

May 25, 1994

Gordon Brent Ingram, Ph.D.
Assistant Professor, Environmental planning¹

Report to Western Canada Wilderness Committee,
Natural Resources Defense Council and
Greenpeace International²

Principles for a Long-term monitoring group for Clayoquot Sound and conservation partnerships with Nuu-Chah-Nulth communities

Summary

The March 1994 Interim Measures Agreement and the May 1994 *Progress Report 2* of the Scientific Panel provide some important new opportunities for conservation in Clayoquot Sound. Before the ecosystem-based forestry explored by the Scientific Panel can be implemented on the ground in the next two to three years, an independent and international monitoring group is necessary to fully evaluate the adequacy of the conservation of particular sites, landscapes, processes, and resources. This is particularly important if the boycotts continue and if there is an attempt to re-establish the lost credibility of both the provincial government and the company. But the most strategic value in a monitoring group is to wrest the control of environmental information from the provincial government to the Nuu-Chah-Nulth. This group can highlight the need for more research before permanent impacts from industrial activities are made and can provide regular scientific reviews of a far broader mandate than that of the Panel. A range of types of "conservation partnerships" are necessary for economic development and protection of biological

¹ This report is offered as a public service. There were no funds involved aside from the standard UBC salary. The opinions in this report represent those of the author, solely, and do not necessarily reflect those of the Faculty of Forestry and The University of British Columbia. After June 8, 1994 the best way to make contact is through the off-campus office:

1230 Hamilton Street #204 Vancouver Canada V6B 2S8
telephone: 1(604)669-0422 facsimile in July 1994 1(604)669-2765

² This report was informally suggested by several individuals working in and with these organizations. This report neither implies the involvement of these organizations in the proposed initiatives nor a commitment of these organizations to collaborate on these proposals. I am grateful for the information and ideas provided by Adrian Carr, Paul George, Bill Barclay, Elizabeth Barratt-Brown, Barbara Archer, and Mary-Lou Couch.

resources and ancient forests for particular Nuu-Chah-Nulth communities. In 1994, both more jobs and increased access to information and training in community-based conservation planning are especially necessary. But this is also a crucial time for outside environmental organizations to listen and learn from the varied Nuu-Chah-Nulth communities and to build-up more credible and more personal alliances to assure the viability of conservation partnerships.

Introduction and current situation

The purpose of this discussion paper is to explore some of the opportunities that have arisen for conservation of the biological diversity³ and the wilderness landscape values of Clayoquot Sound with the advent of the March 1994 Interim Measures Agreement⁴ and the May 1994 *Progress Report 2 of The Scientific Panel for Sustainable Forest Practices in Clayoquot Sound*⁵. This discussion is also the follow up to Ingram's February 28 / April 10, 1994 Report to the European Parliament on "The Status of Biological Diversity and Ancient Forest Ecosystems in Clayoquot Sound, Vancouver Island, Canada."

Both the Interim Measures Agreement and the Progress Report provide new **opportunities** for the campaigns to conserve the ecosystems and biodiversity of Clayoquot Sound but **no guarantees**. The Interim Measures Agreement has some provisions for a staff that could be involved in monitoring logging operations, conservation planning, and environmental management⁶ but it is highly unlikely that such an organization will be functioning in the next two years. The Scientific Panel's *Review of Current Forest Practice Standards in Clayoquot Sound* is a very positive step forward. However, the work of the Panel is still largely at the crucial but very tentative step of developing and disseminating some of the **concepts** of ecosystem-based forestry. It may be years before these ideas are codified into new practices "on the ground." However, **it is crucial that the Panel be supported**. The Panel's mandate is not prescriptive nor does it include the requirement to monitor and evaluate "progress" in terms of either less damaging logging and conservation or in terms of determining the status of ancient forest ecosystems, the terrestrial / marine interface, and respective biodiversity in the area at a given point in time. Therefore a more senior, prescriptive, and conservation planning-oriented body would not be in "competition" with the important work of the Panel.

³ For a discussion of the relationship of concerns for biological resources within the broader and more nebulous concept of "biodiversity," see J. H. Vogel. and G. B. Ingram. 1993. Biodiversity versus 'genetically coded functions': The importance of definitions in conservation policy. *RECIEL: Review of European Community & International Environmental Law* (London) 2(2):121 - 125.

⁴ The authors of the "Interim Measures Agreement on Clayoquot Sound" are the Central Regions Chiefs of the Nuu-Chah-Nulth Tribal Council and the Province of British Columbia and it is dated March 19, 1994. It is on file with the British Columbia Ministry of Aboriginal Affairs in Victoria.

⁵ The Scientific Panel for Sustainable Forest Practices in Clayoquot Sound, *Review of Current Forest Practice Standards in Clayoquot Sound - Progress Report 2: Review of Current Forest Practice Standards in Clayoquot Sound*, May 10, 1994, Victoria, Cortex Consultants.

⁶ Board purview under point 7 of the Interim Measures Agreement.

The Panel's May 10, 1994 recommendations include the following points which will either need to be fully supported by the conservation community, or which will require critical interpretation and clarification by a broader community of scientists, planners, and community activists.

In the Executive Summary, there are the following statements.

