



RESOURCE MANAGEMENT

B.C. Forest Service Review of Tsitika Watershed

Updated Technical Background
(November 1990)

Tsitika River

Ref. No.:

420

ECOLOGICAL RESERVES COLLECTION
GOVERNMENT OF BRITISH COLUMBIA
VICTORIA, B.C.
V8V 1X4



Province of
British Columbia
Ministry
of Forests

Introduction

Since the release of the first backgrounder in May 1990, several events have taken place. This revision provides an update and clarification of the data used in the first version. Significant changes are highlighted in the text.

Because this backgrounder is just a summary, interested individuals should contact the British Columbia Forest Service -- Vancouver Forest Region, 4595 Canada Way, Burnaby, B.C. V5G 4L9 (Phone: 660-7778), or Campbell River Forest District, 370 S. Dogwood Street, Campbell River, B.C. V9W 6Y7 (Phone: 286-3282) -- for information on where to view the details of the Tsitika Watershed Integrated Resource Plan. The data in this backgrounder is from this plan.

Background

The 39 489-hectare Tsitika River watershed is on Vancouver Island's east coast, between Port McNeill and Campbell River.

This watershed has abundant resource values, including:

- deer, elk and other wildlife;
- fish;
- recreation; and,
- timber.

Robson Bight, at the mouth of the river, is unique. It is the habitat for killer whales, which use the area for feeding and resting. This area also includes the well-known "rubbing beaches."

The watershed is managed under the Tsitika Watershed Integrated Resource Plan's guidelines, approved by the Cabinet's Environment and Land Use Committee in 1978.

The Tsitika Follow-up Committee, which was formed at that time, ensures that integrated resource management principles are applied to the management of the watershed.

Unique features of the Tsitika Valley were identified and have been protected through the establishment of seven ecological reserves.

The Tsitika River estuary, adjacent upland areas, and an adjacent marine area known as Robson Bight, are included in two of these reserves. They are shown on the attached map.

More than 40 per cent of the watershed has been set aside or deferred from timber harvesting in consideration of the following:

- ecological reserves;
- unstable soils;
- a regional park (Mount Cain);
- recreation;
- fishing corridors;
- non-productive forest, alpine areas and lakes; and,
- deer and elk winter range.

(This section has been expanded to specify more clearly the areas set aside from harvesting. Table 4 indicates associated areas.)

Seventy-two per cent, or 28 512 hectares, of the watershed lie within Tree Farm Licence 39 held by MacMillan Bloedel Ltd. The company's Eve River Division manages this area.

The rest of the watershed lies within Tree Farm Licence 37, held by Canadian Forest Products Ltd., and Tree Farm Licence 25, held by Western Forest Products Ltd.

As of December 31, 1989, nine per cent, or 3 477 hectares, have been harvested in the Tsitika River watershed.

History

- 1972 -- The Ministry of Environment's Fish and Wildlife Branch recognized the Tsitika River watershed as one of the last intact watersheds on Vancouver Island's east coast and proposed it as an ecological reserve. This proposal was accompanied by public demand for provincial parks near Schoen and Gold lakes.
- A moratorium was declared on timber harvesting and road construction in the Tsitika-Schoen area. The Minister of Forests commissioned a consultant to study the area and report back to the Environment and Land Use Committee (ELUC).
- 1975 -- A report was prepared by the North Island Study Group and circulated for public input. ELUC released 65 000 hectares from the moratorium area after detailed analysis of the proposals in the report, but retained the Tsitika-Schoen areas for further study.
- 1977 -- ELUC announced its decision to:
 - create the Schoen Lake Provincial Park (8 200 hectares);
 - add the Gold Lake area to Strathcona Provincial Park (3 400 hectares);
 - release Schoen Creek from the moratorium (3 800 hectares); and,
 - retain the Tsitika River watershed in the moratorium pending the completion of an approved integrated resource management plan for the area -- to be prepared by provincial government ministries, the federal Department of Fisheries and Oceans, labor groups, industry, and the public.

- 1978 -- ELUC approved the Tsitika Watershed Integrated Resource Plan, and the Tsitika Follow-up Committee was established.
- 1990 -- The Minister of Forests chaired a public meeting in Port McNeill to hear the public's concerns over MacMillan Bloedel's plans for timber harvesting below Catherine Creek.

