

Clayoquot Sound Land Use Decision

Background Report

April 1993

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A. Introduction to Clayoquot Sound

Since 1980, Clayoquot Sound has been the focus of intense public debate about land use and resource development. The controversy has centered around the issues of forest wilderness, protection of ecosystems, visual aesthetics, tourism and large scale industrial forest operations. This debate has resulted in confrontation, civil disobedience and uncertainty.

Clayoquot Sound is located on the west coast of Vancouver Island. The Sound is a large area of islands, ocean, fjords, narrows, estuaries, mudflats, rocky shores, sand beaches, mountains, forests, lakes and streams. Roughly 350 000 hectares in size, the area includes Hesquiat Peninsula, Esowista Peninsula, the islands, sea, and all lands and waters draining into the Pacific Ocean from the height of land between Escalante Point in the north and Quisitis Point in the south.

Clayoquot Sound is a spectacular part of coastal British Columbia, a region renowned for its beauty. The Sound supports a wide range of resources and other values: a huge volume of old growth timber; fisheries that are important for local lifestyles, cultures and economy; concentrations of metallic and industrial minerals; magnificent scenic resources for tourism and an unusual combination of marine, freshwater and land ecosystems. As demand for these resources and appreciation of these values increase, more thought, skill and cooperation are required to sustain them and ensure their coexistence.

Clayoquot Sound lies on a complex mixture of volcanic and sedimentary rocks. The rocks of the Estevan Coastal Plain, roughly Hesquiat Peninsula, Vargas Island and Esowista Peninsula, are relatively recent (under 200 million years old). East of the plain they are up to 360 million years old. The older rocks are cut by intrusions of granitic rock. In places, the heat and pressure of these intrusions converted some of the surrounding area to metamorphic rock. Most of the known mineral concentrations in Clayoquot Sound are associated with these granitic intrusions or with past volcanic activity.

Clayoquot is one of five sounds on the west coast of Vancouver Island – Clayoquot and Barkley in the Regional District, and Quatsino, Kyuquot, and Nootka sounds to the north. Clayoquot Sound features a number of narrow passages with fast tidal currents, such as Hayden Passage between Flores and Obstruction Islands, and large expanses of mudflats and shallow banks.

The narrow ocean passages are rich in marine species, including some rarely found elsewhere in British Columbia. The roughly 860 hectares of eelgrass beds, associated with the mudflats and shallow banks, form the largest cover of eelgrass along the west coast of Vancouver Island.

The mudflats and estuaries near Tofino are one of nine coastal wetlands in British Columbia identified as critical for waterfowl and shorebirds migrating along the Pacific

flyway. This flyway is the only one on the west coast of Vancouver Island. With well over 100 000 birds using the area, it is one of the most important areas in British Columbia.

Most of the land area of Clayoquot Sound is covered by forests which are typical of the very wet Coastal Western Hemlock forest zone. These forests are characterized by western hemlock, western red cedar, yellow cedar, balsam, salal, Alaskan blueberry, deer fern, lanky moss and step moss. At higher elevations, they are replaced by Mountain Hemlock forests and parkland, and, still higher, by Alpine Tundra.

These forests are part of the North American temperate rain forest, which flanks the mountainous coast from Alaska south to the Oregon–California border. Here, land and sea strongly influence each other. Coastal rain and fog promote the vigorous growth of temperate rain forests on the land, which in turn provide nutrients for the waters of the coast and continental shelf.

Nine of Clayoquot Sound's primary watersheds of 1000 hectares or more are essentially natural. A primary watershed is a drainage basin that drains directly to the sea. Six of them, the Megin, Moyeha, Watta, Sydney, Ice and Cecilia, together form the largest continuous block of natural primary watersheds on Vancouver Island. Clayoquot Sound is one of the few areas on Vancouver Island that combines a large expanse of old–growth forest and a diversity of coastal habitats.

A statistical description of the Sound is provided in the table on page 3.