■ *"Current planning procedures are inadequate for sustainable ecosystem management. The Panel recommends that planning in Clayoquot Sound be ecosystem-based and multidisciplinary; it should integrate the full spectrum of resource values. The Panel further recommends that planning be conducted at ecological-relevant time and spatial scales"* (page 2). The implications of this statement, in the context of the Interim Measures Agreement, is that the April 1993 decisions⁷ and map delineations should be cancelled and a planning process which is centred around Nuu-Chah-Nulth communities and the requirements for maintenance for use and conservation of a range of biological resources needs to be quickly developed. **This imperative to finally develop a viable conservation plan, now under the auspices of the Nuu-Chah-Nulth, needs to be advocated and actively supported by local and international conservation organizations.**

■ *"Care is required in undeveloped watersheds. The Panel recommends delaying activity in undeveloped watersheds until adequate inventories are prepared, exemplary forest practices and silvicultural systems demonstrated elsewhere can be applied, and a prequalification procedure is in place"* (page 2). This was the whole point of the 800+ people who demonstrated in 1993 and the fact that a government-supported panel came to the same conclusion needs to be disseminated. More problematic is the reality that logging interests cannot afford to wait, that the Interim Measures Agreement gives Nuu-Chah-Nulth communities rights to decide when and where logging can occur, and that there is not yet a functioning mechanism for how the Nuu-Chah-Nulth and the Province of BC will jointly determine when logging in "undeveloped" watersheds should occur. And given the global significance of the area as a baseline, very little extraction of old-growth timber, if any, should occur in those watersheds⁸ as long as economic alternatives for the Nuu-Chah-Nulth can be created.

⁷ Province of British Columbia, *Clayoquot Sound Land Use Decision: Key Elements*, April 1993, Victoria, Queen's Printer for British Columbia.

⁸ Unfortunately, "watersheds" can also be used as a codeword for "get the islands" as the islands (other than Vancouver Island) have some of the best timber and a series of small watersheds that could be whittled away one-by-one without concerns for maintenance of the broader landscape units. Islands, like Flores and Vargas, should be recognized as having value for protection of their integrity. Conflicts over logging in Clayoquot increasingly will be over a multitude of smaller watersheds with each, singularly, not being very spectacular.

■ *"These changes are major, and the Panel recommends an implementation plan be established and publicized for those steps requiring significant time to implement"* (pages 2). It is crucial for the conservation organizations to actively support and disseminate this recommendation and to pressure the Province of British Columbia into a swift implementation. Otherwise implementation could drag on for years while substantially more of the areas now with relatively intact ecosystems are clearcut. The recommendations of the Panel have no "teeth" and it may take the threat of continued and expanded boycotts, from both Europe and the US, for the various upcoming governments⁹ of the Province of BC to develop a credible framework.

■ Under the General Recommendations, there are also some key points that must be supported and clarified as based on the development priorities articulated by the Nuu-Chah-Nulth communities as well more global conservation ethics and values.

■ Recommendation 2.3.1 (page 11) mentions marine ecosystems though the mandate of the Panel is still very much limited to "Sustainable Forest Practices" and not the totality of the landscapes of Clayoquot Sound. A broader mandate for analysis of ecosystems in Clayoquot Sound are still needed.

■ Recommendation 2.3.3 (page 11) is particularly crucial and contentious. It calls for setting desired levels of *"good and services to be produced from Clayoquot Sound (e.g., cubic metres of wood, visitor days) through a comprehensive ecosystem assessment and planning process."* But this is not purely a technical exercise and there are numerous questions of social equity and distribution of costs and benefits. The role of the conservation organizations, in the construction of such highly politicized models of goods and services output, can be to advocate:

1. to assure that the various Nuu-Chah-Nulth communities and sectors are fully considered in fair distribution of "goods and services" and environmental costs and benefits;
2. to assure that a balanced and secure shift to sustainable livelihoods lays the basis for economic development for the Nuu-Chah-Nulth communities while assuring jobs for the largest portion possible of the

⁹ These are unstable times and it should be assumed that there may be a series of governments in power in British Columbia over the next five years that may only partially involve Michael Harcourt and the New Democratic Party. There could be major cabinet, policy, and leadership changes. Subsequent conservation campaigns and their economic impacts could influence future governments and policy.

areas non-native populations;

3. to assure that the global significance of these relatively intact ancient forest and terrestrial-marine ecosystems, in terms of research, education, and research, are not neglected and the risk standards for minimizing loss of resources and degradation of ecosystems are high.

■ *"Broaden the silvicultural systems used in Clayoquot Sound, beyond clearcutting. Select appropriate silvicultural systems to maintain natural landscape patterns and stand structures, and to meet a variety of management of objectives other than timber production."* (page 12) This is the most understated point in the entire document. **But "broaden" still suggests means allowing some clearcutting.** The conservation organizations should continue to advocate against the removal of trees from old-growth forest ecosystems until the new "systems" are fully established that maintain full sets of respective ecosystem processes. But if the government spends three years to develop these approaches while continuing with the current logging practices much of the ancient ecosystems of Clayoquot Sound will be lost. In the 1994-95 campaign, "time is of the essence."

