The Role of Education in Environmental Impact Assessment: An Analysis of Practical Reasoning about the Tsitika Watershed Issue

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CAQ  Critical analysis questionnaire
EIA  Environmental Impact Assessment
JSKWC  Johnstone Strait Killer Whale Committee
TFC  Tsitika Follow-up Committee
YesP  Yes Position
NoP  No Position
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EXECUTIVE SUMMARY

This study explored the need for education designed to improve the practical reasoning ability of environmental impact assessment (EIA) participants. A questionnaire format known as the J-Test was utilized to investigate the reasoning of key participants in a Federal Environmental Assessment Review process dealing with a controversial integrated resource management issue in the Tsitika Valley, British Columbia. Questionnaire respondents included members of governmental committees (hereafter referred to as committee members) involved in management of the area as well as other, independent participants (non-committee members) in the ongoing debate over potential environmental impacts. Characteristics of the practical reasoning of committee and non-committee members were compared using criteria developed by the Association for Values Education Research, University of British Columbia.

Questionnaire results revealed that many respondents were polarized in their viewpoint; were unable to appreciate the significance of the position of the opposite side; and held widely varying interpretations of the significance of impacts. In probing the justification of their positions, respondents felt uncomfortable answering questions about the implications of their reasoning; had difficulty considering themselves in the role of others who might have been adversely affected; and were unwilling to adjudicate between competing points of view about impacts (such as aesthetics and wildlife). The majority of respondents indicated that they had no formal education in critically assessing or justifying positions on controversial issues and nearly half of the respondents had neither formal education nor any previous experience in EIA.

Differences in reasoning seemed to exist between committee and non-committee members. The data suggested that compared with non-committee members, those in committees were less certain of their positions; chose fewer reasons in support of their positions; were more interested in modifying their chosen reasons; and were less willing to answer questions testing their understanding of principles implied by their reasons. Also more committee members had some formal education in critically assessing issues as well as some experience in EIA. These differences may be the result of committee members’ experience in negotiating among competing interests in the issue. Overall the questionnaire results suggest areas in which the practical reasoning of respondents could be enhanced. Education could play a role, both in the short-term for individuals currently engaged in EIA, and in the long-term for future EIA participants. The J-Test questionnaire format was successful in demonstrating the problems in practical reasoning as well as in generating considerable descriptive material of potential use towards resolving conflict among interest groups in an EIA.
1.0 INTRODUCTION

Environmental Impact Assessment (EIA) “generally refers to assessment by government agencies or the proponent of the potential impacts of a proposal on the natural environment” (Andrews and Higham 1986:2). EIA "recognizes a role for the public (as distinct from experts and bureaucrats) in assessing the kind of environmental quality that is to be preserved or enhanced” (Whitney and Maclaren 1985:1). Whether the participants in EIA are experts, bureaucrats or the public, all are engaged in evaluating and judging impacts of proposals on the social and biophysical environments. Hopefully, their judgments are based on sound reasoning about the issues involved. This reasoning is grounded in critically assessing and justifying positions and results in defensible decisions about actions. The ability to exercise good practical reasoning is learned and “enhancing practical reasoning is a very significant educational concern, .[and] a complex and demanding educational task” (Coombs undated: 1).

The assumption underlying this study was that educational programs designed to teach the principles and practices of practical rational reasoning about controversial issues could enhance the success, defensibility and public acceptance of Environmental Impact Assessment. These educational programs could form part of the training available to all who participate for anyone in EIA.

To begin exploring the role of education in EIA, this study investigated the practical reasoning employed by some key people (stakeholders) participating in an environmental impact assessment. The model for the study was an EIA of commercial forestry activities in the Lower Tsitika Valley in British Columbia, - a complex and controversial integrated resource management issue. Using a questionnaire, stakeholders were asked to justify their positions on whether or not logging should continue in the Lower Tsitika Valley. The study, conducted from 1990 to May 1991, sought to answer two questions:

1. whether there is a need for educational programs in practical reasoning for EIA participants
2. whether any case-specific information, important in an educational context for resolving conflict over potential impacts, could be obtained using this questionnaire.

2.0 EIA CASE STUDY

The Tsitika Watershed is located on northeastern Vancouver Island, British Columbia (Figure 1) and consists of 39,505 hectares drained by the Tsitika River and two major tributaries. The issue of logging in the Tsitika River watershed has been controversial since at least 1972 when the B.C. Fish and Wildlife Branch proposed to establish an ecological reserve in the watershed. An EIA, under the Federal Environmental Assessment Review Process, had been initiated for the Tsitika Watershed Integrated Resource Plan (British Columbia 1978) by the Federal Minister of Fisheries just prior to June 1990. Specifically, the EIA covered
concerns about environmental protection in regard to impacts of the MacMillan Bloedel five year logging plan (1990-94) for the lower Tsitika Valley.

Figure 1
The Tsitika River Valley on Northeastern Vancouver Island, British Columbia.

There are numerous interests groups in the Tsitika Valley issue including: logging, fishing and tourism industries; government agencies; conservation organizations; Native bands; and the general public. All have been involved in the management of the Valley or in public debate over resource use in the Valley for many years. The Federal government’s EIA focused the debate on an examination of the varied impacts of logging within the context of integrated resource management.

The area currently under investigation for the Federal EIA is the section north of a logging cutblock designated Block 101 (Figure 2). This section, encompassing the lower reaches of the Tsitika River, supports five species of anadromous salmon (Oncorhyneus spp.) and contains three ecological reserves including a reserve protecting unique killer whale (Orcinus orca) habitat.
The environmental impact assessment of all logging operations in British Columbia up until 1990, have been conducted under provincial government guidelines such as those for the Vancouver Forest Region (British Columbia 1988). As a result of the Federal Court of Appeal decision on the Friends of the Old Man River Society v. Canada (Minister of Transport) case¹, The Federal Environmental Assessment Review Guidelines Order was found to apply to any activity for which the Government of Canada had decision-making responsibility (Elder 1989; Canada 1989). Therefore, in the Tsitika Valley case, under the Fisheries Act, the Federal Guidelines Order applied to logging activities affecting a salmon-bearing river and killer whale habitat, and the Federal Minister of Fisheries, not the Provincial Ministry of Forests, was responsible for initiating an EIA.