Since 1950, approximately 27 000 hectares of forest land have been harvested. Most of this area has been reforested, either naturally or by planting. The remainder is in the process of being reforested.

| Clayoquot Sound: Area Statistics | | | | |
|------------------------------------|------------|----------------|--|--|
| | (hectares) | | | |
| Ocean | | 78 425 | | |
| Lakes | | 8 983 | | |
| Forest Land | 244 150 | | | |
| Non Forest Land | 18 442 | | | |
| Total Land | | <u>262 592</u> | | |
| Total Area | | 350 000 | | |
| Land in Protected Areas establishe | 39 100 | | | |

Clayoquot Sound is part of the Regional District of Alberni–Clayoquot. There are four communities within Clayoquot Sound: the Nuu–chah–nulth communities of Ahousaht, Tla–o–qui–aht, and Hesquiaht (combined population 845); and approximately 1 105 non-aboriginals, virtually all of whom live in the Tofino area. South of the Sound are the Ucluelet and Toquaht bands (combined population 392), and the Ucluelet area (population 2282). To the east are the communities of the Alberni Valley, including the City of Port Alberni (population 26 601). In 1991, the total population of the Alberni–Clayoquot Regional District was 31 224.

The economy of the Regional District depends heavily on timber, tourism, fisheries, and aquaculture. Mining has played an important role in the area and there is significant exploration activity.

The City of Port Alberni relies heavily on the forest industry and is, a major production centre for lumber, pulp and paper. The forest resource in the area is considered to be fully committed. Commercial fishing and farming also contribute to the economy.

Tofino and Ucluelet are also resource oriented, with emphasis on logging, tourism, commercial fishing and aquaculture. For Tofino and the Nuu-chah-nulth bands of Clayoquot Sound, the most important economic sectors are tourism and seafood production. For Ucluelet, timber, fishing and tourism are equally important. Road access to Tofino and Ucluelet is by way of Port Alberni.

A principal tourism attraction for Clayoquot Sound is Pacific Rim National Park Reserve. This park includes Long Beach, an outstanding sandy beach some 16 kilometres long between the communities of Tofino and Ucluelet.

Excellent sport fishing and boating, and opportunities for hiking and whale-watching are also significant tourism attractions.

B. Aboriginal Considerations

1. The Nuu-chah-nulth

The government recognizes the rights of the Nuu-chah-nulth peoples with respect to traditional use of resources and their concern for improving forest practices, and for a more meaningful and timely role in decisions concerning resource utilization. To this end, policies of resource agencies will ensure greater opportunity for consultation and participation with First Nations. The government also recognizes that this land use decision must, to the extent possible, not prejudice and be subject to the outcome of comprehensive treaty negotiations.

2. Meares Island

This land use decision does not include Meares Island. Meares Island is the subject of litigation before the Supreme Court of British Columbia, and negotiations are currently underway with First Nations to resolve the land use issues relating to that litigation. Resource allocation decisions must, therefore, await the outcome of these negotiations.

C. History of Planning Processes

The wealth of natural resources and the wilderness values of Clayoquot Sound have resulted in differences of opinion about appropriate land uses and the level of resource development. This debate accelerated in the late 1970s as a result of heightened environmental awareness. Local forest planning processes were unable to resolve these differences and the controversy grew with little compromise by the parties involved.

Since 1980, the provincial government has sponsored major community—based planning initiatives to resolve the issues. These initiatives have included the Clayoquot Sound Sustainable Development Task Force and the Clayoquot Sound Sustainable Development Steering Committee.

The Task Force was formed in 1989 to develop a consensus—based sustainable strategy for the Clayoquot area. The Task Force could not come to a resolution on the issue of where logging could proceed while the Strategy was being developed and, as a result, was disbanded in the fall of 1990.

In January 1991, the Clayoquot Sound Sustainable Development Steering Committee (the committee) was formed.

The Committee consisted of representatives from the Nuu-chah-nulth Tribal Council, City of Port Alberni, District of Tofino, Village of Ucluelet, Regional District of Alberni-Clayoquot, and groups representing the interests of aquaculture, environment, fishing, labour, mining, small business, large and small forest companies, and tourism. Government was represented by six provincial ministries and two federal departments.