■ *"Establish appropriate phase-in period for standards requiring major changes to current practices. This will allow stakeholders times to adjust and will help to ensure compliance"* (page 12). It is crucial that the new conservation campaigns work to pressure the Government of British Columbia to give as much support to making this "phase-in period" as rapid as possible while minimizing short-term economic losses to Nuu-Chah-Nulth and non-native communities. It is important to note that there are still considerably more resources available for non-native timber industry workers and enterprises, for the transition to "sustainability," than there is to support the Nuu-Chah-Nulth in economic development. It is crucial that the conservation organizations be active in and calling for "picking up the slack."

A central role of the 1994-95 campaign for Clayoquot Sound should be to assure that the Government of the Province of BC responds to these recommendations in a timely manner and to indicate an indefinite commitment to public advocacy, support for the development of the economies of the Nuu-Chah-Nulth communities, and even to the use of consumer boycotts to conserve the area's biological diversity and wilderness values.

The Nuu-Chah-Nulth communities of Clayoquot Sound have various historical relationships to conservation movements and initiatives, assertion of traditional tenure and stewardship of their lands, logging, and the need for increased jobs and services. Conservation organizations must be prepared to listen and work with particular communities, sectors, and groups for a protracted period. In deed, one of the major questions in native communities in Clayoquot Sound is of who is really committed to staying and working within the emerging frameworks of the Interim Measures Agreement,

and whatever forms of joint management that are established, and of who are more like tourists. Only two groups that have established themselves, in the minds of many in the Nuu-Chah-Nulth communities, as having long-term commitments to the area is Western Canada Wilderness Committee (WC²) and the Natural Resources Defense Council (NRDC) through its association with Robert Kennedy Jr. But without increased contact, information, jobs, and other kinds of tangible "support" even these bonds will be inadequate for formation and maintenance of the kinds of long-term "conservation partnerships" that can counter the pressures and enticements of the logging companies.

Solutions to the problems just mentioned can be divided into a concept of an international monitoring group and strategies for development of a range of new conservation partnerships involving particular alliances between organizations, institutions, and individual Nuu-Chah-Nulth communities, groups, and sectors.

The formation of independent assessment and monitoring groups for forest lands in western North America

There have been a number of assessment and monitoring groups formed around forest lands in recent years. The underlying roles of many of these groups has been to assess that charges that timber harvesting operations are uneconomical and require continued and increased public subsidies while causing more damage to habitats and biological resources than originally foreseen. The most relevant group is that of the one that is currently meeting for the Tongass National Forest¹⁰ in southeastern Alaska which was set up by the Jack Ward Thomas, the Director of the USDA Forest Service.

There are few good models of forest land use planning assessment groups in Canada at the present time. More problematic, is the fact that the US groups have formed and made decisions **after** there has been considerable research and assessments under the rubric of Federal U.S. legislation like "NEPA" while environmental impact assessments are not required for cutting plans in British Columbia¹¹, even at the scale of the April 1993 decision. Most forest lands assessment groups, in the U.S. context, are generally mandated to assess the overall logic and viability of plans and their respective environmental impact assessments as times, economic conditions, and public ethics change. For such reviews in British Columbia, the mandate of an assessment and monitoring group will be required to be even broader because the initial information, that is required for a standard environmental impact assessment for such large areas, has not yet been collected.

A partial list of the functions of these assessment bodies include the following.

- The adequacy of the information base of the land use decision can be assessed. Information gaps can be identified and priorities for future research can be highlighted.

¹⁰ For a background on the Native dimension of the debate on logging in the Tongass, and one that is relevant to planning in the Clayoquot, see Stephen W. Haycox' 1990 "Economic development and Indian land rights in modern Alaska: The 1947 *Tongass Timber Act*," *The Western Historical Quarterly* XXI(1): 21 - 46.

¹¹ For a list of the projects where environmental impact assessments are necessary, see "What is a reviewable project" pages 7 and 8 of *Overview: An update on the environmental assessment project* (Victoria): April 1994.

- The implications of new findings of current and projected impacts can be considered against the logic and specific decisions of the forest land use plans. For example, were newer projections on the impacts of global warming on sea level changes fully explored in the original planning processes?
- The nature of the cumulative risk of industrial operations and other activities to specific elements of biological diversity, such as with the Northern Spotted Owl on the Pacific Northwest mainland, can be more carefully considered as new data, theory, and perspectives come to light.
- Indicators¹² can be identified and measures can be more precisely established for ongoing "adaptive management"¹³.
- Landscape-wide processes, such as the many often lumped under the heading of "fragmentation"¹⁴ can be more carefully considered and monitored.
- The short and long-term costs, benefits, and trade-offs can be more fully considered particularly in terms of more specific ecological and social criteria for "sustainable development."

Rationale for an independent monitoring group for Clayoquot Sound

There are three major reasons why a separate monitoring group for Clayoquot Sound is necessary:

1. to have broader terms of reference than the Scientific Panel;
2. to minimize conflict of interests; and to
3. better use the pool of international expertise in developing both high standards and creative solutions.

¹² For a discussion of indicators for monitoring the status of local biological diversity on the BC coast, see Ingram, G. B. 1992. Landscape indicators for conservation of biological diversity: An example from Haida Gwaii, British Columbia. In *Landscape Approaches to Wildlife and Ecosystem Management*. G. B. Ingram and M. R. Moss (editors). Morin Heights, Quebec, Polyscience. 99 - 134.