Tsitika Watershed Integrated Resource Plan

This plan was formulated on the basis of three guiding objectives:

- to maintain other resources, including fish, wildlife and recreation, and to establish representative ecological reserves;
- to minimize the adverse impacts of development on resource productivity and sensitive areas, and, where possible, to enhance resource values; and,
- to ensure a sustained harvest of economically viable timber.

The plan's key features are:

- the establishment of seven ecological reserves -- **Table 1** provides more detail;
- the deferral from harvesting of 2 177 hectares of productive forest land for 150 years to provide critical winter range for the 3,000 black-tailed deer and elk which use the watershed;
- the deferral from harvesting of 551 hectares of productive forest land for 18-20 years to provide alternate winter range;

- the establishment of specific 'prescriptions' for wildlife habitat management, including the location, size and distribution of openings, and the timing of timber harvesting, burning and brush control;
- site-specific management 'prescriptions' -- included in each licensee's tree farm licence management and working plans and five-year development plans -- will manage other wildlife species in the watershed;
- the protection of the fisheries resource by applying the Tsitika Fisheries Guidelines and the Coastal Fish-Forestry Guidelines -- the aim of maintaining water quality will guide cut-block layout and road construction, and windfirm buffer strips will be established along fisheries-sensitive zones which are identified through on-site, multi-disciplinary inspections;
- the establishment of 7.5 kilometers of recreational fishing corridors to provide sport-fishing opportunities;
- a requirement that timber harvesting be dispersed throughout the watershed; and,
- the designation of 4 280 hectares considered as "sensitive" or unstable soil sites, which have been removed from the land base available for harvesting. (The area of 13 000 hectares used in the original backgrounder also included 8 755 hectares of alpine and non-productive forest in the total.)
- the establishment of a follow-up committee to guide ongoing studies and monitor the plan's implementation.

A number of studies on the watershed have been completed since the plan was approved. The results of studies prompted amendments to the plan. **Table 2** summarizes these studies.

A study of the visual impacts of harvesting in the lower Tsitika is currently being coordinated by the Tsitika Follow-up Committee.

Amendments to the plan include:

- deletion of a proposal to use the Tsitika River estuary for a log-dump development -- as a result of studies, all logs are now hauled to the Eve River Division camp site; and,
- guidelines for cut-block configuration and size to deal with the problem of blowdown, which was recognized soon after harvesting began in the watershed.

Tsitika Follow-up Committee

The committee's mandate is to oversee the implementation of the Tsitika Watershed Integrated Resource Plan, to monitor its success, and to coordinate special studies in the Tsitika watershed.

The committee is made up of representatives of provincial resource ministries, the federal Department of Fisheries and Oceans, public representatives, labor groups and the forest industry. Table 3 lists the committee members.

Besides reviewing five-year plans, the committee takes an annual field trip to review forest-management activities in the watershed and to assess compliance with the plan.

The committee plans to hold public information sessions in November 1990 in Port McNeill, Campbell River, Nanaimo, Victoria and Vancouver to inform the public on the developments in the Tsitika River watershed over the last 10 years and to solicit the public's input on the overall development of the Tsitika drainage.

MacMillan Bloedel Ltd.'s harvesting plans

MacMillan Bloedel Ltd. is currently preparing a revised five-year development plan for the Tsitika watershed. Before this plan is approved by the Forest Service, it will be made available for public review.

Public comment

Public comment ranges from advocating the preservation of the remaining unharvested area in the Tsitika River watershed below Catherine Creek to advocating the implementation of harvesting plans, which are prepared in accordance with the Tsitika Watershed Integrated Resource Plan.

Preservation advocates feel that any harvesting in the area would destroy the "pristine wilderness backdrop" to Robson Bight and would impact on the whale-watching industry, which has developed in the area.

Others are concerned about the impact of harvesting operations on the killer whale habitat. Such concerns include:

- providing public access to the Robson Bight ecological reserve;
- the impacts of increased siltation due to harvesting and road building on the estuary and rubbing beaches; and,
- the 'unknown' impacts on the whales due to disturbances (mainly noise) in the area adjacent to the whale habitat.

Timber harvesting advocates feel that the existing planning process and Tsitika Follow-up Committee have been very effective in ensuring that the principles of integrated resource management have been followed.

They feel there would be direct social and economic impacts on local communities if the lower Tsitika area was preserved in addition to those areas that were preserved as a result of ELUC's 1978 decisions.

Public comments were received by the Forest Service:

- during the public meeting, chaired by the Minister of Forests, on April 21, 1990;
- through letters and written briefs; and,
- during MacMillan Bloedel's five-year plan review.