The Committee had the mandate to develop a strategy that would achieve sustainable development in Clayoquot Sound. The aim was to reach consensus on a final document that would set out:

- the parts of Clayoquot Sound that should be designated for particular purposes;
- management practices for resources in Clayoquot Sound;
- methods to improve the economy of Clayoquot Sound and dependent areas in ways that are ecologically sustainable;
- practices to maintain heritage values, natural diversity, and environmental quality;
 and
- a way to implement the strategy.

The Committee worked with the understanding that if consensus could not be achieved, government would make the decision.

The mandate of the Committee was reconfirmed after the present government took office in the fall of 1991. The Committee's role as a separate consensus process was reiterated when the creation of the Commission on Resources and Environment was announced in January 1992.

The issue of where logging could proceed while a strategy was being developed was referred to a separate provincial government panel involving the Ministries of Environment and Forests. The decision which resulted was not supported by the environmental representatives on the Committee and they left the process in May, 1991. However, an environmental perspective was provided throughout the process by different communities, government representatives and other members on the Committee.

A tremendous amount of time and effort was given by the Committee members to this process. The Committee met at least once a month to exchange views and formulate a strategy. Several subcommittees were tasked with research and analysis of important issues such as fisheries, forestry, aquaculture, natural diversity, tourism, economic development and the importance of the forest sector to the Alberni–Clayoquot Regional District. An extensive information base was assembled and used by the Committee.

The first draft of a strategy was released for public review in January 1992. Six public meetings were held during February and March 1992. The Committee then held numerous meetings along with several workshops to incorporate public input, and produced a second draft of the strategy document. The second draft was released in August 1992.

Following public review of the second draft, the Committee attempted to finalize the strategy. They did agree on many aspects of sustainable development and reached an understanding on some areas that should be designated for protection and on some areas that should be open for development. However, major disagreement remained over what should happen to several intact watersheds, and the degree to which the forest companies could be expected to log in an environmentally sensitive manner. As a result of this deadlock the Committee disbanded in October 1992.

The Strategy Director and Committee Chair prepared a joint report for government outlining areas of agreement and the position of Committee members at the termination of the process.

Following the end of the Committee process, various interests and citizens met with members of government to present their views on appropriate land use options for the Sound.

D. Considerations Underlying the Decision

The government has now made a land use decision for Clayoquot Sound. It is important that the principles underlying this decision be understood.

This decision:

- builds on the limited agreement that was reached. While recognizing that no consensus was achieved on the total land use issue, the Committee process did result in an understanding on some areas that should be designated for development and on some areas that should be designated for protection;
- utilizes the extensive resource information that was collected by both the Task Force and the Committee;

- is consistent with policy directions that will be recommended in the Protected Areas Strategy and the new Forest Practices Code. (Discussion papers to be released in the spring of 1993.);
- reflects the approach that any future forest harvesting in sensitive areas should be carried out under stricter guidelines for protecting environmental and tourism values than has been the case in the past;
- ensures that timber harvesting will utilize alternate strategies to avoid extensive clearcuts and to maintain visual qualities in important areas; and,
- most importantly, reflects a balanced approach between protecting the significant environmental values of the Sound, while ensuring stability for workers, local communities and their economies.

E. The Clayoquot Sound Land Use Decision

1. Protected Areas

(a) Description

Within Clayoquot Sound, 39 100 hectares have previously been protected from development as parks or reserves. The largest areas are within Strathcona Park – British Columbia's oldest park – and the Pacific Rim National Park Reserve. Smaller areas are Maquinna Provincial Park, Gibson Marine Provincial Park, Megin River Ecological Reserve, and Cleland Island Ecological Reserve. Previously protected areas comprise 15 percent of the land area of Clayoquot Sound.

This decision gives protected status to –an additional area of 48 500 hectares, or an additional 18 percent of the land area. The result is that a total of 87 600 hectares, or 33 percent, of the Clayoquot Sound land area is now protected.

These areas are immediately reserved from any new resource development or allocation, including timber harvesting, mineral claim staking and *Land Act* tenures.