¹³ On page 10 of *Progress Report 2*, the Scientific Panel notes that,
"Adaptive management rigorously combines management, research, and monitoring so that credible information is gained and management activities can be modified by experience."
There are some other components to the concept of adaptive management that are often used. A key additional concept is that of not making decisions of a relatively permanent nature, such as the removal of old-growth trees and the alteration of the forest, until there is an adequate knowledge base at the necessary scales.

¹⁴ For a discussion of the synergistic affects of loss of primary forest on islands, see Ingram, G. B. 1992. Fragmentation: Towards an expanded of the vulnerability of forest habitats on islands. Proceedings of the symposium, *In Harmony with Nature, International Conference on the Conservation of Tropical Biodiversity*. Kheong, Y. S. and L. S. Win (editors). 94 - 121. Kuala Lumpur, Malaysia, Malayan Nature Society.

The monitoring group for Clayoquot Sound will need to include the following short-term functions that are presently not being carried out by other organizations.

- Many of the recommendations of the Scientific Panel will need to be fully reviewed and supported by international conservation institutes and organizations.
- The Scientific Panel for Sustainable Forest Practices in Clayoquot Sound has neither a mandate for on-going monitoring (being scheduled to disband later in 1994) or for assessment and prescriptions for specific areas and sites. A broader assessment and monitoring group is therefore necessary.
- Monitoring is needed to determine the status of indicators, biological resources, ecosystem and landscape processes, and timber availability changes of timber harvesting programmes and the viability (and credibility) of the government "phase-in" schedules¹⁵.

The objectives of an independent monitoring group could be the following.

- The status of the ancient forest and terrestrial / marine ecosystems and associated biological diversity of Clayoquot Sound have yet to be fully assessed as a global resource¹⁶ and the findings disseminated.
- A monitoring concept has yet to be developed that recognizes that Clayoquot is a series of cultural landscapes formed by many generations. Traditional land use practices and species can provide at least a partial basis for both monitoring and articulating priorities for conservation¹⁷ but this will require cautious scientific supervision.
- It is crucial that there be close tracking of landscape level processes such as fragmentation and the implications of logging, roads and other industrial sites for the integrity for the ecosystems of Clayoquot Sound on an ongoing basis.

¹⁵ Given the way that Premier Harcourt has made so many promises and suggested that timber harvesting in BC has already become exemplary while so little has actually change on the ground, such monitoring by an independent body will be crucial for pressuring for real progress in conservation and sustainable timber harvesting.

¹⁶ For a discussion of the global significance of the remaining islands with large tracts of primary rainforest see Ingram, G. B. 1992. The remaining islands with primary rainforest: A global resource. *Environmental Management* 16(5): 585 - 595. Issue on problems on small islands.

¹⁷ For a discussion of the efforts of island peoples to define their own criteria for conservation, see Ingram, G. B. 1990. The need for knowledge from indigenous communities in planning networks of protected habitat for the conservation of biological diversity: Three island settings. In *Ethnobiology: Implications and applications*. Proceedings of the First International Congress on Ethnobiology (Belem, Brazil 1988). Part 2. M.J. Plotkin (ed.), pp. 87-105, Belem, Para, Goeldi Museum.

- The monitoring group could compile evaluations of the prospective impacts of new timber harvesting practices and operations.
- A particularly key function of the monitoring group would be to provide information to and answer the questions of the Nuu-Chah-Nulth communities as related to the impacts of proposed operations and the requirements for viable conservation.
- The monitor group would be the only independent body of experts to conduct assessments and reviews of the situation in Clayoquot Sound as related to proposed consumer boycotts and the eventual lifting of such boycotts.
- The monitoring group would disseminate information on the status of the biological diversity and wilderness values of Clayoquot Sound, at particular points, and make regular reports.

Some principles for an independent monitoring group for Clayoquot Sound

- Assessments should be made independent of government, industry, and donations-based NGOs.
- Conflict of interest in scientific reviews should be minimized.
- The monitoring group should be (critically) supportive of the work of the Scientific Panel for Sustainable Forest Practices in Clayoquot and should avoid judging it.
- The monitoring group should represent the highest level of theoretical, field-based, and international expertise available.
- The monitoring group should focus on actual physical conditions on the ground and not with the various promises and top-down policy changes (which may take years to produce actual conservation and tangible benefits).
- The monitoring group should highlight **both** the achievements and deficiencies in the current Province of BC policies and decisions on Clayoquot Sound.
- The monitoring group should recognize the Nuu-Chah-Nulth as the "sovereigns"¹⁸ of Clayoquot Sound and work directly with them on that basis.

¹⁸ For a discussion of the significance of sovereignty in asserting rights over various "public" resources, see University of Victoria professor R. B. J. Walker's 1994 "Sovereign identities and the politics of forgetting," *Public* (Toronto) 9: 94 - 117.

■ The monitoring group should become a central vehicle in the conservation partnerships through providing information, and related education and training, that is accessible to the people of those communities and which translates the discussions between outside experts into concepts meaningful to local life and to the various development efforts of the coming years. The information and basic skills of the monitoring group should be transferred after 3 to 5 years directly into the hands of the Nuu-Chah-Nulth communities.

