vicinity of Catherine Creek
 - riverside main trail to Robson Bight
 - other trails to lead to alpine areas probably including Tsitika Mountain, Mount Derby and Mount Sir John
2. Possible provision for small boat access to the Robson Bight Ecological Reserve. This might be restricted to beachable boats only, such as small runabouts, rowboats, canoes and Zodiacs. A site might be found near the western extremity of the Bight. It is suggested that no moorings and no anchorage be allowed in the water reserve.
3. Camping to be restricted to designated campgrounds on the Tsitika River and at Robson Bight; unrestricted wilderness camping elsewhere.
 - an automobile campground at the road terminus near Catherine Creek
 - several small riverside campgrounds mainly for anglers
 - a large campground in the vicinity of Robson Bight but outside the ecological reserve
4. Interpretation to be strongly featured.
 - introductory interpretation at Catherine Creek campground
 - detailed information to be provided at the Robson Bight campground, probably within a nature house. Resident naturalists, film and slide shows, campfire talks
 - significant flora and fauna, etc. to be covered but with particular emphasis on the killer whales
 - the public to be carefully educated to appreciate the extremely delicate nature of the man - orca relationship; explanation that stringent park regulations are required from the outset because heavier public use is to be anticipated
 - preservation of the habitat within the ecological reserve and non-harrassment to be stressed
 - instruction to be given in use of whale-watching blinds

APPENDIX A. Brief History

The Tsitika River Watershed has been the focus of much controversy and study as it is the last unlogged watershed on eastern Vancouver Island. (Logging has now commenced.)

The first section following is a quotation from an information brochure produced by the Tsitika Resource Planning Committee, which was entitled TSITIKA RESOURCE MANAGEMENT PLAN Public Involvement Opportunity - Phase II.

"In 1972, the Tsitika Drainage was proposed for ecological reserve status. This proposal was followed by public demands for provincial parks in the vicinity of Schoen and Gold Lakes. In 1973, the Minister of Lands and Forests declared a moratorium on logging and road construction in the Tsitika-Schoen area so that the existing Tree Farm Licences (T.F.L.) could be considered in light of these new land-use proposals. A North Island study group was formed under the direction of Environmental Consultant Howard Paish to consider land-use options for the area. In the report that followed four alternatives were described. Public hearings were then held at Port McNeill, Sayward, Campbell River and Nanaimo to gather public opinions which the Environment and Land Use Committee (E.L.U.C.) of the Government could consider along with all other relevant information to make a policy decision as to the best overall use or combination of uses for the Tsitika Watershed.

"The policy decision process culminated on October 28, 1977, three years after the public hearings, when the Honourable James A. Nielsen, Chairman of the Environment and Land Use Committee, announced:

1. the creation of a 20,243 acre provincial park comprising Schoen Lake and surrounding mountain slopes and meadows;
2. the inclusion of 8,745 acres surrounding Gold Lake into Strathcona Park;
3. the release of 9,334 acres in the Schoen Creek drainage from the moratorium;
4. the preparation of an integrated management plan for the 84,839 acre Tsitika drainage with continuation of the moratorium until the plan was approved.

Also announced was the formation of a planning group, co-ordinated by the B.C. Forest Service, to prepare the Tsitika Watershed Integrated Resource Plan. The group included representatives from Macmillan

Bloedel Limited, Canadian Forest Products Ltd. and Rayonier Canada Ltd. (the Tree Farm Licence holders operating in the area), the B.C. Forest Service, the B.C. Fish and Wildlife Branch, the B.C. Ecological Reserve Unit, and Environment Canada - Fisheries Service.

"The planning group's terms of reference were to:

- identify each resource sector's concerns, management principles and objectives;
- develop an overall plan for the area;
- prepare a plan for the first five year harvesting period;
- solicit input from the public and provide an opportunity for the public to comment on the preliminary plan;
- submit the final plan to the E.L.U.C. for approval.

"In response to demands for wider public representation, the Planning Committee was later expanded to include representatives of the Tsitika Conservation Committee (B.C. Wildlife Federation and Outdoor Recreation Groups), the International Woodworkers of America (I.W.A.) and the United Fishermen and Allied Workers Union (U.F.A.W.U.)" (end of quote)

In the spring of 1978 the Tsitika Planning Committee completed a preliminary draft of the Tsitika Watershed Integrated Resource Plan. The Committee provided opportunity for public involvement by publishing a brochure. It advised the public of the E.L.U.C. decisions, gave an outline of the planning process and invited public contributions. In addition visual displays were made at Port McNeill, Sayward, Campbell River, Nanaimo, Victoria and Vancouver. Public meetings were held at Port McNeill, Sayward, Campbell River and Nanaimo. Following this public involvement phase, in October 1978 the Tsitika Planning Committee submitted to government a final draft of its plan. Since that time the implementation of the plan has been in the hands of the Tsitika Follow-up Committee (TFC), made up of fourteen members.

In the spring of 1979 the Sierra Club of Western Canada requested a broader public representation and financial assistance for public interest groups. This was refused by E.L.U.C.

APPENDIX B. Whales

1. Letter from (a) George A. Wood

November 18, 1974

Gordon Macnab
Chief of Planning
Parks Branch
Department of Recreation and Conservation
Government of British Columbia

RE TSITIKA RIVER WATERSHED

In August, we chartered PELIN to the Pacific Biological Station for two weeks of killer whale survey in Johnstone Strait. Most of our time was spent around Robson Bight, the bay into which the Tsitika River drains.

For reasons that are not understood this is the area where the whales congregate. We made hundreds of sightings---repeats on what the mammologist aboard estimated as about forty individuals. It was a most thrilling and exhilarating experience to get close to these wonderful animals.

Not far from the river mouth is a steeply sloping little beach where the whales come to rub themselves.

While we were at Robson Bight, a film crew was encamped at the mouth of the Tsitika River making a film on the whales. It is truly amazing how reliable the whales are in showing up at this area on a daily basis.

I am told that the Tsitika River Watershed is the only unlogged watershed on the east coast of Vancouver Island. I understand that there are some government reserves covering it and I notice that there is no open season on game. I would guess that it has been considered for park purposes, but I have no idea of the progress of such proposals if they exist.

From my own observation it would seem to have a great deal to offer with a fine salmon and trout stream, virgin timber, alpine lakes and scenic snow peaks. But the presence of the killer whales adds a great deal of weight to the importance of setting the Tsitika River Watershed aside as a park or some type of nature conservancy area. These magnificent creatures could be viewed from the beaches and bluffs of Robson Bight or from small boats kept there. I would strongly suggest a ban on power boating within the Bight. The fame of the whales is spreading and already there is harrassment by power boaters.

For further information on the presence of killer whales in Robson Bight, contact Mr. Ian MacAskie, Pacific Biological Station, Nanaimo, B.C.

George A. Wood
Big Bay, B.C.