The recommendation of the first stage of the EIA or screening procedure, released August 1990, was that further information should be gathered prior to a rescreening. This information was to include: a report on the visual impact of logging; consultation with the

Native Bands; completion of a siltation generation study; as well as reports from two multi-agency committees (Tsitika Follow-Up Committee (TFC) and Johnstone Strait Killer Whale Committee (JSKWC)).

The TFC, formed in 1978, has responsibility for monitoring implementation of the Tsitika Watershed Integrated Resource Plan (Vreeswijk 1985). The composition of the TFC's membership has changed over the years. Currently, the TFC includes representatives of government agencies; logging, fishing, and tourism industries; and public outdoor recreation groups (see Appendix I for a list of the member agencies). The JSKWC was formed in 1990 to examine the “impacts of human activity on killer whales in Johnstone Strait” (British Columbia and Canada 1991). The JSKWC membership includes representatives of government agencies; and killer whale specialist advisors. Both multi-agency committees have or are in the process of conducting public information sessions in order to complete their reports and the Department of Fisheries and Oceans continues to gather information for the EIA rescreening.

For a variety of reasons, this case study serves as a good model for exploring the practical reasoning behind key stakeholders’ positions in an EIA. First, there is a broad range of easily identifiable stakeholders who tend to be well informed about the issue due to many years of participation in Tsitika Valley related activities. Second, there is a commitment on all sides to resolve the long-standing conflict as many different interest groups see the outcome of the Tsitika issue as setting a precedent that could have profound implications. Finally, presence of the governmental committees provides the opportunity to examine the differences in reasoning between members of these multi-agency committees (hereafter referred to as committee members) and stakeholders not in the committees (referred to as non-committee members). The committees with their diverse membership have had to consider and debate Tsitika-related issues from a variety of perspectives, while those not involved in committees have dealt primarily with the issue from their own perspective. This study, using the results of a questionnaire, described various characteristics of the practical reasoning of 39 stakeholders in the Tsitika Valley EIA and discussed some educational implications.

3.0 EDUCATION AND VALUES IN ENVIRONMENTAL IMPACT ASSESSMENT.

EIA is a planning tool whereby the environmental impacts of a project are identified and assessed before commitments or irrevocable decisions are made (Canada 1987; Rees 1978). The EIA process encompasses both the physical and biological aspects of environmental effects and the directly-related social effects of a development proposal. Usually little of what is done in EIA is known to the public because most of the initial evaluation is done in-house by proponents or government departments and only a few proposals undergo full public investigation. However as public awareness grows and more development projects are seen as
EIA offers an avenue for the public to become involved in rational deliberation over the future planning of communities.

While many groups have turned away from EIA due to its procedural and political problems (Rees 1978), EIA is evolving and currently could have a role to play in planning for sustainable development (Rees 1988). Governments and agencies are continuously seeking public participation in development issues. If the EIA process is to be understood and used to its full potential by increasing numbers of individuals then the development of a suitable educational component to EIA could be beneficial.

3.1 EDUCATION

A comprehensive educational curriculum for any subject contains both content and process elements. Content usually refers to knowledge of specific subject matter and process deals with the development of various intellectual abilities. To conduct an EIA one has to learn:

- content: e.g., the reporting stages of the particular EIA, the details of the proposed development, and the impacts;

and

- process: e.g., the ability to think critically; and to use sound reasoning in evaluating impacts and making decisions.

Learning the content elements of EIA is an important educational concern and examples of current programs that address this concern are available. However, the educational focus of this study is on the process elements of EIA, particularly on the ability to weigh information in making decisions and to defend judgments. Learning practical reasoning would assist EIA participants by enabling them to determine “what one has good and sufficient reason to do” (Coombs undated: 1) and to defensibly justify their positions based on their evaluation of the impacts. Evaluations are, by definition, processes of appraising or valuing (Simpson and Weiner 1989), in this case, the impacts of a proposal. EIA participants, through developing their reasoning abilities would gain some understanding of “general theory of value” (Taylor 1961:x) or how we make decisions based on value judgments.

3.2 VALUES IN EIA

Environmental impact assessment is in essence a process of value reasoning about the effects of potential biophysical and social impacts. EIA has been termed a socio-political phenomenon, “based as much on subjective judgments about values, feelings, beliefs and

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2For example, EIA is included in the curriculum of the Geography Department of the University of Victoria (GEOG 350 A and B); the Resource Management Program, Simon Fraser University (MRM 46); and the School of Community and Regional Planning, University of British Columbia (514).
prejudices, as on the results of scientific studies” (Beanlands and Duinker 1983:37). Major questions exist regarding these value judgments: “Who determines what impacts are relevant or valuable?” “How relevant are they?” “How is their value measured and stated?” “On what basis is the final decision made?” (Gardiner 1980). There is also the issue of how to evaluate those intangible quality-of-life considerations that are not normally expressed in measurable terms.

Despite these questions, it has been suggested that for EIA, societal goals and objectives should provide the criteria for judging impacts and the scientists’ role is to provide the facts to apply to these criteria (Whitney and Maclaren 1985; Beanlands and Duinker 1983). However there is also debate as to whether scientific research is in itself value-free (Howe 1985) and, as a result, EIA is a compromise between various value judgments.

EIA must deal in a demonstrable way with the process of justifying and weighing value positions because as White suggests “there is no single expert opinion about attitudes toward quality of environment: there are the opinions each person holds, the opinions he thinks others hold, and the opinions he thinks they should hold” (1966:109). Unfortunately, the EIA process often becomes controversial because the values presented are diverse, incompatible or poorly articulated and the value judgments are unclear. Thus a prerequisite for functioning effectively in the EIA process is an ability to competently reason through the various value issues.

4.0 OVERVIEW OF PRACTICAL REASONING THEORY

Practical reasoning or deciding in a rational way what one has “good and sufficient reason to do” (Coombs undated: 1) is based on making value judgments by evaluating and choosing among one’s reasons for doing various alternative courses of action (undated 1971). ‘Rational’ is “having the faculty of reasoning” (Simpson and Weiner 1989:XIII 218) or operating in a manner “which one accepts when he has full knowledge of what he is doing” (Coombs 1971:7).