The newly created protected areas are:

- **Megin Watershed:** This is the only remaining intact watershed larger than 20 000 hectares on Vancouver Island. The area protected encompasses 21 300 hectares, including the entire Megin watershed and its major tributary, the **Talbot Creek** watershed. This will not only afford protection for significant old growth stands, but will provide expanded opportunities for wilderness–based recreation.
- **Upper Shelter Inlet:** This will add a 3900 hectare natural watershed, to protected area status, consisting of the **Watta and Shelter Creek** drainages. Obstruction Island and a coastal strip on the north and south shores of inner Shelter Inlet and Sulphur Passage are also protected. This protected area totals 6000 hectares. This will ensure protection for this fjord and a scenic gateway to the heart of Strathcona Park.
- **Sydney Inlet:** The Sound's best example of a fjord is included in a 2400 hectare protected area in Sydney Inlet. The protected area also includes the Sydney River estuary and a portion of the river up to Sydney Cone. Provision will be made to allow shipping to pass between Stewardson Inlet and the entrance to Sydney Inlet.

- **Hesquiat Peninsula and Trail**: This 7600 hectare area protects vast sandy beaches, sandstone reefs, sea caves and rugged outer coast and forms a significant wilderness corridor from Hot Springs Cove around Hesquiat Harbour and past the Estevan Point lighthouse along the outer coast. This corridor includes part of the historic west coast telegraph trail.
- **Flores Island:** One–quarter of Flores Island, consisting of 4000 hectares on the western side, will be protected. This provides a scenic wilderness corridor with significant sandy beaches, exposed sandstone reefs and major Sitka spruce stands.
- Vargas Island: The western two—thirds of Vargas Island, an area of 2000 hectares, will protect an important area for wildlife viewing, beachcombing, sea kayaking and other recreation. The adjacent Blundon Island is also protected to preserve an important marine ecosystem.
- Clayoquot Arm/Clayoquot Lake: This area contains 1800 hectares of land. It will protect old growth Sitka spruce, lake and river salmon spawning habitat and opportunities for canoeing, hiking and wildlife viewing. It includes Clayoquot Lake, the lower Clayoquot River and the west side of the Clayoquot Arm of Kennedy Lake.
- Clayoquot Plateau: This 2800 hectare area will protect an exceptional ecosystem containing 29 rare plant species, several occurring only in this location on Vancouver Island. Limestone caves provide an exciting recreation opportunity, as do alpine lakes and karst sink holes.

Six smaller areas, totalling 600 hectares, protect significant ecological and recreational features. They are:

- **Dunlap and Morfee Islands**, protecting a rich marine ecosystem at Calmus Passage, including the rare massive purple ascidian;
- **Dawley Passage and Lane Islet**, protecting a rich subtidal fauna, including white hydrocoral not found elsewhere in British Columbia;
- **Kennedy River Bog**, protecting a low moor, low acid bog, in a region where most bogs are high acid;
- **Kennedy Lake,** adjacent to the Pacific Rim National Park Reserve, protecting additional lakeshore recreation values:
- Tranquil Creek Headwaters, protecting a scenic alpine lake recreation area; and,
- **Hesquiat Lake, protecting** a very rare plant species, dwarf trillium (Trillium hibbersonii), and associated plant communities.

All newly protected areas will be referred to the Protected Areas Strategy to determine the formal designations under which each area will be administered. This might include provincial park, ecological reserve, or alternate designations that arise through the Strategy. In all cases, there will be no resource development in the protected areas identified in this decision.

(b) Ecological Representation

This decision will significantly contribute to achieving the goals of the government's new Protected Areas Strategy for British Columbia. Through the Strategy, protected areas in British Columbia will be increased to 12 percent based on representative ecosystems, recreation features and areas of cultural value.

The ecological objective of the Protected Area Strategy is to protect representative examples of the province's ecoregions and their biogeoclimatic variants. Vancouver Island is broken into two such major ecoregions – Western Vancouver Island and Eastern Vancouver Island. The Western Vancouver Island ecoregion, which includes the Clayoquot Sound area, contains ten biogeoclimatic variants and seven of these variants occur in the Clayoquot Sound area. Five of them are already well—represented in protected areas, or there is a strong possibility they will be protected in other planning processes on the Island.