THE UNIVERSITY OF BRITISH COLUMBIA
2075 WESTBROOK MALL
VANCOUVER, B.C., CANADA
V6T 1W5

TFC
Estuary

DEPARTMENT OF ZOOLOGY

October 11, 1978

SECRET

U. B. C.

E. L. U. C.
VICTORIA, B.C.

Mr. Ray Ostby, Chairman
Tsitika Planning Committee
B.C. Forest Service
355 Burrard St.
Vancouver, B.C.

Dear Mr. Ostby:

Under contract with the federal Department of Supply and Services I currently am investigating, with one of my graduate students, the underwater acoustics of killer whale groups in B.C. Last summer our work was concentrated, as it will be next year, in the upper Johnstone Strait area. Because of the nature of the whales' regular behavioural routine, much of the work centres on the Robson bight area.

In their passage down the Strait, the whales invariably stop in the Bight for up to two hours, resting, then go through a routine of intense activity close inshore just adjacent to the Bight as shown on the attached map. This consists mainly of rubbing themselves vigorously both against the rocks and on small pebbly beaches. They react markedly to anyone on the rocks above them at this time, or too close to them in boats, showing agitation and movement away.

This behaviour pattern is so regular during each circuit made by the whale social groups in whose home range the Bight is, that any permanent disturbance to it could be construed as an undesirable ecological impact. At the time of our initial work there I was unaware of the plans to develop the Bight as a logging port, and of the hearings that I understand were held. I would however now like to provide this additional input to your committee, with the hope that any ecological reserves being planned could be extended offshore where appropriate, to protect as far as possible this aspect of the biology of what surely is the most spectacular marine member of the region's fauna.

Most important, it seems to me, would be to include the area adjacent to the Bight that I have mentioned. As an ideal situation, I mark on the map an outline that would enclose as well the resting and play area that is described above.

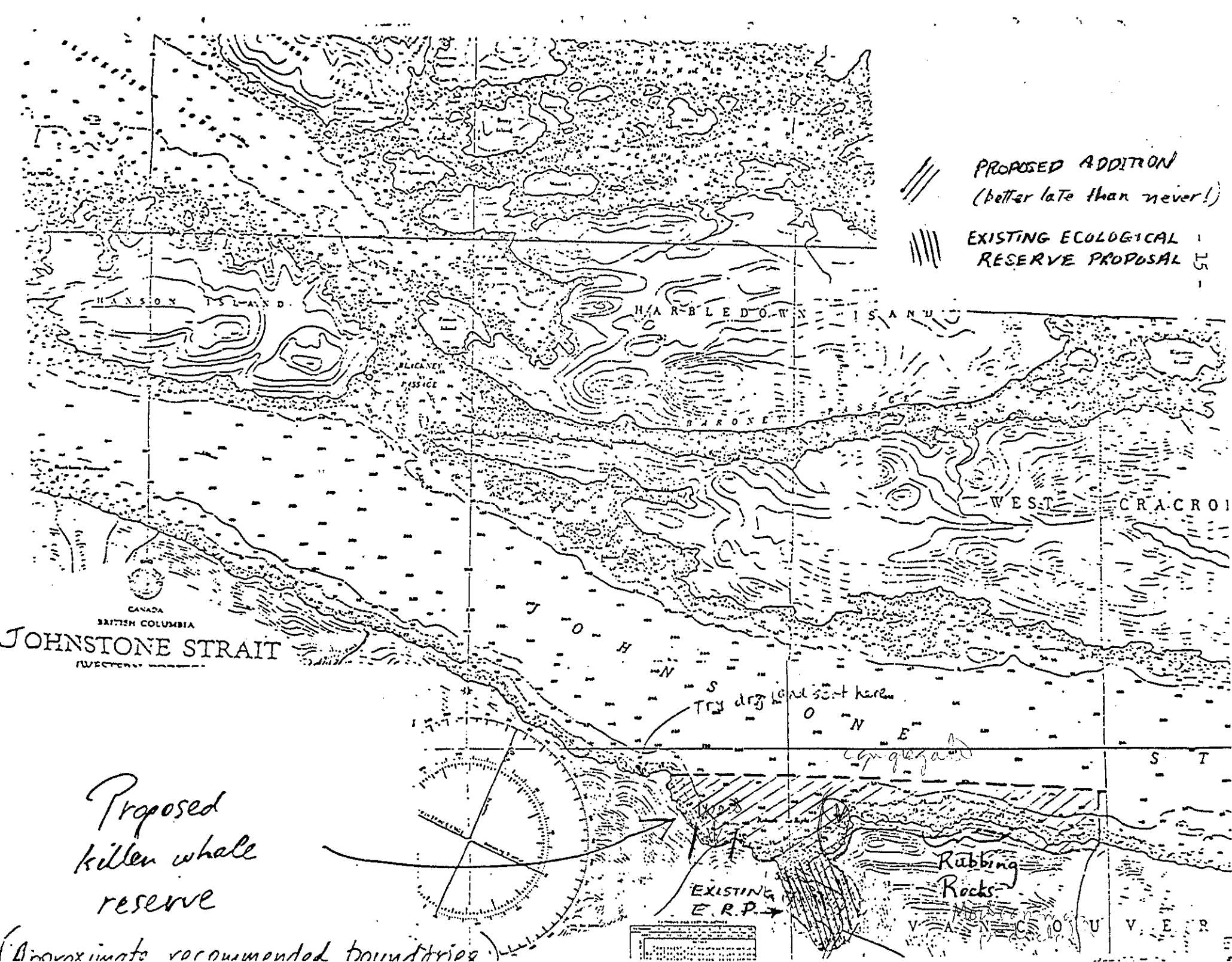
There is a natural grade running into the "rubbing rocks", with ribbon survey markers all about. Any path or road into this small area would, I emphasize, be a most undesirable development, as the whales are very sensitive to any presence on shore in the area, and it forms an important part of their ritual.

I am sending copies of this letter to Dr. Bristol Foster, as I believe he is involved with an ecological reserve proposal for the area, and to Dr. M.A. Bigg, in charge of marine mammal research and management for the Department of Fisheries and Environment at Nanaimo. I very much hope that this aspect of the Bight's ecology can be considered in any plans for the region.

Sincerely,

John Ford

D. Fisher, Professor.



/// PROPOSED ADDITION
 (better late than never!)
 |||| EXISTING ECOLOGICAL
 RESERVE PROPOSAL

CANADA
 BRITISH COLUMBIA
 JOHNSTONE STRAIT
 (WESTERN)

Proposed
 killer whale
 reserve

(Approximate recommended boundaries)

EXISTING
 E.R.P.

Rubbing
 Rocks

Try dry land sent here

Can get a

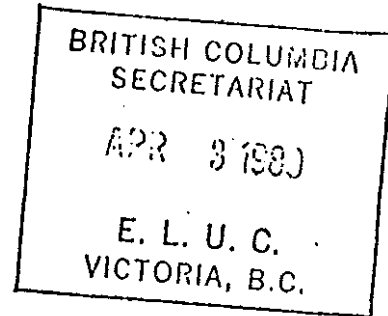
Your file / Votre référence

Our file / Notre référence

18-3-1

April 1, 1980

Ron Koff
Environmental Land Use Committee Secretariat
Parliament Buildings
Victoria, B.C.
V8V 1X4



Dear Sir:

This letter is in reply to your request of 28 March 1980 for information on the use of the Robson Bight area by killer whales and the possible impact which log booming here would have on their biology.