In practical reasoning, it is assumed that for any judgement about public policy (as opposed to judgements about individual actions) there must be a standard of moral acceptability as conveyed in the principle of justice or just distribution.

A person who is making a social judgment has a prima facie obligation to choose that alternative which realizes the greatest common benefits for persons, without violating the fundamental rights of individuals. An alternative which provides greater total benefits but distributes them unequally may be chosen only if the judge has good reason to believe this choice is genuinely impartial and universalizable, i.e., that it follows from principles which every rational person would have reason to want everyone to follow. (Coombs undated: 10)

The good practical reasoner should have knowledge, experience, motivation and initiative as well as the ability to think critically, and to envisage outcomes (Coombs undated). The reasoner
has to learn the concepts and standards applicable to practical reasoning, and acquire experience in making and having to live by their value judgments.

4.1 VALUE JUDGMENTS

A value judgment determines the quality or worth of an object or action when measured against some standard or norm. A judgment may be positive, negative or neutral (Coombs 1971; Taylor 1961). Judgments are made from many different points of view (e.g., moral, economic, ecological, legal) and subsidiary judgments contribute to a decision about the overall worth of a value object. While the interrelationship can become complex, value reasoning has three basic components:

1. VALUE JUDGMENT or value position
2. REASONS, or factual evidence, that relates the value object to the principle.
3. IMPLIED PRINCIPLES, used as grounds or standards for the judgment.

Thus the parts of a value judgment form a syllogism where the value judgment is the conclusion of a deductive argument with the factual reason as the minor premise and the implied principle as the major premise. For example:

VALUE JUDGMENT or CONCLUSION

Logging should proceed in the lower Tsitika Valley.

REASON or MINOR PREMISE

Logging the lower Tsitika Valley will help to keep the local resource-based communities alive.

IMPLIED PRINCIPLE or MAJOR PREMISE

We ought to do things that keep resource-based communities alive.

In evaluating practical reasoning, it is the adequacy of the reasoning, not the conclusion of argument, that is judged. The value judgments in a good practical reasoning process must conform to at least four standards (Coombs undated, 1971):

1. the factual evidence (reason) must be confirmed by adequate evidence;
2. the facts must be relevant (have valence for the reasoner);
3. as much relevant information as possible must be considered;
4. the implied principle or standard must be acceptable to the reasoner.

This study of reasoning in the Tsitika issue examined the justification of value judgments, specifically with reference to the fourth standard of reasoning that requires the implied principle to be truly acceptable to the person making the judgment. This was done by actually testing the acceptability of the implied principle in the value judgment.
4.2 PRINCIPLE TESTING

Coombs (1980) described four ways to assist someone in testing the acceptability of the principle implied by their reason.

1. New Cases Test: whether the implied principle is acceptable when applied to other analogous (potentially undesirable) circumstances.
2. Role Exchange Test: whether the implied principle supports acceptable consequences for those likely to be most adversely affected by the judgment.
3. Universal Consequences: whether the consequences of everyone acting on the implied principle would be acceptable.
4. Subsumption Test: whether the implied principle is consistent with other fundamental principles held by the reasoner.

To be beneficial, these tests must be appropriately applied and persons using them must be disposed to alter their judgment should the tests fail.

Thus the significance of learning practical reasoning in controversial situations is that it encourages reasoners to become clear about the actual reasons for their value judgments; to ensure that there are good grounds for holding those reasons; to investigate other perspectives and relevant data; and to check that the principles implied by their reasons are acceptable to them. In conducting this analysis, reasoners can identify sources of conflict such as: the truth, relevance, valence or interpretation of certain factual reasons; or the acceptability of the implied principle. This process provides building blocks for increased understanding and possible conflict resolution.

5.0. METHODOLOGICAL APPROACH

This study used an evaluation format known as the J-Test (Justificatory Test) (Case 1988) in a critical assessment questionnaire entitled: “Logging in the Lower Tsitika Valley: What do you think and why?” to investigate practical rational reasoning of stakeholders in the EIA of the lower Tsitika River Valley (see Appendix III for components of the questionnaire).

5.1 J-TEST

The J-Test format, conceived by R. Case (1988), is based on a theory of reasoning about value issues developed over 15 years by the Association for Values Education Research (AVER) at the University of British Columbia. The test uses the practical reasoning theory syllogism format explained above. The respondents’ reasoning is examined using the principle testing described by Coombs (1980). The J-Test ensures the certainty of the respondent’s chosen position not only by testing the acceptability of the implied principles but also by having respondents examine and select acceptable reasons from a list of reasons in support of the opposite position.
The J-Test is primarily a diagnostic test for value reasoning although the test also has a descriptive component. The descriptive component offers the opportunity to acquire previously unknown information regarding the issue in the form of preferences and reasons that underlie the issue. The diagnostic aspect reveals the respondents’ ability to present reasons for their positions and the respondents’ acceptance of the principles implied by their reasons. The test looks for gaps in reasoning over the range of issues and indicates possible areas where educational intervention might enhance the proceedings of EIA in a defensible rational way.

The J-Test is similar to a primary “scoping” technique in any EIA. The important issues are identified and their perceived importance recorded. The J-Test probes deeper by exploring characteristics of the justification offered by respondents. Also the test provides respondents with opportunities to increase their awareness of practical reasoning by participating in justifying their positions.

5.2 DESIGN AND IMPLEMENTATION OF THE CRITICAL ASSESSMENT QUESTIONNAIRE

Using the J-Test, format the critical assessment questionnaire (CAQ) was designed to examine the practical rational reasoning of stakeholders in the Tsitika Valley EIA. As noted, the stakeholders in this study fell into two groups: members of a multi-agency committee or independent participants. Stakeholders were identified from the committee membership lists; by their participation in Tsitika-related logging, fishing, tourism, scientific, conservation-or educational activities; and from the Native bands with land claims over the area. Implementation of the CAQ proceeded in three phases described below.