An administrative framework for a monitoring body for Clayoquot Sound

name: (International or Independent) Monitoring Group for Clayoquot Sound

mandate and charter:

- The first function of the group would be to monitor the status of ancient forest and coastal ecosystems and the respective biological diversity.
- The second function could be to monitor the nature and extent of the conservation (and related planning and management) in the area.
- The third function could be to monitor the short and long-term impacts of environmental policies, tenure decisions, and particular operations on the economies of the Nuu-Chah-Nulth communities.
- The fourth function would be to disseminate information on the situation in Clayoquot Sound by a balanced and interdisciplinary group without conflict of interest.
- The fifth function of the group would be to advocate and develop educational and training programmes in conservation and conservation-based economic activities for the Nuu-Chah-Nulth communities.

independence and lack of conflict of interest:

One of the main reason for this group is that there has been such a high degree of conflict of interest in the decisions, recommendations, and writings around Clayoquot Sound. Consequently, the conflict of interest rules should be particularly strict.

- Members should remove themselves from participation in the group while they are proposing or participating in a BC government project or contract or a federal government of Canada project or contract related to British Columbia.
- Members should remove themselves from participation in the group while they are employees or board members of environmental groups active in Clayoquot Sound.

- Members should remove themselves from participation in the group while they are employees or board members of economic enterprises active in Clayoquot Sound or if they hold any related financial interests.

institutional affiliation:

The secretariat of the monitoring group needs a home and an institutional umbrella; one that is actively involved in conservation and assessment of biological resources and environmental monitoring as well as training and technology transfer. The following are some possibilities.

- **UBC First Nations House of Learning, UBC** and allied programmes - This institute does not have much involvement in environmental science. But the development of a monitoring framework to transfer to the Nuu-Chah-Nulth will require special consideration of the needs for special preparatory and cross-cultural education and training programmes. This institute should probably have a central role in the "transfer" aspects of the monitoring group.

- **Centre for Applied Conservation Biology, UBC** - This would be a logical choice but virtually all of the funding for this group goes through one individual, Fred Bunnell who is the Co-Chair of the Scientific Panel. More problematic is the fact that the Centre has not broadened its funding base beyond several ministries of the Government of BC.

- **Institute for Sustainable Development, UBC** - This is a new institute and still very much focused around its Director, John Robinson. They have not been very active in conservation or looking at timber harvesting through Hammish Kimmins is involved.

- **other institutes at southern BC universities** - Simon Fraser University and the University of Victoria are fairly small and do not have many research institutes in related fields. UVic's Department of Geography and Environmental Studies Program have the most long-running involvements in more balanced scientific inquiries in the impacts of logging operations and in conservation planning¹⁹.

- **Harvard Institute for Economic Development** - This group is quite active in running grants for biodiversity conservation related to development.

- The University of London, UK office of **FIELD (Foundation for International Environmental Law and Development)** is active in exploring frameworks for

¹⁹ For a general discussion of conservation planning for islands with primary rainforest, see Ingram, G. B. 1991. Biological, visual and recreational values and the planning of extractive development and protected areas: A tale of three islands. *Landscape and Urban Planning* (Amsterdam) 21: 109 - 129.

monitoring of biological resources especially where there are economic and legal issues related to genetic resources and the *Convention on Biological Diversity*.

Given the importance of Clayoquot Sound, and the debates over it, there should be at least several institutes that want to take leadership in these conservation-monitoring-development efforts and which are willing to compete for such a project through providing some of their own "overhead."

membership:

- Senior experts on biological diversity, temperate old-growth forests, related shore ecosystems, fragmentation, traditional island societies land management and tenure, and wild species genetic resources are needed.

- Some of the experts should have had experience with other review and monitoring groups.

- Several people, some of whom will probably be less established, who are active in field work in the area and in development of new field research techniques for better assessment and monitoring of biological diversity, are also needed.

- There will need to be several economists oriented to diversification, ecotourism, and sustainable development of traditional (First Nations) island communities.

- There is an art to conservation planning and adaptive management and several of the participants will need to be experts in environmental planning.

the chair or co-chairs:

- The chair(s) should be elected annually by the group and should be charged with setting priorities for research and review group achievements.

- The concept of a dual chair, with a respective Nuu-Chah-Nulth elder²⁰, should be explored.

executive secretary / administration:

- The Executive Secretary would be appointed by both the donors and the other members and would be the only member of the monitoring group where a contract for administration and research services would be necessary. The same strict rules of conflict of interest would apply.

- The Executive Secretary would be charged with overseeing the research requested

²⁰ The Co-Chair of the Scientific Panel is Dr. Richard Atleo, Hereditary Chief UMEEK.

by the Chair, coordinating communications, disseminating the group's findings, coordinating training, reporting to the donor group, and supervising the project assistant.

- At least a half-time project assistant would be needed.

communications, meetings, and decision-making process:

- Exchange of most information could be by mail and email.
- Some decisions can be made by email.
- There would be at least one meeting in the area annually to approve assessments, reports, and related research and to set new priorities for information collection. A second annual meeting might be necessary.
- Where possible, decisions could be made by consensus.
- Where consensus cannot be reached, the chair(s) and the executive secretary have the right to call a vote with minority opinions recorded and disseminated with the majority decision.

field work:

It will be important to liaise with the other field work initiatives in the area such as the following:

- the Citizen Witness Project;
- the airplane reconnaissance program;
- any research that is formally undertaken under the Interim Measures Agreement;
- any independent environmental research based in Tofino; and
- any subsequent provincially and federally funded initiatives and subsequent data bases.

funding:

Including dissemination, an executive, and a part-time assistant, a minimum budget of \$150,000. per year is probably necessary. However, this could be scaled back with a less ambitious set of objectives.

donors:

It would be optimal to have at least 5 donors and these might include environmental groups, foundations, companies (highly unlikely) and government agencies.

donor group:

The donor group would be limited to concerns over effectiveness, administration, and procedure and might meet semi-annually. It could have its own executive to oversee reviews and audits.