First, let me begin with a short outline of my research on killer whales. Each year since 1973 we have undertaken surveys along the B.C. (and to some extent, Washington) coast to determine the abundance, movements and behaviour of killer whales. To do this, we photographed the unique markings of each animal encountered so as to produce a catalogue of "fingerprints" for most killer whales (and for probably all pods) which inhabit the inshore waters. The unique markings allow us to determine the individual composition of pods and their movements. A report is enclosed which summarizes results to March 1976. Although we have refined knowledge and found a few more pods since then, the basic findings remain the same as reported.

In summary, our findings indicate that there are about 25 pods comprising about 265 whales which inhabit the inshore waters of B.C. A pod is a long term breeding unit (or family) of individuals of different ages and sexes. Each pod only associates with certain others. There are three associations or "communities" of pods. The first consists of 3 pods, totalling 80 whales, which travel in Georgia Strait, Puget Sound, Juan de Fuca Strait and areas of unknown extent on the west coast. They inhabit the area year round. The core area, or resting area, for their range, is along the southwestern shore of San Juan Island of Haro Strait. When in this core area, the whales stop and rest on the surface, laze and swim back and forth throughout the day, normally within 100 yards of shore. During July-October, some whales can be seen there almost every day. When not in the core area, the whales are usually touring continuously either feeding, or perhaps patrolling.

... 2

R. Kopf
April 1, 1980
Page 2

The local "community" consists of 12 pods, totalling about 150 whales. They travel from northern Georgia Strait northward to at least Kitimat and probably to areas off the west coast of Vancouver Island and into Hecate Strait. Most are present during July-October and at least one pod is present all year. Although I have reports of whales seen during all months, I do not know yet which pods they are. The core area for this community is the Robson Bight area. Here, the whales behave in the same manner as do those in the southern community--resting, lazing and swimming back and forth very close to shore. When not in the core area, they are touring and rarely rest.

We have spent considerable time observing them in the core area which extends from about 2 miles east of Robson Bight to about $\frac{1}{2}$ mile west of the Bight. During the months of July-October, whales occur here almost every day. We have observed up to 50 at one time. Pods do not spend more than an hour or two resting. Not all pods use the area with equal frequency. The main activity in the area occurs within about 100 feet of shore and consists of lying still on the surface or moving slowly along the shore. They frequently rub themselves on rocky outcroppings on the bluffs of the eastern shore of Robson Bight and on the pebble beaches and bottom east of the Bight. Such behaviour we do not see outside this core area. The behaviour of whales quite dramatically changes upon leaving this area, to faster swimming.

The third "community" consists of about 10 pods totalling 35 whales. These appear to be as transients, travelling generally alone (although occasionally with other pods) throughout the ranges of the other two communities but not associating with them. They do not appear to have a core area.

With this study as a background, my comments now follow on the value of the Robson Bight area to killer whales. For the northern killer whale groups, this is a unique resting locality and very different in utility to all other estuaries and bays used by the whales in their range. The key biological question, for which I do not yet have an answer, is why they use this area and not some other. A core area is a prominent feature for each of the two main whale groupings. Both core areas (Robson Bight, San Juan Island) are used mainly during July-October when salmon are migrating nearby. Both areas are in a central location within the ranges of most pods. In both, whales remain close to shore. Thus, the core area seems to be, at least in part, a convenient, socializing locality in relatively calm water near good feeding. The nature of the socializing and importance of the resting and recreation is unknown. There may also be other functions which are not yet obvious.

As I do not know the function of the core area, it is difficult to say what would happen if the area were to be used for log booming. Obviously, booms would displace the whales and boom tugs and human activity would discourage them from using the area. It is possible that making a boom ground here would merely make the whales move to another locality, but it is also possible that it would affect their productivity.

In my view, the fact that this small area is utilized for purposes yet unknown by the largest concentration of killer whales in B.C. and Washington (and, to my knowledge, anywhere) means that excessive risk would be involved in gambling that nothing would happen in making a booming ground here.

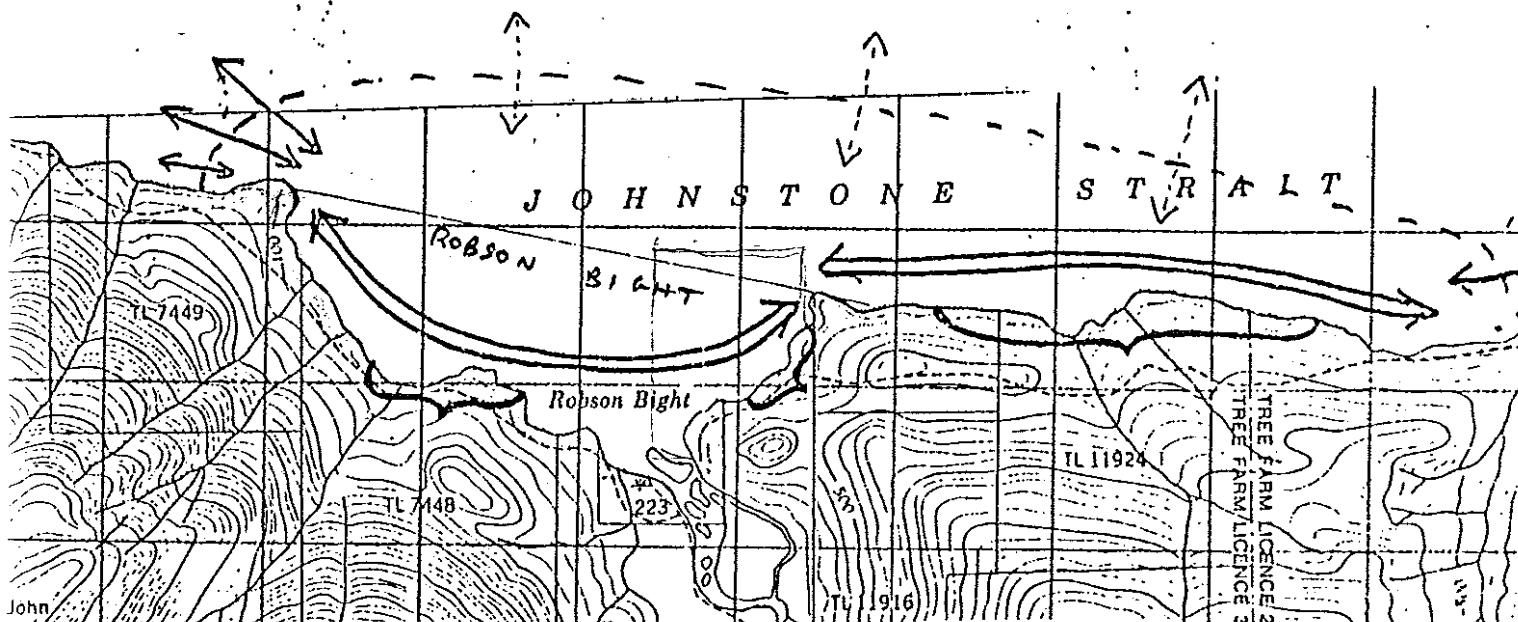
If you require more precise information, please let me know.