5.2.1 Phase I
Phase I consisted of developing an exhaustive list of reasons whether or not logging should proceed in the Tsitika Valley. The reasons were considered to reflect factual concerns that stakeholders might have with respect to potential impacts of the logging proposal. The list was generated by asking a diverse array of 31 stakeholders, in the non-committee group (see Appendix II for the affiliation of respondents in Phase I), to identify all of the reasons people might give for and against proceeding with the logging. Reasons were compiled into categories and formulated into two lists: a list of 16 reasons why logging should proceed and a list of 15 reasons why logging should not proceed (see Appendix III for the lists of reasons).

5.2.2 Phase II
The six sections of the CAQ were developed in Phase II. These sections are discussed below.
1. **INITIAL POSITION:**

   *Should logging proceed in the lower Tsitika Valley?*

   Respondents were asked to take a position and to indicate how certain they felt about their position.

2. **THE REASONS:**

   e.g., *Logging the Tsitika would provide jobs in the timber industry, e.g., logging, milling, silvicultural, and other related jobs.*

   Respondents were asked to select from an appropriate list, those reasons that they felt supported their position. They were also requested to choose up to three reasons they considered to be the most important reason and support of their position and to write any additional reasons not already on the list.

3. **THE PRINCIPLE TESTS:**

   e.g., Implied Principle:

   *This reason implies that, in principle you believe ‘we ought to do things that provide jobs’.*

   e.g., Principle Test:

   *If continuing an industry that provides jobs meant that there would be damage to a world renown scenic area would you support the industry? Yes or No*

   Respondents were requested to complete 4 or 5 principle tests (called probes in the CAQ) for each of their most important reasons (see Appendix III for examples of the probes). The principle tests for a given reason were a variable selection of any of Coombs’ (1980) four types (e.g., New Cases Test, Universal Consequences Test).

   Respondents were asked to answer the tests for each reason with a yes or no response. They were directed to comment on the tests if they wished. Then, they were asked to indicate if they still supported the important reason they had chosen or if they wanted to modify it.

4. **THE OPPOSITE REASONS:**

   e.g., *Not logging the Tsitika would preserve this region’s biodiversity.*

   Respondents were asked to choose any reasons they considered good reasons from a list of reasons for the opposite position to the one they supported.

5. **CONCLUDING POSITION:**

   Respondents were asked the initial question (see 1. above) again and requested to confirm their certainty.
6. BACKGROUND AND EVALUATION:
Respondents were requested to answer a series of questions about their background in practical reasoning and EIA (see Appendix III for the background questions). They were also asked to indicate whether the principle tests caused any reevaluation of their position; what sources of information contributed to their position; and to indicate any other comments.

This form of the questionnaire was piloted with seven stakeholders (see Appendix II for the affiliation of these respondents) and minor changes were made to some of the principle tests and the reasons.

5.2.3 Phase III
The questionnaire was circulated to 39 respondents (19 Committee and 20 Non-committee members) (see Appendix II for affiliation) using a modified interview format. The CAQ was explained to the respondents, then left with them, and picked up after completion. The questionnaire took between 30 minutes and one hour to complete.

6. RESULTS
The federal EIA on the Lower Tsitika Valley has undergone several delays and is progressing slowly. This study reports the preliminary data collected using the J-Test with 39 stakeholders during the rescreening stage of the EIA from February to May 1991. In general the questionnaire was favourably received and respondents had no problems with the format. Positive feedback included support for the thought-provoking aspects of the questionnaire and the opportunity to review the issue. General criticism included annoyance with yet another study of the issue and discomfort with having one’s views challenged.

6.1 Initial Position
At the beginning of the questionnaire respondents were asked whether or not logging should proceed in the lower Tsitika Valley. Thirty out of thirty-nine respondents, indicated they were not in support of logging proceeding while nine supported the logging (Table 1). The identification of the “No” position (hereafter referred to as NoP) by the majority of stakeholders was not anticipated. Therefore, the results reflect an imbalance towards the NoP. In the "YES" position (hereafter referred to as YesP), two thirds of participants were members of the multi-agency committees. However, the NoP was more equally divided between the two groups, committee members and non-committee members (Table 1).
Table 1 Number of respondents with “YES” and “NO” positions in each group.

<table>
<thead>
<tr>
<th>GROUP:</th>
<th>COMMITTEE</th>
<th>NON-COMMITTEE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes POSITION</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>No POSITION</td>
<td>13</td>
<td>17</td>
<td>30</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19</td>
<td>20</td>
<td>39</td>
</tr>
</tbody>
</table>

Respondents were also asked to indicate how certain they were of their position. Possible choices included: Absolutely Convinced; Reasonably Certain; and Some Reservations. The certainty which respondents expressed, in support of their position, varied. The data suggested that more non-committee members were absolutely convinced of their position (either Yes or No), while the committee members tended to be less certain of their position. (Figure 3).

Figure 3. Initial certainty of respondents’ positions
6.2 Reasons for the Position

Respondents were asked to indicate four categories of reasons. First they were asked to chose all of the reasons in support of their position. Second, from these supporting reasons, the respondents were to select up to three of their most important reasons. Third, they were asked to chose any good reasons from a list of reasons for the opposite position. Fourth, they were invited to add any additional reason in support of their position that was not on the list.

6.2.1 Overall Reasons in Support of the Position

The Yes respondents chose among 12 of the 16 reasons offered in support for their position while the No respondents chose from all 15 of the possible reasons. The data suggested that on average, the non-committee members chose more reasons per member than those in the committee (Figure 4).

![Figure 4 Average number of reasons chosen per respondent.]

6.2.2 Most Important Reasons in Support of Position

The most important reasons with the three highest selection frequencies (in each case there was a tie) for each position are presented in Table 2.
Table 2
Important reasons most often selected by each position.

<table>
<thead>
<tr>
<th>POSITION</th>
<th>YES LOGGING SHOULD PROCEED</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>% RESPONSE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67</td>
<td>* was decided on the basis of careful planning procedure and extensive studies</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>would provide jobs in the timber industry e.g., logging, milling, silvicultural and other related jobs</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Is based on a plan for sustainable harvesting if the area</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>will have no known adverse effects on the area’s wildlife including killer whale habitat</td>
<td></td>
</tr>
</tbody>
</table>

* ‘Logging the lower Tsilika’

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NO, LOGGING SHOULD NOT PROCEED</th>
<th>REASONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>% RESPONSE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>would avoid risking environmental damage including degradation to wildlife habitat since research is inadequate to provide error-proof plans.</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>would respect widespread public desire to protect a valuable publicly owned wilderness area for future generations.</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>would prevent significant environmental damage including degradation of the habitat of fish, killer whales and other wildlife.</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>would help to protect an internationally recognized ecological feature of B.C. planning procedure and extensive studies</td>
<td></td>
</tr>
</tbody>
</table>

* ‘Not logging the lower Tsilika’
The committee and non-committee members for both YesP and NoP selected different important reasons as illustrated in Table 3.