However, two biogeoclimatic variants are at present not well covered either in the Western Vancouver Island ecoregion or indeed, in all of Vancouver Island. These are:

- very wet maritime coastal western hemlock, submontane (CWHvml); and
- very wet maritime coastal western hemlock, montane (CWHvm2).

The newly protected areas in Clayoquot Sound increase the percentage of CWHvm1 protected on Vancouver Island from 3.4 percent to 5.7 percent, and CWHvm2 from 5.6 percent to 7.7 percent. In addition, these new areas will achieve 46 percent of the goal for the protection of lakes on Vancouver Island, as well as covering a variety of landscape features such as fjords, alpine plateaus and estuaries.

(c) Biodiversity

A particularly important outcome of creating these newly protected areas is that a large natural reserve is now in place that links the interior mountains of Vancouver Island to the ocean shore.

Protecting the Megin and Talbot, as well as the Watta and the Shelter Inlet area, effectively adds 28 000 hectares to Strathcona Park and, combined with Strathcona, will make this area one of the largest areas of temperate old growth coastal forest on the west coast of North America under permanent protection.

The principle of "island biogeography" generally states that the larger the area, the greater the diversity of species and habitats. Large areas, like the now expanded Strathcona Park, are more likely to support "forest–interior" species and to contain complete systems within them. Species within such large areas are more tolerant of natural disturbance because they retain the ability to recolonize from within and, hence, minimize the threat of extinction.

This large, newly protected reserve will foster the maintenance of biological diversity in this important west coast ecoregion.

2. Integrated Resource Management Areas

(a) Description

The majority of the Clayoquot Sound land base has been designated as an Integrated Resource Management Area. Appendix 1 provides a detailed statistical description.

Integrated resource management areas will continue to support various types of economic activity, including timber use and management, fisheries, wildlife, tourism, recreation and mineral exploration and development. Aquaculture activity may occur in the shoreline areas that adjoin integrated resource management areas.

It is the integrated resource management areas which contain the "working forest." The working forest is the land area which will maintain a sustainable forest industry to provide stability for forest workers and dependent communities.

Forest workers, their communities and the forest industry now have assurance that the land use decision in Clayoquot Sound has been made. Existing investment in processing facilities will be at less risk and employees will have assurance of more stable employment over the medium and long term. The employees of the Kennedy Lake logging division, for example, will now have more certainty about the amount of timber that is available for harvesting. The communities of Port Alberni, Ucluelet and Tofino and their residents who depend primarily on timber harvesting and processing will have more stability to plan for the future.

Within the integrated resource management area, areas with special management emphasis have been identified for recreation, wildlife and scenic corridors. Timber harvesting within these special management areas will be managed as required to meet recreation, wildlife, or scenic landscape objectives.

In the **Pretty Girl Lake special management area**, the government will undertake an interagency resource planning process to complete a resource use plan. Timber harvesting will occur in this area but the management emphasis for this plan will be to maintain recreation and associated scenic landscape values in the Pretty Girl Lake and Holmes Inlet areas. The target date for completing this plan will be the end of 1995.

In the **Ursus Creek special management area**, the government will undertake an interagency resource planning process to complete a resource use plan. Timber harvesting will occur in this area but the management emphasis for this plan will be to maintain important wildlife values, notably Roosevelt elk. The target date for completing this plan will be the end of 1995.

Scenic corridors have been designated on 15 percent of the land area in Clayoquot Sound. The government will undertake an interagency resource planning process to complete landscape management plans for scenic corridors. Timber harvesting will occur in these areas, but the management emphasis for these plans will be to maintain key scenic values. The target date for completing these plans will be the end of 1994.

For all of these more detailed plans, affected interests and the general public will have an opportunity to provide input at key stages of plan development.

A map identifying protected areas, special management areas and general integrated management areas is included as Appendix 2.

(b) Implications for Resource Development

This decision resolves the outstanding land use question in Clayoquot Sound. The goal for the working forest is a sustainable harvest level of 600 000 cubic metres per year, which represents a reduction of approximately 33 percent from the previous level. Timber

harvesting at this new level will maintain employment for up to 2175 people in the provincial economy. Through active encouragement of value—added manufacturing, more jobs will be generated from the timber harvest.