Sincerely

Michael Bigg

Michael Bigg, Ph.D.

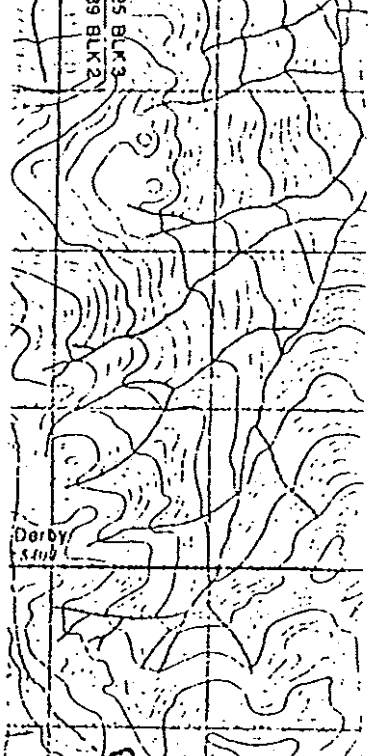
(Head, Marine Mammal Research)



USE OF ROBSON BIGHT AREA
BY KILLER WHALES

- KILLER WHALE CORE USE AREA
- ← MAIN ENTRY/EXIT POINTS
- ←---→ OCCASIONAL ENTRY/EXIT POINTS
- ↔ MAIN TRAVEL ROUTE WITHIN CORE AREA
- {} RUBBING AREAS

SOURCES: DR. M. BIGG
TOP ISLAND ECOWANTS

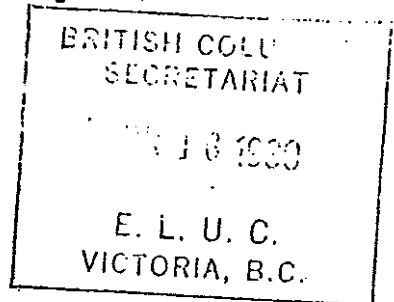


THE UNIVERSITY OF BRITISH COLUMBIA
6270 University Blvd.
VANCOUVER, B.C., CANADA
V6T 1W5

DEPARTMENT OF ZOOLOGY

8 April, 1980

Mr. Ron Kot,
Environment and Land Use Committee
Secretariate,
Parliament Buildings,
Victoria V8V 1X5



Dear Mr. Kot,

This letter is in response to your request, made during our recent telephone conversation, for additional information concerning the role of Robson Bight in the movement patterns and behaviour of killer whales.

As you know, I have been studying the acoustic behaviour of killer whales in the coastal waters of B.C. for the past two years, under the direction of Dr. H.D. Fisher, Professor of Zoology at U.B.C. As a result of our observations of killer whales in the Johnstone Strait area during the summer of 1978, Dr. Fisher and I became concerned about the potential effects of proposed industrial development in Robson Bight on the resident killer whales in the area. The nature of our concerns was expressed in a letter, dated 11 October 1978, to Mr. Ray Ostby, Chairman of the Tsitika Planning Committee. In this letter, Dr. Fisher described the regularity of the whales' use of the Bight and some of the behaviours exhibited by the animals while there, and suggested that development in Robson Bight be avoided so as not to cause the whales serious disturbance.

Since that letter was written, we have had considerably more experience with killer whales, having logged more than 200 hours travelling with and observing the behaviour of the whales both in the northern Johnstone Strait area and in other waters. As a result of this improved data base, the use made of Robson Bight by killer whales can now be described and interpreted in greater detail.

Between 19 July and 20 August, 1978, and 10 July and 7 August, 1979, we actively sought and observed killer whales in the Johnstone Strait area. Killer whales were encountered on 36 days, or on one out of every two days on average. A total of 8 different family groups, or pods, were identified (using dorsal fin markings), representing a population of between 65 and 75 whales. The whales were observed in waters from southern Queen Charlotte Strait south to Adams River in Johnstone Strait.

Killer whales were seen to enter Robson Bight on 26 of the 36 days of observation, or 72% of the encounters. Of the 150 hours killer whales were under observation, they spent 26 hours, or 17% of their time, either in the Bight or along the "Rubbing Rocks" slightly to the east. This amount of time is quite significant considering that killer whales are usually moving constantly at speeds of 2 to 6 miles per hour and can, therefore, cover very

large areas. As an example, in one 13 hour period in the Johnstone Strait area, we observed a pod to travel 62 miles. On this day, the animals spent $1\frac{1}{2}$ hours in Robson Bight.

The whales' appearance and behaviour in Robson Bight was relatively stereotyped and predictable. On many occasions, killer whales were encountered early in the morning while entering Johnstone Strait from waters to the north and west. As they entered the Strait, they were typically widely dispersed and actively foraging. Continuing down the Strait, the whales tended to move towards the Vancouver Island shore and enter Robson Bight. At this point, some animals usually travelled far into the Bight, moving very closely along the rocks and beaches, while others would cut across its entrance. Whales occasionally rubbed on the pebble beaches at the western end of the Bight, but this activity was more common along the Rubbing Rocks east of the Bight. On a number of occasions we observed apparent feeding in the Bight, especially at its western end and off the mouth of the Tsitika River.

Towards the eastern end of the Bight, the whales would usually converge and begin a period of active social interaction and play. Often, individuals in the group would also lie motionless at the surface for up to several minutes, apparently resting. These activities usually continued for 15 minutes to over an hour, and would terminate either with the group dispersing and heading back up the strait, or with the whales moving down the Vancouver Island shore to the Rubbing Rocks, about $\frac{1}{2}$ mile from Robson Bight. Here the animals would rub vigorously on the gravel beaches and shelves for periods of up to $1\frac{1}{2}$ hours. The whales then dispersed and retraced their path back up the Strait or (less often) continued down the Strait.

On most occasions when we observed killer whales in Johnstone Strait, the pods spent the greater part of the days, foraging up and down the Strait between Hanson Island and Robson Bight, dispersed yet travelling as a unit. While the western terminus of their circuit was rather ill-defined (ranging from Cracroft Point to the western end of Hanson Island), the eastern turning point was typically the eastern end of Robson Bight. Again, once in Robson Bight the whales usually converged, rested, and interacted socially before resuming their foraging. Since this circuit was often repeated a number of times in succession, the whales returned to Robson Bight as many as 4 times in a single day. Also, friends who have observed the whales from a camp in Robson Bight reported that the animals often entered the Bight during the night.