Outstanding issues and action taken

In addition to the issues identified and addressed under the Tsitika Watershed Integrated Resource Plan, there are some outstanding issues which require further consideration.

- **Land-based public access to Robson Bight ecological reserve**

Government agencies and the public have raised concern about the impact of human interactions with the killer whales. The road network proposed for the area below Catherine Creek would provide land-based public access to the edge of the Robson Bight ecological reserve, and subsequently to the Bight itself.

In May 1990, the federal-provincial Johnstone Strait Killer Whale Committee was established to study the effects of human activity on killer whales in order to develop strategies to protect the whales.

Action taken:

Land-based access to Robson Bight will be strictly controlled, until this committee has completed its study, by developing an access management plan. This plan is now being developed by the Tsitika Follow-up Committee.

In addition, all harvesting activity adjacent to the Robson Bight ecological reserve has been deferred until this study is completed.

Meanwhile, a gate has been erected by the company at the direction of the Forest Service.

Access provided along the Naka Creek road in Tree Farm Licence 25 to the south of the watershed is also gated.

- **Siltation**

The existence and/or impact of siltation on the Tsitika estuary and on the rubbing beaches, caused by upland road-building and harvesting activities, is not known at this time.

Action taken:

The Tsitika Follow-up Committee has been instructed to initiate and coordinate a study to address this issue.

- **Visual aesthetics**

As previously indicated, the Tsitika Follow-up Committee is currently coordinating studies to assess the visual impacts of harvesting in the Tsitika River watershed.

Action taken:

A review of landscape options will be completed to ensure that the visual impact is minimized, before any harvesting is carried out on areas visible from the water .

- **Public involvement**

Concern was expressed that there was insufficient opportunity for public involvement in the decision-making process that provides for approval of timber harvesting in the watershed.

The Forest Service's planning process provides for public input during the formulation of the tree farm licence management and working plans and five-year development plans.

Public input was also received during the initial formulation of the Tsitika Watershed Integrated Resource Plan.

The Tsitika Follow-up Committee includes representatives of the public who provide public input into any new issues which arise. In addition, the committee plans to hold a series of public information sessions this November on the Tsitika Watershed Integrated Resource Plan to review accomplishments, future direction, and to receive public input on new issues.

Action taken:

The committee will document public reaction to public information sessions, including new issues, in a written report to the Chief Forester.

Table 1: Ecological reserves

| <u>Reserve</u> | <u>Size</u> (hectares) | <u>Purpose</u> |
|----------------------------------|---------------------------|---|
| Robson Bight | | Protects important killer whale habitat as well as forests of northern Vancouver Island |
| -- water | 1 248 | |
| -- land (total) | 505 | |
| -- land within Tsitika watershed | 249 | |
| Tsitika Mountain | 554 | Preserves outstanding subalpine wetlands, subalpine forests, and a small bog lake |
| Mount Derby | 557 | Preserves forests in a complete range of altitudes |
| Tsitika River | 110 | Preserves cedar pine swamps |
| Mount Elliott | 324 | Preserves cedar pine swamps |
| Claud Elliott Creek | 231 | Encompasses a productive montane forest, which includes deer winter range |
| | 3 529 | |
| | ===== | |

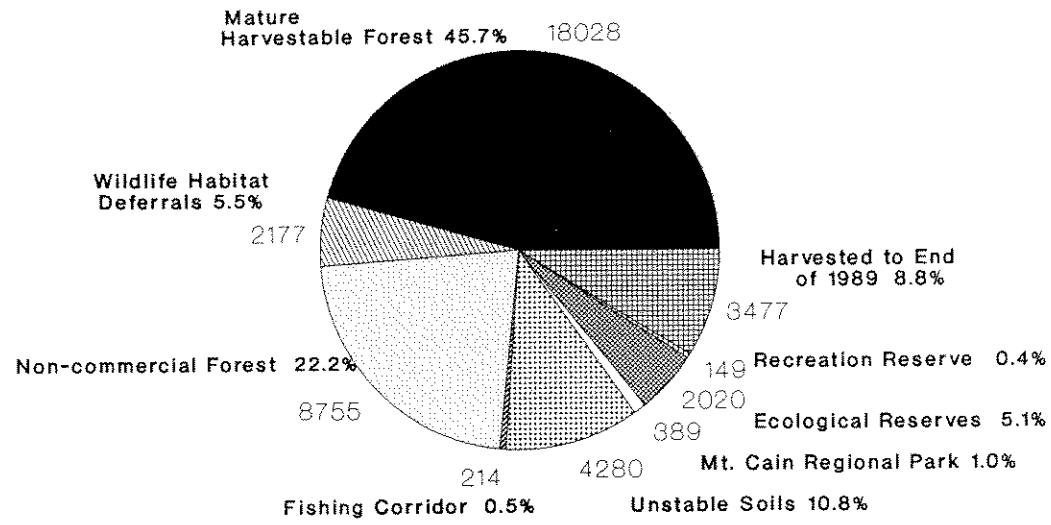
Table 2: Studies completed on the Tsitika (1981-1989)