First Nations conservation initiatives in British Columbia

Conservation initiatives by First Nations communities have come to take on a central role in "environmentalism" and the political economies of the BC coast. In the past decade, a range of native and non-native alliances have formed around imperatives for conservation of a number of relatively intact forest and marine habitats and resources. First Nations conservation initiatives on the BC coast are similar to community-based movements going on in a number of other islands with remaining primary forest in the Pacific Rim²¹. Perhaps the most clear departure from the "comanagement" that is being developed in many protected areas in Canada's north, with its heavy emphasis on Government of Canada control, is the Haida concept of "joint management" for Gwaii Haanas²².

The Ahousat Band of Clayoquot Sound have been very active and successful with asserting hereditary title over Meares Island for more than a decade. But what has also been remarkable is the lack of ongoing support that they have received from outside environmental organizations with the exception of WC².

Implications of the Interim Agreement with the Nuu-Chah-Nulth and the Province of British Columbia for conservation in Clayoquot Sound

Whatever "sustainable" conservation occurs in Clayoquot will involve the decisions and active support of the Nuu-Chah-Nulth communities. Whatever new conservation occurs in Clayoquot will involve the initiatives of at least one Nuu-Chah-Nulth community. More importantly, the Nuu-Chah-Nulth communities have the right to construct their own conservation, tenure, and development frameworks. As the Haida did over a decade before, the Nuu-Chah-Nulth could declare their own conservation areas and their boundaries and even a biosphere reserve - with their own conservation and development priorities²³. They

²¹ For a discussion of activism for the conservation of intact primary forest and marine ecosystems see Ingram, G. B. 1994. Rainforest conservation initiated by traditional island communities: Implications for development planning. *Canadian Journal of Development Studies* XV (2). (Ottawa). Also see Eugene Linden's "Our home and native land," *Time* May 2, 1994, 46 - 47.

²² For a discussion of the efforts of the Haida, see Ingram, G. B. 1994 (in press). Institutional obstacles to conservation of habitat and biological diversity on *Gwaii Haanas*, British Columbia 1851 - 1993. *Forest and Conservation History* (North Carolina).

²³ For a discussion of the divergent social priorities that can be used for development and management of biosphere reserves, see Ingram, G. B. 1990. The management of biosphere reserves for the conservation and utilization of genetic resources: The social choices. *Impact of Science on Society* (Paris) 158: 133-141.

could develop their own programme as sovereigns (or more likely in collaboration with the Government of Canada) to participate in the *Convention on Biological Diversity*²⁴.

Aside from these new potentials for autonomy, the current reality for these Nuu-Chah-Nulth communities is far more difficult. A great number of the young do not finish high school and the few who want to go to college or university have few opportunities to do so. Monitoring, information, and conservation partnerships must be based in supporting more educational, training, and job opportunities for youth.

Some principles for supporting community-based conservation initiatives by the Nuu-Chah-Nulth

■ Each of the Nuu-Chah-Nulth communities have different needs and perspectives and may often have differing priorities for conservation development. While conservation scientists and advocates must take great care to not be divisive, it is equally important to work with each Nuu-Chah-Nulth community on their own terms and to link programmes across Clayoquot Sound only after the initiation of specific Nuu-Chah-Nulth communities and groups.

■ Outside scientists and environmentalists, from other parts of Vancouver Island or from other parts of North America, must spend considerable time **listening and learning** about traditional land management²⁵ before we will be able to fully support the conservation initiatives of these communities.

■ Particular Nuu-Chah-Nulth communities may choose to develop their linkages with various local, bioregional, national, North American, and overseas organizations. Unconditional support from "environmental" groups is necessary. To a very really extent, the environmental groups will develop successful alliances with Nuu-Chah-Nulth when they contribute to decolonization of the area and are not perceived as part of recolonization processes.

Some frameworks for supporting community-based conservation initiatives

Employment and related training

- Further documentation and re-establishment of traditional tenure and use
- Development of ecotourism and cultural tourism enterprises owned by Nuu-Chah-Nulth communities and individual partnerships
- Surveying and documentation of various categories of genetic resources²⁶

²⁴ The Convention was ratified on December 30, 1993 and text referred to here is dated June 1992 (on file Environmental Law and Institutions Programme Activity Centre, UNEP, Nairobi).

²⁵ On page 15 of *Progress Report 2*, the Scientific Panel highlights the traditional system of land and resource management called *HaHuulhi*.