The reduction of 300 000 cubic metres per year to the estimated new level of 600 000 cubic metres per year is attributable to:

- 200 000 cubic metres per year for the creation of the additional protected areas in Clayoquot Sound; and
- 1 00 000 cubic metres per year from the constraints on timber harvesting within the areas of special management emphasis and the application of new forest practices.

All estimates of change in harvest are preliminary. Actual changes in allowable annual cut will be determined by the province's Chief Forester as outlined below:

The government will amend the areas of Tree Farm Licences (TFLs) 44 and 54 and the Arrowsmith Timber Supply Area (TSA) to delete the areas identified for protection.

The Chief Forester will require that the TFL holders in the area prepare revised TFL Management Plans (formerly referred to as Management and Working Plans).

The Ministry of Forests will complete a new timber supply analysis for the Arrowsmith TSA.

New Management plans for the TFLs and the new timber supply analysis for the Arrowsmith TSA will reflect the requirements of the special management emphasis areas and the application of new forest practices.

At the new harvest level, approximately 1 000 hectares per year will be logged in small dispersed cutblocks. These cutblocks will be reforested, on average, within 3 to 5 years following harvest.

An emphasis on more environmentally sensitive harvesting systems will also result in more jobs. For most harvest areas, the use of aerial systems which suspend the logs in the air will be required. Aerial systems such as skyline operations usually employ more forest workers to handle the logs.

Harvesting methods such as single—tree selection and group selection methods will be utilized in sensitive areas within the scenic corridors. These alternative methods will also provide more employment.

For the mining sector, 62 percent of the land base remains available for mineral resource exploration and development. The designation of protected areas does mean that some area of high mineral potential are not available for exploration. However, other high potential areas, such as Ursus Creek, remain available for exploration and possible development.

(c) Performance Based operations

A policy of performance based operations will guide timber resource development in the integrated resource management areas within Clayoquot Sound. This means that forest companies, must, on an on–going basis, demonstrate good performance in meeting harvesting and environmental standards. New operations will be approved only when monitoring indicates that operations have been conducted to these standards.

Special timber harvesting standards will be applied to development in the upper Sydney River and upper Clayoquot River drainages. Operations in these areas will emphasize skyline and helicopter harvesting, to reduce road densities and potentially damaging midslope roads. Access to the upper Sydney River drainage will be from existing development in the Mooyah River. Access to the upper Clayoquot River drainage will be from existing development in the upper Kennedy River.

Throughout Clayoquot Sound, timber harvesting plans will be required to incorporate smaller dispersed cutblocks. This will be a significant change from past practices of large clear—cut areas. Lower road densities and a corresponding increase in skyline and helicopter harvesting systems will be a key principle of future forest development plans.

Appendix 1
Clayoquot Sound Decision: Area Assigned to Various Land Use Categories

| | Before 1993 Decision | | After 1993 Decision | |
|---|-----------------------|-------|-----------------------|-------|
| Total Land Area – Clayoquot Sound* | (hectares) 262 600 | 100% | (hectares) 262 600 | 100% |
| Indian Reserves | 1 100 | 0.4% | 1 100 | 0.4% |
| District of Tofino | 1 900 | 0.7% | 1 900 | 0.7% |
| Meares Island | 8 100 | 3.1% | 8 100 | 3.1% |
| Integraded Resource Manage • General Integrated Management | ement Areas 212 400 | 80.9% | 117 400 | 44.7% |
| • Special Management – Recreation | _ | _ | 3 000 | 1.1% |
| – Wildlife | _ | _ | 3 500 | 1.3% |
| – Scenic Corridors | _ | _ | 40 000 | 15.2% |
| Land in Protected Areas | 39 100 | 14.9% | 87 600 | 33.4% |

Source: Government of British Columbia

^{*} The total area of Clayoquot Sound is 350 000 hectares, of which about 87 000 hectares is ocean and lake. The 1993 decision also protects some lake and ocean areas which are not dealt with in this table.

Appendix 2

Map: Clayoquot Land Use Decision 1993