In summary, Robson Bight appears to be an important site for "recreational" activities of killer whales as well as a geographic "focal point" which may determine the pattern of foraging movements in Johnstone Strait. I know of no other location in the northern Vancouver Island area which appears to attract killer whales in the same manner as Robson Bight.

Aside from being of apparent biological importance, northern Johnstone Strait, especially the Robson Bight area, is likely the

most reliable place on the west coast to view wild killer whales. Although killer whales are also regularly sighted in the U.S. San Juan Islands, I do not know of any specific site in that area comparable to Robson Bight. Indeed, Johnstone Strait may well be globally unique as an area to observe killer whales. The Strait offers a combination of features, including a high concentration of killer whales, a relatively confined area, and ready accessibility, which is likely unparalleled. As a result, over the past 10 years, northern Johnstone Strait has become an internationally-known place for observing wild killer whales. In the summer of 1979 alone, amateur whale-watchers from such countries as the U.S., England, and Japan visited the area. It is very likely that this interest in viewing wild killer whales will increase in the future.

In view of the considerable use made of Robson Bight by the killer-whale groups frequenting Johnstone Strait, I feel that any industrial activity which may disrupt the animals in this important area should be avoided. It is difficult to confidently predict whether the proposed activity would prevent the whales from making use of Robson Bight as they have done in the past. However, I feel that it is a very real possibility. Should industrial development disrupt the whales' use of Robson Bight, the patterns of whale movement and behaviour in Johnstone Strait I have described above could be significantly affected. The overall impact this could have on the whale population in the northern Vancouver Island area is unknown.

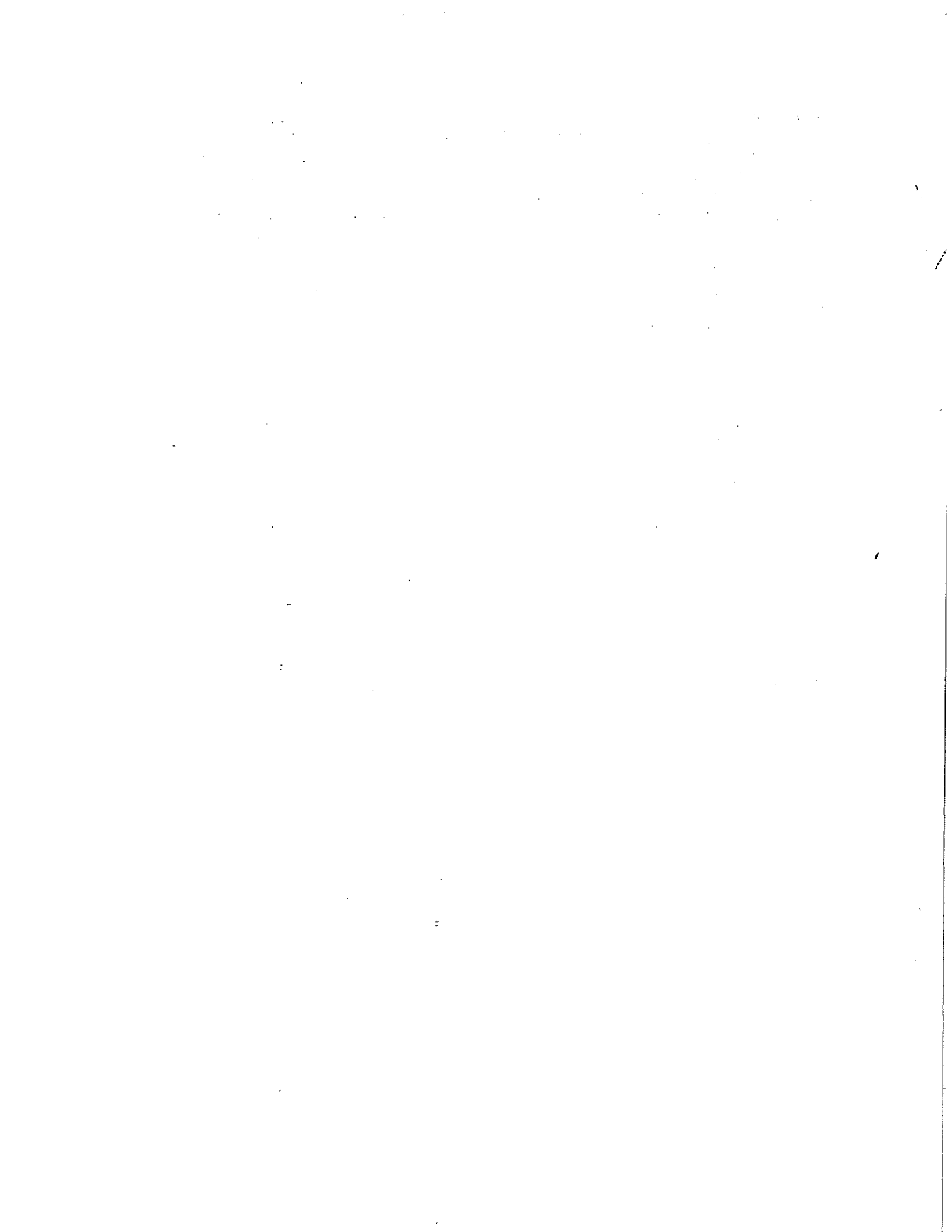
I hope the information in this letter will be considered in future decisions concerning the fate of Robson Bight and the Tsitika River estuary. Please note that I am forwarding a copy of this letter to Dr. Bristol Foster of the Ecological Reserves Unit. Should you require any further information, please contact me at the above address or at 228-5033.

Yours sincerely,



John K.B. Ford
Graduate Student

c.c. Dr. B. Foster



Robson Bight

**What does it mean to save the whales
if we destroy their habitat?**



Both photos Killer whales in Johnstone Strait, near Robson Bight. Photographer, Peter Thomas

Sighting killer whales is a special event, for along the coast of British Columbia live only 265 of these swift, high-finned mammals.

Over half of British Columbia's killer whales (whales of the species *Orcinus orca*) live in and around Johnstone Strait. Dozens of Orcas have been seen travelling together down the Strait, leaping, diving and signalling.

**Commercial whaling has been outlawed in North America.
But what does it mean to save the whales if we destroy their habitat?**

Robson Bight, a bay in Johnstone Strait, is the centre of Orca activity for much of the year. The logging industry plans to industrialize this virgin bay.

The Tsitika River flows into Robson Bight from what was, until recently, the last unlogged watershed on the east coast of Vancouver Island. Although some of the timber already cut from this watershed has been removed overland, logging interests say that it would be most economical to haul the rest to tidewater, where a dry sorting facility and logging grounds would be constructed.

Inevitably, such activity will foul the beach, the sea bottom and the bight with bark mulch, sunken logs, diesel fuel, and other contaminants such as leachates. The quiet stretches of this untouched bay, the glistening kelp beds in the clear water, the salmonids of the Tsitika's many-pronged estuary, the seals, otters and eagles, the magnificent Orcas — all these are part of Robson Bight. All are vulnerable. All are threatened.