²⁶ Of the categories of genetic resources, traditionally used species and wild relatives of crops are the most promising. There are a number of traditionally used species with promise for introduction into production and a remarkable number of wild relatives of crops of interest to European breeders including species in the following

and biodiversity prospecting and development of a framework for intellectual property control²⁷ over the genetic resources of Clayoquot Sound such as under the rubric of the *Convention on Biological Diversity*²⁸

Information transfer

- Conservation concepts
 - Environmental science and monitoring techniques
 - Conservation planning
 - Genetic resources and the implications of the *Convention on Biological Diversity*
-
- Technology transfer
 - Communications
 - Use of digital information and storage
 - Geographic information systems
 - Ecotourism and hospitality

Recommendations for the 1994 and 1995 campaigns for conservation in Clayoquot Sound

1994 will need to be the year for "catching up" in terms of listening, learning, and exchange between particular Nuu-Chah-Nulth communities and conservation groups. Opportunities to make more personal contact in ways that impress particular Nuu-Chah-Nulth communities that there is the basis for long-term prospects are crucial.

Along with the greater personal contact are some projects that would contribute to

genera: apple / pear, *Pyrus* sp.; currant, *Ribes* spp.; berries, *Rubus* spp.; blueberry, *Vaccinium* spp.; and strawberry, *Fragaria* spp.

²⁷ See Michael A. Golin's 1993 "An intellectual property rights framework for biodiversity prospecting," In *Biodiversity Prospecting*. Washington DC, World Resources Institute, 159 - 198.

²⁸ The Nuu-Chah-Nulth, through support from bodies like the monitoring group, could take on responsibilities related to the following articles of the Convention and develop national and international funding arrangements:

- Article 8. In-situ Conservation;
- Article 12. Research and Training;
- Article 14. Impact Assessment and Minimizing Adverse Impacts;
- Article 15. Access to Genetic Resources;
- Article 16. Access to and Transfer of Technology;
- Article 17. Exchange of Information;
- Article 18. Technical and Scientific Cooperation;
- Article 19. Handling of Biotechnology and Distribution of its Benefits.

For a more radical vision of traditional communities taking control of local protected area management through funding mechanisms linked to genetic resources, see Joe Vogel's *Genes For Sale*, New York, Oxford University Press, (summer) 1994.

long-term conservation partnerships.

■ **paid training** - If the Nuu-Chah-Nulth are to define their own conservation and development needs, it will be necessary to have more access to a range of conservation concepts and information. One alternative would be to have paid training in conservation, collection of baseline environmental data, and more extensive monitoring and run the programme through the high school at Ahousat. Related courses could be subsequently developed in mapping traditional lands, biodiversity prospecting, ecotourism, and hospitality,

■ **the setting of conservation development priorities by each Nuu-Chah-Nulth community** - The initiation of a fund or lines of credit, along with a technical support program, for Nuu-Chah-Nulth enterprises that would be conservation-dependent would be highly advantageous.

Priorities activities for the monitoring group in 1994-95 can include the following.

■ **setting priorities for biodiversity inventories** - Reviews of the biogeographic data are necessary as is publicizing the gaps in information for areas, organism, and ecosystem types.

■ **gap analysis for strategic tracts of old-growth forest and terrestrial / marine habitat** - The protected areas established in April 1993 should be analyzed along with information on all of the remaining primary forest mosaics. A gap analysis can be made with the most strategic unprotected forests identified for additional conservation. Over the next three years, this could lead to redesign of the protected areas of Clayoquot with identification of large areas of primary forest that need additional protection from industrial timber harvesting.

■ **identification of strategic corridors** - In areas where logging is scheduled, additional strategic sites as possible "corridors" could be identified for additional conservation.

■ **compilation and review of digital information** - The government data bases on Clayoquot Sound, such as that of the Ministry of Forests Inventory Branch and the one recently developed by the Ministry of Tourism and Small Business, should be evaluated and the valid data integrated into that of the monitoring group (which would be eventually be transferred to the Nuu-Chah-Nulth communities).

■ **focus on the sensitivity of island ecosystems** - The impacts of additional industrial logging on the islands (other than Vancouver Island) could be assessed with a subsequent statement and distribution of information on the importance of conservation of intact island ecosystems. Similarly, the most

rich and strategic shore and shallow marine ecosystems can be identified for removal of the threat of industrial activities such as log booming.

■ **identification of areas that should remain roadless** - The impacts of roads could be more fully assessed with sensitive areas, that are still under pressure for logging, identified as requiring roadless industrial operations.

gordon brent ingram Ph.D.

1230 Hamilton Street #204 Vancouver Canada V6B 2S8

telephone: 1(604)669-0422 facsimile: 1(604)822-8640 / after June 1994 1(604)669-2765

May 24, 1994

Liz Barratt-Brown, Natural Resources Defense Council

Bill Barclay, Greenpeace International

Adrian Carr and Paul George, Western Canada Wilderness Committee

RE: Transmissions of report:

"Principles for a long-term monitoring group for Clayoquot Sound and conservation partnerships with Nuu-Chah-Nulth communities"

Dear Colleagues,

Enclosed are copies of my report to your organizations. You have my permission to use it in any way that you would like including reproducing and quoting.

I remain very interested in possibilities of working with you and an independent scientific group on these initiatives. I doubt that I will be able to do this as a member of the faculty of The University of British Columbia. My contract was not renewed - a year before I would have gone up for the tenure review (when there are more rights for the protection of free speech). However, I have still been able to go ahead with a human rights case, under Province of BC legislation, arguing that my removal is a silencing of a particular set of perspectives, with political dimensions, and that the push for clearcutting has constituted a *de facto* "party line" within the UBC Faculty of Forestry.