Table 3. Important Reasons Most Often Selected by Each Group

<table>
<thead>
<tr>
<th>MOST IMPORTANT REASONS BY GROUP</th>
<th>YES POSITION</th>
<th>NON-COMMITTEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMITTEE</td>
<td>NON-COMMITTEE</td>
<td></td>
</tr>
<tr>
<td>basis in careful planning</td>
<td>providing jobs</td>
<td></td>
</tr>
<tr>
<td>keeping resource-based communities alive</td>
<td>basis of sustainability</td>
<td></td>
</tr>
<tr>
<td>legal authorization</td>
<td>basis in careful planning</td>
<td></td>
</tr>
<tr>
<td>no known adverse wildlife effects</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>NO POSITION</th>
<th>NON-COMMITTEE</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMMITTEE</td>
<td>NON-COMMITTEE</td>
</tr>
<tr>
<td>avoid risking environmental damage</td>
<td>prevent environmental damage</td>
</tr>
<tr>
<td>protect international feature</td>
<td>protect biodiversity</td>
</tr>
<tr>
<td>public desire to protect wilderness</td>
<td>protect Native rights</td>
</tr>
</tbody>
</table>

*excerpts from full reasons*

6.2.3 Reasons Chosen from Those of the Opposite Position

The three reasons most often selected from the opposite position’s list of reasons in both YesP and NoP demonstrated marked differences from the important reasons selected by respondents supporting those positions (compare Table 2 and Table 4). In other words, respondents from both positions did not recognize what the other side thought was important.
Table 4
Opposite reasons most often selected by each position

<table>
<thead>
<tr>
<th>POSITION</th>
<th>NO, LOGGING SHOULD NOT PROCEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>% RESPONSE</td>
<td>OPPOSITE REASONS (REASONS FROM THE YES POSITION)</td>
</tr>
<tr>
<td>27</td>
<td>*would provide jobs in the timber industry e.g., logging, milling, silvicultural and other related jobs.</td>
</tr>
<tr>
<td>23</td>
<td>*will help to keep the local resource-based community alive.</td>
</tr>
<tr>
<td>17</td>
<td>*allows residents in a resource-based community to pursue their chosen livelihood.</td>
</tr>
</tbody>
</table>

* 'Logging the lower Tsilt’ka’

<table>
<thead>
<tr>
<th>POSITION</th>
<th>YES, LOGGING SHOULD PROCEED</th>
</tr>
</thead>
<tbody>
<tr>
<td>% RESPONSE</td>
<td>OPPOSITE REASONS (REASONS FROM THE NO POSITION)</td>
</tr>
<tr>
<td>44</td>
<td>*would respect widespread public desire to protect a valuable publicly owned wilderness area for future generations.</td>
</tr>
<tr>
<td>33</td>
<td>*would avoid risking environmental damage including degradation to wildlife habitat since present research is inadequate to provide error-proof management plans.</td>
</tr>
<tr>
<td>33</td>
<td>*would conserve an area which has significant spiritual and emotional value for many people.</td>
</tr>
</tbody>
</table>

* ‘Not logging the lower Tsilt’ka’*

In addition, approximately 50% of both positions selected NONE of the other position’s reasons (Figure 5). It appears that more non-committee than committee members selected NONE of the opposite position’s reasons (Figure 5). Comments volunteered by respondents about the opposite reasons ranged from “arguments to stop logging are more emotional and subjective than fact based” to “for the section in which you consider the opposite position, I can understand how they would be good reasons for some, but they are not ‘good enough’ for me”.

17
6.2.4 Additional Reasons

Nineteen additional reasons were offered, three from the YesP and sixteen from the NoP. Respondents also voluntarily modified eleven of the reasons on the original lists. Most of the additional reasons expressed further details and nuances about issues presented in the original lists of reasons.

6.3 Testing of the Implied Principle

As mentioned previously, the principle implied by the most important reasons was “tested” by posing challenges to the principle. Responses to the tests of the implied principle reflected differences in acceptance of the tests. Despite comments such as “I had trouble with the probes”, only 10% of the test questions were left unanswered. The data suggested that more tests were left blank by committee (13%) than non-committee members (7%). Respondents were also invited to comment on their reactions to each of the tests. On average, one in three tests received a comment. The comments included critiques such as “difficult analogy to assess”, or “a bit extreme don’t you think”, as well as complex descriptions of the issue in question. It was possible to pick out the most controversial tests and reasons by examining which tests were left unanswered or received a large number of comments.

6.3.1 Acceptance of Tests of Implied Principle

Most of the respondents accepted some of the tests of the implied principles and rejected others. Respondents in the NoP accepted all of the tests for 35% of their important reasons while none of the YesP respondents accepted all of the tests for any particular reason. However,
the YesP respondents rejected all of the tests for 22% of their chosen reasons. Overall, 60% of the YesP tests and 70% of the NoP's tests were accepted.

6.3.2 Modification of the Reasons
The percentage of reasons for which modifications were suggested, after the tests were completed, was approximately the same in both YesP (30%) and NoP (24%). Committee members supplied most of the modifications (79%). Six respondents in the YesP(committee=2, non-committee=4) did not accept any of the tests for one of their reasons and yet five of these respondents confirmed their support for that reason without modifications.

6.3.3 Amount of Reevaluation
Seventy-six percent of respondents replied NO to the question of whether the tests (called probes in the CAQ) of the implied principles caused any reevaluation of their position. Responses of the YesP and NoP and the committee and non-committee appeared to be similar. The effect of the tests on the respondents’ desire to reevaluate their positions was summed up in the comments: “Probes elicited considerable thought and reflection at times (a testing of position) but no changes” or “Although after careful consideration my position remains unchanged”.