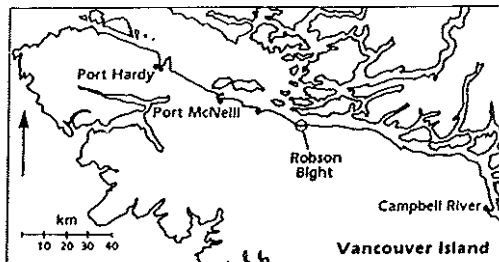


What, then, does it mean to save the whales if we destroy their habitat?

The timber harvested in the Tsitika watershed can continue to be removed overland without harm to this precious resource — Robson Bight. All of Robson Bight could and must become an ecological reserve for the preservation of the killer whales in their natural habitat.

Today, few places on the east coast of Vancouver Island remain unpolluted. Canadians should insist on the preservation of one of these remaining few.

The volunteers of the Robson Bight Preservation Committee are working in a data collection program that will enable ecologists to assess the importance of the Robson Bight marine ecosystem. Some day, we are sure, this ecosystem will answer questions that science has not yet learned to ask.



We would like your letters to accompany our brief to the Hon. C. Stephen Rogers, Minister of the Environment, in Victoria. Please write in support of the preservation of Robson Bight. Send your letter to us, the Robson Bight Preservation Committee, Box 48, Port McNeill, B.C.

The RBPC is a committee of the Top Island Econauts Society, a non-profit diving club. For further information, call Anne and Jim Borrowman at 956-3572, Bill Harrower at 956-4338 or Donna McKay at 928-3185.

APPENDIX C. Boundaries

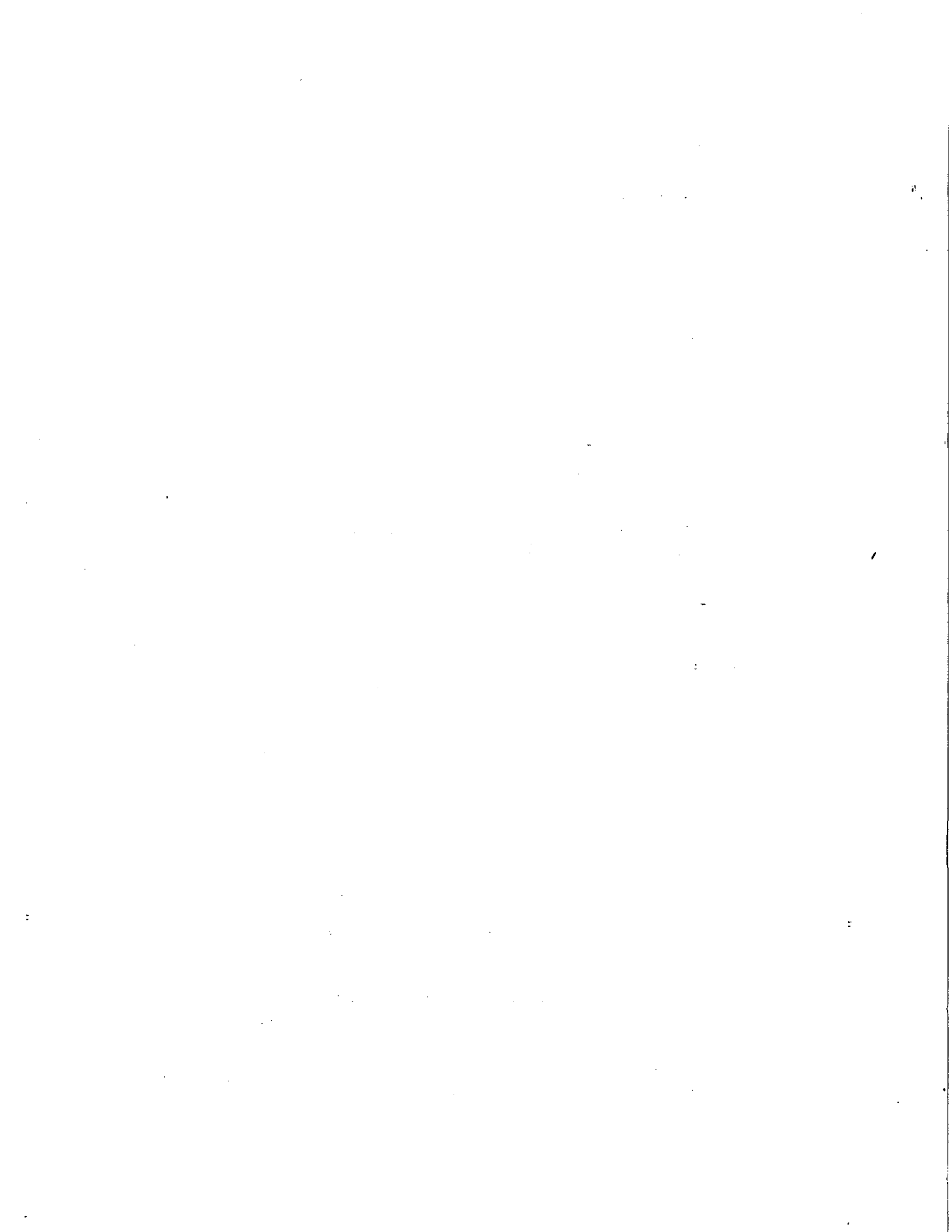
The boundaries (Map No. 4) suggested in this brief would create a park of 4,461 hectares. This is a large enough area for wilderness experiences yet it does not represent a major subtraction from the forest resource. With the exception of parts of the common boundaries with the ecological reserves, the park boundaries are topographic features readily discernible on the ground.

The reasons for the choice of some boundaries are listed:

1. South Boundary - The lower seven kilometers of the Tsitika River contain a number of areas designated in the Plan as protected or as having logging prescriptions attached. The southern boundary crosses the River at a point which allows the inclusion of these areas in the park. Moreover this section of the River has a waterfall, canyon and other scenic features as well as salmon-watching and fishing opportunities.

- In order to incorporate properly Ecological Reserves Nos. 2 and 3 with the wilderness area, the park should be extended at least as far as their southern boundaries. It is also logical to include the elk winter range. Catherine Creek, the major westbank tributary of the Tsitika River is a good natural boundary. The unnamed creek southwest of the one draining from Mudge Lake was chosen to include Tsitika Mountain both for alpinists and for the psychological effect of having the major peak within the park.