In the meantime, I am looking for a research position, possibly with some teaching responsibilities, as well as consulting contracts. I will be in the Boston and New York areas from June 8 to July 4 but if any of you want to talk, please call me here and I will pickup the messages.

With best wishes for the meeting in early June.

Sincerely,

direct telephone 1(604)822-5271

direct facsimile 1(604)822-8640

June 7, 1994

file:a:\clayoquot94\6-94

Gordon Brent Ingram, Ph.D.

Assistant Professor, Environmental planning²⁹

Legal implications of the early 1994 analyses and scientific recommendations for Clayoquot Sound

This brief is an exploration of the legal implications of two reports released in early 1994:

1. Ingram's UBC February 28 / April 10, 1994 Report to the European Parliament on "The Status of Biological Diversity and Ancient Forest Ecosystems in Clayoquot Sound, Vancouver Island, Canada" and

²⁹ This report is offered as a public service. There were no funds involved aside from the standard UBC salary. The opinions in this report represent those of the author, solely, and do not necessarily reflect those of the Faculty of Forestry and The University of British Columbia. For more information and updates, also contact this off-campus office:

1230 Hamilton Street #204 Vancouver Canada V6B 2S8
telephone: 1(604)669-0422 facsimile in July 1994 1(604)669-2765

Legal implications of the early 1994 analyses and scientific recommendations for Clayoquot Sound

2, the May 10, 1994 Progress Report 2 of The Scientific Panel for Sustainable Forest Practices in Clayoquot Sound³⁰.

Ingram's February 1994 report confirmed that standard scientific research and environmental planning methods had not been used in the April 1993 decision of the Cabinet of the Government of British Columbia. The Scientific Panel for Sustainable Forest Practices in Clayoquot Sound recommendations³¹ of May 10, 1994 include the following points and include a remarkably similar logic to that of the 1993 demonstrators that blockaded logging operations in Clayoquot Sound.

In the Executive Summary, there are the following statements.

■ *"Current planning procedures are inadequate for sustainable ecosystem management. The Panel recommends that planning in Clayoquot Sound be ecosystem-based and multidisciplinary; it should integrate the full spectrum of resource values. The Panel further recommends that planning be conducted at ecological-relevant time and spatial scales"* (page 2).

There are, of course, (development and conservation) planning procedures, that are well accepted and used in Canada, the United States, in western Europe, and even in parts of the developing world that could have been applied in Clayoquot Sound. But these approaches would probably have required:

1. a reduced **rate** of cut which might of undermined investor confidence and
2. a more ecosystem-based approached to land management that was more precise in terms of both site-specificity and cognizance of landscape processes.

■ *"Care is required in undeveloped watersheds. The Panel recommends*

³⁰ The Scientific Panel for Sustainable Forest Practices in Clayoquot Sound, *Review of Current Forest Practice Standards in Clayoquot Sound - Progress Report 2: Review of Current Forest Practice Standards in Clayoquot Sound*, May 10, 1994, Victoria, Cortex Consultants.

³¹ The "Scientific Panel" includes a wide range of largely BC-based scientists most with close ties to provincial agencies and respective funding and contract sources. The members were chosen and appointed by the Office of the Premier of BC in 1993.

Legal implications of the early 1994 analyses and scientific recommendations for Clayoquot Sound

delaying activity in undeveloped watersheds until adequate inventories are prepared, exemplary forest practices and silvicultural systems demonstrated elsewhere can be applied, and a prequalification procedure is in place" (page 2). This was the most common of the 800+ people who demonstrated in 1993 and the fact that a government-supported panel came to the same conclusion needs to be considered carefully.

■ *"These changes are major, and the Panel recommends an implementation plan be established and publicized for those steps requiring significant time to implement"* (pages 2).

■ Under the General Recommendations, there are also some key points that confirm the motivating position of some of the demonstrators.

■ Recommendation 2.3.3 (page 11) is particularly crucial and contentious. It calls for setting desired levels of *"good and services to be produced from Clayoquot Sound (e.g., cubic metres of wood, visitor days) through a comprehensive ecosystem assessment and planning process."* All modern approaches to land use planning suggest that such analyses be initiated **before** cutting in wilderness landscapes is initiated.

■ *"Broaden the silvicultural systems used in Clayoquot Sound, beyond clearcutting. Select appropriate silvicultural systems to maintain natural landscape patterns and stand structures, and to meet a variety of management of objectives other than timber production."* (page 12)

Concerns for the permanent damage of clearcut logging, at excessive scales and rates of cutting, was also a central concern of the demonstrators.

Conclusions

Neither the planning of conservation nor timber harvesting, in the April 1993 decision on Clayoquot Sound by the Cabinet of the Government of BC, was based on adequate data nor were land use decisions sufficiently clear or precise. This was confirmed in both a UBC study and one by Government of BC appointees. Since the 1993 Clayoquot demonstrators expressed similar concerns for the decision and some of the timber harvesting operations associated with it, as the central motivations in their behaviour, there should be a basis for arguing that a crisis of conscience is a viable defense against the charge of contempt of court related to the injunction that was based on the faulty land use planning process.