6.4 Concluding Position and Certainty
After considering all of the tests applied to each implied principle as well as the reasons from the opposite position, respondents were asked if they still held the same position with the same degree of certainty. There were no changes in any respondents’ position on the issue, although, four respondents noted a change in certainty about their position. Three of these (1 YesP committee, 2 NoP non-committee) held a more certain position at the end of the questionnaire and 1 (YesP committee) was less certain. Comments of the participants whose certainty increased included:

*Questionnaire shows that reasons for not logging are more emotional that fact based,*

and

*Feel that if native band gets the lower Tsitika, would feel OK if selective logging were done to build buildings in the valley that enhanced spiritual practices such as long-houses, sweats, small retreat cabins, etc.*
The comment for the decrease in certainty was:

*I do have some reservations about logging as we do not have all the answers yet with regard to the long-term effects it may have on other resource values. I believe there is an 'n between position? where we have such things as alternate harvesting methods, smaller cut blocks, visual analysis, etc. etc.*

Two concluding comments on the changes were also offered by persons whose certainty did not change. One emphasized that "...this is not a new question or issue;" and the other stated "My position is reasonably firm but this is a 'thought-provoking' questionnaire."

6.5 Background Questions

Results from the background questions revealed respondents' formal education in critically assessing or justifying positions in controversial issues, and showed their previous involvement or educational background in environmental impact assessment. Fifty-four percent of all respondents had no formal education in critical assessing issues (including classes, seminars and workshops) and the committee members seemed to have more educational background in critical assessment than those not in the committees (Figure 6).
Fifty-one percent of all respondents had never participated in an EIA. The results suggested that more from the NoP and more committee members had some previous EIA experience (Figure 7).

![Figure 7](image1)

Figure 7 Respondents' previous experience in EIA

Sixty-one percent of respondents had no formal education in EIA. There appeared to be a higher percentage of the NoP with some formal EIA education than of the YesP (Figure 8).

![Figure 8](image2)

Figure 8 Respondents' formal education in EIA
Overall forty-three percent had neither previous experience, nor formal education, in EIA. The percentage was higher for respondents in the YesP and in the non-committee group (Figure 9).

![Figure 9. Percentages of respondents with NO previous experience or formal education in EIA](image)

### 7.0 CONCLUSIONS

The analysis of data from the questionnaire provides affirmative answers to the two initial questions:

1. the data from this J-Test format questionnaire indicated the importance of developing educational programs in practical rational reasoning for EIA participants;
2. the J-Test can provide beneficial case-specific information to assist in resolving conflict over potential impacts in EIA issues.

In addition, the differences in the questionnaire responses between the committee and non-committee members suggested the certainty and choice of reasons that committee members had in support of their positions may have been influenced by their opportunities to participate in negotiation over the issue. However, the overall results tended to indicate that the quality of deliberations over this EIA issue could be enhanced by improving the practical reasoning ability of the participants.
7.1 Importance of Education in Practical Rational Reasoning for EIA Participants

Only 46% of respondents had any formal education in critically assessing or justifying positions on controversial issues. Furthermore, in this particular EIA, certain observations suggested that respondent's reasoning may be enhanced by a better understanding of the concepts of practical reasoning. These observations included: polarization of viewpoint; diversity of views, and discomfort with the principle testing.

7.1.1 Polarization of Viewpoint

One of the keys to good practical reasoning is the ability to appreciate all sides of an issue. Respondents (both YesP and NoP) tended to be very certain of their position, with less than half acknowledging any of the other side’s arguments as good reasons. Also, few respondents reevaluated their position following the principle testing. EIA is a compromise between various value judgment and because the individuals in this study tend to be polarized, it would be difficult to begin discussing the relative significance of impacts without all sides having a considerable understanding of practical reasoning.

7.1.2 Diversity of views

The diverse views of the respondents in this study were evident from the number of reasons that were selected and the range of comments that were made. Discrepancies occurred when respondents identified different reasons from the opposite position’s lists than those actually chosen by the position. In addition, committee and non-committee members for the same position chose different important reasons. Thus, developing a scale and ranking the possible significance of impacts for all of the diverse reasons selected, would require extensive negotiation, for which the ability to engage in rational practical reasoning would be beneficial.

7.1.3 Discomfort with the Principle Testing

Experience in justifying the principles implied by positions might alleviate some of the discomfort many of the respondents expressed in the principle testing. Many individuals had difficulty separating the principles implied by their choices from the issue itself. For example, responses to the tests included comments such as, “not the case in the Tsitika”.

Also, many respondents resented having to defend their selected principle by being asked to choose between issues that had similar value for them and yet this is often the case in EIA. Some respondents had difficulty in assuming the role of those potentially adversely affected. For example several role exchange tests received responses such as “I’m a non-Native can’t comment”. Other respondents were unable to consider issues from different points of view (e.g., choosing between wildlife and aesthetic effects, a comment was “aesthetics don’t affect wildlife”). Experience with understanding and acting according to certain standards of
reasoning in making judgments might assist individuals in justifying their positions. This emphasizes the importance of making educational opportunities available so that EIA participants could improve their practical rational reasoning abilities.

7.2 Important Case-Specific EIA Information from the CAQ

The information from this study of the Tsitika Valley EIA, could be valuable in identifying and resolving conflict about perceived and real impacts. Representatives of various interest groups could use the data including: the key reasons selected; the principle test responses; and the comments, to provoke the identification and discussion of factual or contextual information underlying their positions. The information could provide the basis for focus group interviews or for using the Delphi process. At the very least, if practical reasoning was employed throughout the process, clear, defensible reasoning could be recorded and be available for any subsequent decisions. Therefore, the CAQ using the J-Test format could be effective in generating case-specific information similar to that collected in an EIA scoping exercise.

7.3 Differences between Committee and Non-committee Members

The data from the CAQ suggested that relative to non-committee members, those in committees were less certain of their position; chose fewer reasons per respondent; suggested more modifications for their reasons; left more principle tests blank; and registered more experience with EIA and more formal education in justifying issues. It is possible that these differences are the result of having to continually negotiate and discuss differences in judgment over the Tsitika Valley issue. The committee members may have been more aware of the difficulties in choosing appropriate responses to any question about the issue and therefore, left more principle tests blank and modified the answers they gave. However, comments also suggested that they felt uncomfortable dealing with the choices.