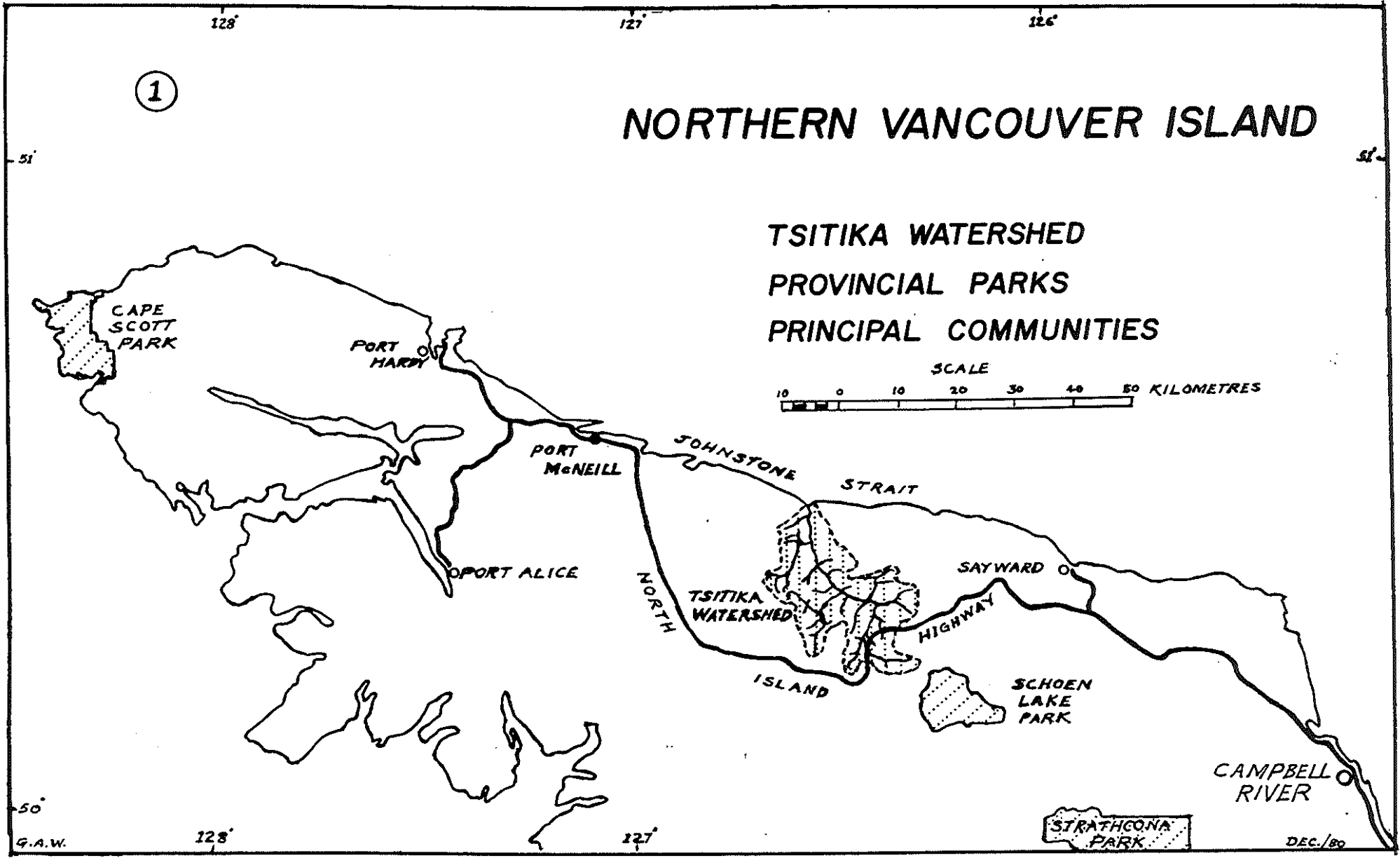
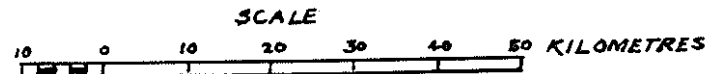
2. Northwest Boundary - This is a departure from the Tsitika Watershed involving 689 hectares in order to give protection to the narrow strip of the proposed Ecological Reserve No. 111 which fronts on the western arm of Robson Bight. It is a watershed boundary passing through Mount Sir John and ending at the northwest extremity of Robson Bight.
3. Northeast Boundary - This is a departure from the Tsitika Watershed involving 580 hectares in order to give protection to the parts of the proposed Ecological Reserve No. 111 which front on the eastern arm of Robson Bight and on Johnstone Strait. It is a watershed boundary which ends at the mouth of the stream known locally as "Pine Creek".