| <u>Study</u> | <u>Author</u> | <u>Date</u> |
|---|---|-------------|
| 1. Killer Whale and Coastal Log Management. An overview of future uses of Robson Bight (three members of the study team were Tsitika members) | | 1981 |
| 2. Tsitika Plan Implementation Procedures (must be reviewed by district staff and agencies) | | 1983 |
| 3. Terrain Stability Mapping and Interpretations | MacMillan Bloedel and Canadian Forest Products Ltd. | 1981 |
| 4. Windthrow Studies | Terry Rollerson | 1984 |
| 5. Fisheries Guidelines | MacMillan Bloedel Federal Fisheries, Ministry of Environment and MacMillan Bloedel | 1982 |
| 6. Introduction of New Methods Minimizing impacts • Line-pulling techniques • Directional falling and yarding • Road-building techniques • Special skidders and forwarder to pick up blowdown • Hoe chucking • Use of a backspar to lift logs over a stream | Forest Companies, ongoing Ministry of Environment | |
| 7. Evaluation of the Planning Process | Tsitika Follow-up Committee | 1982 |
| 8. Channel Morphology Study | E. Karanka | 1985-1989 |
| 9. Robson Bight Ecological Reserve -- Background Report | Ministry of Parks | 1988 |
| 10. Robson Bight Ecological Reserve -- Evaluation of potential impacts | T. Lewis | 1989 |
| 11. Landscape Analysis Studies • Tsitika Landscape Analysis • Video Imagery • Digital Terrain Analysis | Ministry of Forests MacMillan Bloedel | 1988 - |
| 12. Tsitika Plan Status Report | | 1983-1989 |

Table 3: Tsitika Follow-up Committee

| <u>Representation</u> | <u>Affiliation</u> | <u>Name</u> |
|-----------------------|--|--|
| Government agencies | Ministry of Forests | Gary Sutherland (Chairman) Don Huestis Darcy Yule |
| | Federal Department of Fisheries and Oceans | Mike Brownlee |
| | Ministry of Environment | Doug Morrison |
| Labor | Ministry of Parks | Ron Lampard |
| | International Woodworkers of America | Sy Pederson |
| | United Fishermen and Allied Workers | Danni Tribe |
| Outdoor recreation | Outdoor Recreation Council of B.C. | Phil Deardon |
| Tourism | Stubbs Island Charters | Jim Borrowman |
| Public | | Ed Mankelow |
| Industry | MacMillan Bloedel | Derek Ferguson Bill Pollard |
| | Western Forest Products | Cindy Fox |
| | Canadian Forest Products | Wayne Green |

Table 4
LAND USES IN THE TSITIKA WATERSHED
 Integrated Resource Plan



Areas Shown in Hectares

| | (hectares) | (% of total watershed) |
|--|---------------|------------------------|
| Wildlife Deferral Areas, Long-Term | 2,177 | 5.5% |
| Non-Commercial Forest, Lakes, Alpine Areas | 8,755 | 22.2% |
| Fishing Corridor | 214 | 0.5% |
| Unstable Soils | 4,280 | 10.8% |
| Mt. Cain Regional Park | 389 | 1.0% |
| Ecological Reserves | 2,020 | 5.1% |
| Recreation Reserve | 149 | 0.4% |
| Harvested to End of 1989 | 3,477 | 8.8% |
| Mature, Harvestable Forest | 18,028 | 45.7% |
| Total Area | 39,489 | 100.0% |

NOTE: Areas scheduled for timber harvesting are managed under integrated resource use plans. Location and timing of harvesting are scheduled to protect other resource values and to complement the special land-use designations in the Tsitika Watershed Integrated Resource Plan. Harvesting will occur over an 80 year period.