Committee members not only selected fewer reasons, they also selected a different array of reasons from those not in the committees. Choosing fewer reasons may indicate that committee members had thoroughly discussed the issue or had conducted an adequate ‘scoping’ and had decided on the critical issues. It could also indicate that influential members had successfully directed the focus of the group towards their selective point of view or that members were simply be out of touch with some of the problems in the issue.

The differences between choices of reasons in the committee and non-committee members suggested that in the YesP, those in the committee considered the issue in a less personal framework than those not in the committees. Committee members were more concerned with resource-based community welfare, and the planning and legality of the issue than with the non-committee members’ most frequent choice of personal job loss. The
differences could also indicate that certain controversial aspects such as Native rights, are not being recognized by the committee. Native rights were recognized as important concerns by 35% of the non-committee members and by none of the committee.

Thus although intra-committee negotiations may have been facilitated by the committee members’ background experience in EIA and their educational background in justifying issues, the results suggest that both groups of respondents could benefit from enhanced practical reasoning abilities.

This study suggested that the use of a J-Test format questionnaire in EIA issues has merit and associated problems. The data from this study also explored the need to enhance the practical reasoning ability of EIA participants in order to improve public participation in EIA issues.

1. Merits of the J-Test

The J-Test format questionnaire had merit in three areas: 1. the accuracy and detail of the information provided by the test’s descriptive and diagnostic components, 2. the worth of actually participating in the test and experiencing some aspects of practical reasoning and 3. the ability of the test to incorporate various perspectives of the value of issues.

One strength of the J-Test is that it provides an accurate account of the reasons for positions on a controversial issue. Assessments documenting only the positions on issues provide insufficient information because stakeholders can hold similar positions for a vastly different reasons. The J-Test offers a more complete picture of the positions held, by having respondents indicate the reasons behind their position. Creating an extensive set of reasons by surveying large numbers of stakeholders in the development stage of the questionnaire also ensures that the range of reasons is comprehensive.

The reliability that the reasons chosen truly reflect the opinions of respondents is also enhanced in the J-Test by testing the respondents in two ways. First, through a principle testing procedure respondents are exposed to some of the implications of the principles underlying their reasons and second, they are also exposed to and asked to choose from the list of reasons for the opposite position. Thus they have had to justify or reject their reasons in the face of competing and potentially undesirable consequences and in light of opposing views.
Data generated by the J-Test can be used as the basis for developing an appropriate educational response for particular problem areas in EIA issues. For example, if the choice of reasons differs among groups or positions, the source of factual information for the reasons and the perspective of the respondents can be explored. Also, the comments provide valuable material for discussion.

Possible gaps in respondents’ logic can also be investigated. Respondents may indicate that they reject the implied principle for a given reason, in the context proposed in the principle tests, but they may still accept the reason. Thus, the relevance of the reason to the respondent, or the factual evidence linking the tests and the reason could be examined. For example, consider the respondent who selected a reason with the following implied principle:

\[ \text{we ought to do things that allow other (than timber) users to have a long term sustainable future in a region,} \]

The same respondent rejected the following test of the implied principle which asked the respondent to consider personal financial implications of the reason:

\[ \text{Would you be willing to give up your job in an industry which allowed you to make five times the salary of people in other industries using the same resource, if this meant that people in the other user industries would have a long-term sustainable future?} \]

However, the respondent affirmed support for the following reason:

\[ \text{allowing other (than timber) users to have a long-term sustainable future in the region is an important reason for not logging the lower Tsitika.} \]

There are at least three possible explanations for the respondent’s replies. First, the respondent may have felt that salary had greater relevance than allowing other users to have a long-term sustainable future; second, that there was no factual connection between people having to give up high-paying jobs and the position they took on not logging the lower Tsitika, or third, that personal considerations were more important than social ones. These possibilities can be examined in focused group interviews dealing with overall societal goals and objectives relevant to particular EIA issues. Respondents can gain an awareness of the various priorities individuals place on competing perspectives of the value of an impact. For example, some may rate ecological considerations ahead of economic value etc. Also, factual material on an issue could either be presented or educational opportunities could be provided to develop information procuring skills.
Respondents may simply be uncomfortable with the process of justifying their positions or may be unable to imagine themselves in the position of someone adversely affected by their decision or unable to consider the opposite position’s views. These problems were illustrated by their responses in the J-Test. Educational opportunities could be provided to assist stakeholders in enhancing their practical reasoning ability. Teaching practical reasoning in the context of group decision making and having to live with the results of decisions has been suggested as necessary for appreciating the worth of good practical reasoning (Coombs undated).

8.1.2 Educational Opportunity

Working through a J-Test format questionnaire in a particular EIA issue offers stakeholders the opportunity to participate in a practical reasoning exercise. This in itself has worthwhile educational potential for beginning to develop practical reasoning abilities.

8.1.3 Different value perspectives

The J-Test format offers the opportunity to examine the relevant factors in an EIA from various personal or societal perspectives. It has been suggested that EIA has as its framework the premise that societal goals and objectives provide the criteria against which any project-related environmental change must be assessed and evaluated (Whitney and Maclaren 1985:21),

If we accept this premise, then EIA must be built upon a clearly defined or definable set of societal goals and objectives. However, in today’s society there appear to be several perspectives dictating different sets of goals and objectives to different networks of individuals. From the economic-based value perspective, one extreme view of the world is as “a warehouse to be plundered in satisfaction of the material needs and wants of humankind” (Rees 1988:275).

At the other end of the spectrum are those who consider that “non-human species possess intrinsic value” (Callicoot 1989: 131) and that Homo sapiens have no right to cause their extinction. Some see men and women, or aboriginal peoples and industrialized societies as having different perspectives about what is valuable in society (Gilligan 1982).