1

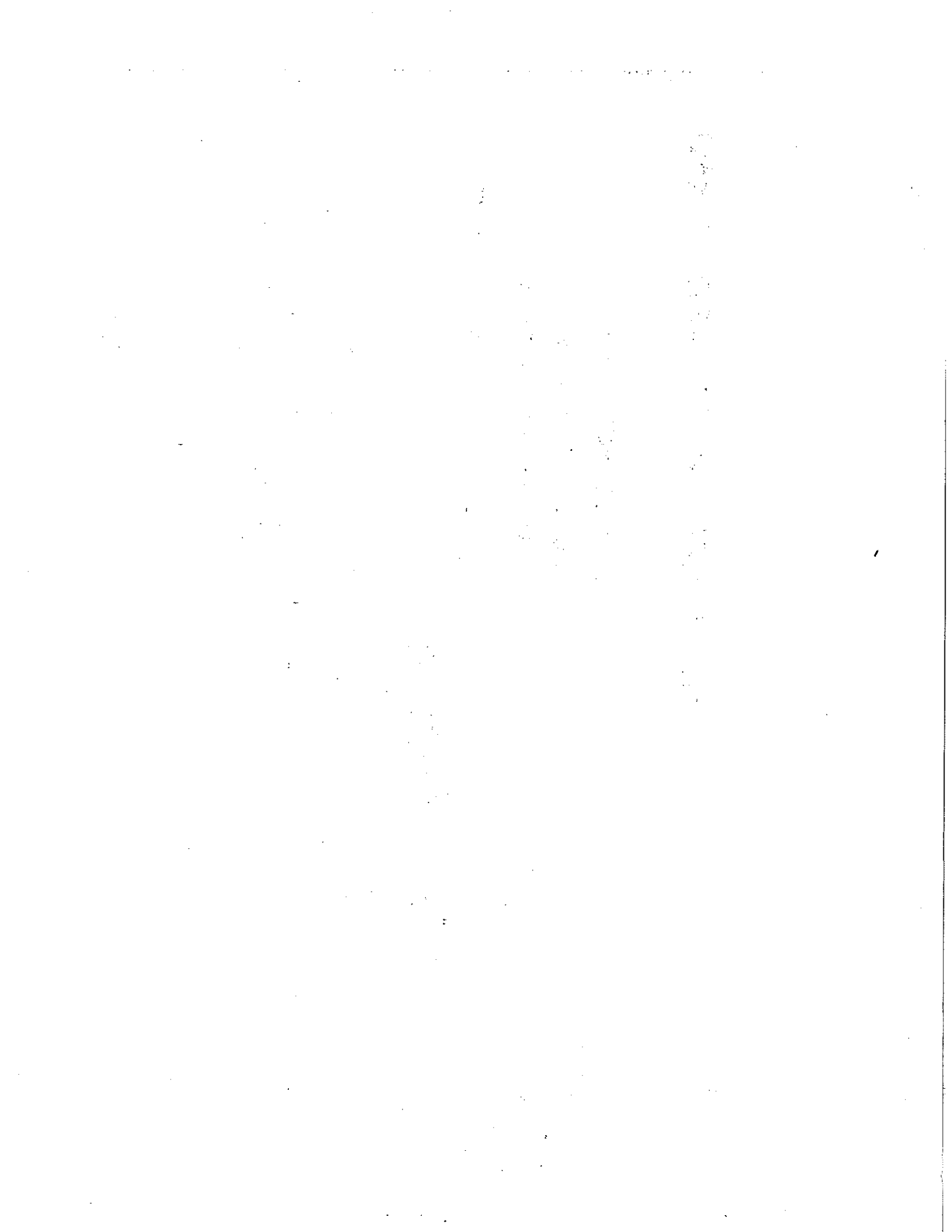
NORTHERN VANCOUVER ISLAND

TSITIKA WATERSHED
PROVINCIAL PARKS
PRINCIPAL COMMUNITIES



G.A.W.

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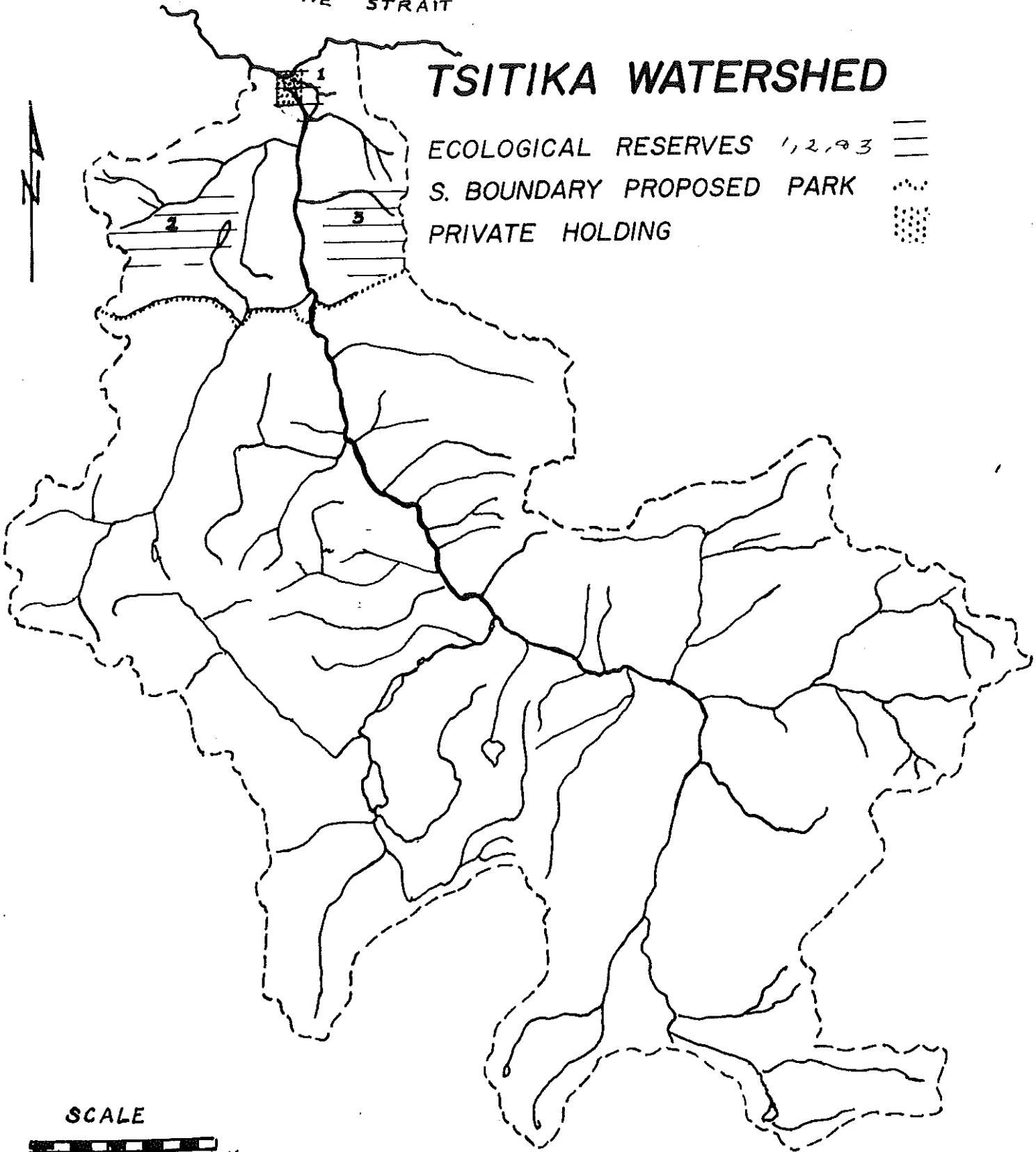


2

JOHNSTONE STRAIT

TSITIKA WATERSHED




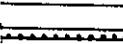

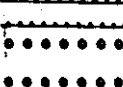
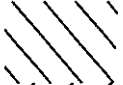
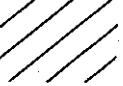
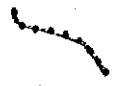
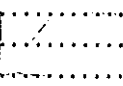

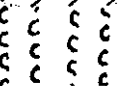

ECOLOGICAL RESERVES 1, 2, 3
S. BOUNDARY PROPOSED PARK
PRIVATE HOLDING



SCALE



APPENDIX E. Legend for Map No. 3

| | Source A * | <u>Folio Map No.</u> |
|--|---|----------------------|
|  Ecological Reserve | | 8 |
|  Protection forest (outside of reserves) | | 6 |
|  Deer wintering area | | 2 |
|  Deer wintering area (alternate) | | 2 |
|  Elk wintering area | | 2 |
|  Windfirm leave strip or deferred area to protect fisheries sensitive zones. | | 3 |
| Fisheries sensitive zones | | |
| 2 | : tributary alluvial fan | |
| 3 | : of salmonid life history significance | |
| 3a | - rearing | |
| 3b | - spawning | |
| 3c | - up-stream holding | |
| 3d | - stock collection site | |
|  Variable term deferral or no logging due to resource values other than fish | | 3 |
|  Resource constraint | | 4 |
|  Area of visual importance from Johnstone Strait | | 4 |
|  Soil sensitive area with potential for sediment production and/or stability problems | | 7 |
|  Area with potential for recreational activity | | 7 |
|  Firebreak | | 7 |
|  Log sort and booming ground sites (options considered by M&B Ltd.) | Source B ** | |

* Integrated Resource Plan, Volume I (folio of maps)

** Evaluation of Potential Booming and Barge Loading Sites in the Vicinity of Tsitika River, Feb. 1979