One of the continuing subjects of controversy about different perspectives is the view of modern science as value-free. In this view, objective scientific evidence takes precedent over anything not scientifically measurable such as emotional or subjective evidence. Beanlands and Duinker point out the conceptual problem of scientifically measuring impacts on things such as aesthetic value (1983). In this study, similar comments were made about the importance of fact based information over emotional evidence.
An important aspect of the J-Test with regard to examining different perspectives is that the J-Test utilizes theory which recognizes both the cognitive and affective aspects of an individual’s thought in arriving at a rational judgment. The cognitive processes are engaged in acquiring the facts and in the ability to test them. The affective processes are involved because reasoning is dependent on a commitment to value and principles both of which embody feelings, attitudes, and preferences. When a person holds a rational evaluative conclusion there are some things he knows and some things he feels. (Coombs 1971:26).

Therefore, the J-Test doesn’t prejudge the perspective from which the stakeholder is operating and it accommodates differing values as social criteria for EIA decisions.

8.2. Problems with the Test

Three problems arose in using the J-Test format for this study including:
1. the possibility of bias in the implementation and completion of the test;
2. the under representation of the YesP;
3. the varying relevance of the principle tests for different individuals.

8.2.1. Bias

The sources of bias in a questionnaire of this type included first, the bias of the questionnaire implementation method and second, variation in commitment of respondents. The first source of bias arose because the questionnaire implementation was highly personal in nature. The questionnaires were administered individually and respondents were aware that the researcher would view their responses. Some respondents may have felt uncomfortable revealing their responses or may identified the researcher with a particular position and allowed this to influence their answers. However, given that EIA functions in a social context and that the identification of reasons and reasoning gaps with individuals may be advantageous, the privacy of responses may not be significant for the general application of the test. If bias of groups towards a particular researcher was a problem, a mixed team of differently aligned individuals could circulate the questionnaire to members of all groups.

Bias is also a factor with respect to the amount of time and energy a particular individual is willing to invest in any questionnaire. Accurate and complete responses to the questionnaire dependes on the committment of respondents. Biases toward or against particular reasons may enter if respondents don’t take the time to consider their reponses or if respondents don’t answer test questions due to lack of committment, this may be interpreted in terms of the quality of their reasoning. If respondent’s felt they had ownership in the development of the questionnaire and
they were able to see the benefits with regard to clearing up confusion over practical reasoning on value issues then the commitment might be expected to be high.

8.2.2 Representativeness

In this study, there were an unexpected number of respondents who did not support the logging in the lower Tsitika resulting in an under representation of those that supported the logging. Also, no attempt was made to obtain ‘representative’ samples of each stakeholder group. Neither of these issues was important for the overall objectives of this study, which were a general exploration of the reasoning of respondents and a preliminary examination of the potential of the CAQ to acquire descriptive data. Obtaining a representative sample would be possible using the J-Test in other EIA issues.

8.2.3 The Principle Tests

The principle tests, used in the J-Test format, must present defensible challenges to the principle implied by the respondent’s reason. These tests will vary in acceptability and relevance depending on the individual respondent. However, the significance of the individual’s responses can be investigated by analyzing the comments or in subsequent discussions.

8.3 Importance of Practical Reasoning to Public Participation in EIA

Public involvement programs are recognized as important components of the early stages of Federal EIA procedures (Canada 1988). Three of the six stated goals of these Federal public involvement programs are to identify public concerns and values; to develop two way contact; and to improve the overall decision making. Vindasius (1974) noted that in public involvement sessions, “conflict between planners and the public must be accepted as a distinct possibility” and that the conflict must be addressed in a responsible manner. She recommended that

*meaningful interaction and dialogue between the two sides throughout the planning process can resolve this conflict, achieve compromise and create a broader consensus.*

(Vindasius 1974)

The stakeholders in EIA issues represent a range of ‘publics’ and will have diverse and conflicting concerns and values. If we are going to have the necessary responsible dialogue with stakeholders and improve public decision making, then I believe we will have to enhance the practical reasoning abilities of the ‘publics’ through education.
8.4 The Need for Education in Practical Reasoning

In proposing that education in practical reasoning might be beneficial for EIA participants, it is important first to establish that EIA participants have problems with the present system of resolving conflicts in EIA and that they don’t have an educational background in practical reasoning. This study’s model was an EIA with stakeholders who were unhappy with the current process for resolving the land use dispute as evidenced by their involvement in civil disobedience in the Tsitika and by the presence of the issue repeatedly in the courtroom. Also, fifty-four percent of the respondents in the study registered that they had no formal education in critically assessing or justifying positions in controversial issues. Thus, this case is an example of an EIA where education in practical reasoning abilities might be worthwhile for these respondents.

There are reasons to think that the need for education in practical reasoning may be more widespread. The existence of confrontational situations over development issues in Canada, that are continually recorded in the popular media, suggest that unhappiness with the status quo may be broadly based. As for practical reasoning education from grades 1-11, the authors of a recent report examining Social Studies education in B.C., suggested that critical thinking in the current curriculum is “neither as effectively nor as widely implemented as intended” (British Columbia 199 1:7). They noted that teachers themselves “are unsure about what is meant by ‘critical thinking’”. Also in B.C., none of the British Columbia university instructional programs in EIA, mentioned previously, included formal instruction in practical reasoning about value issues, although some did include role-playing exercises. Therefore, education in practical reasoning is as yet undevolved and the benefits await future trial.

9.0 SUGGESTIONS • Where do we go from here?

Both short- and long-term approaches to education in practical reasoning are possible.

9.1 Short-term Educational Opportunities for Individuals Currently Involved in EIA Issues

A J-Test format questionnaire could be beneficial in the EIA process both in the early screening stages and later during formal panel reviews. The initial aspects of the J-Test are essentially the same as techniques used in scoping. For example, a list of the perceived impacts is obtained by contacting representative stakeholders and the interaction of these impacts is investigated. The development of principle tests would assist persons implementing the EIA in clarifying the issues and trade-offs involved and in understanding the different perspectives of the issue. The CAQ could be used with stakeholder groups, appointed consultants or committees, and if desired, the concerned public.
Participating in an exercise such as the CAQ provides an introduction to some of the concepts of practical reasoning. A form of the J-Test is currently being developed on computer software and this will facilitate future construction and use of examples of the J-Test format.

9.2. Long-term Educational Opportunities for Public Education

There is a need to develop defensible curricula in practical reasoning applicable to the field of EIA. EIA is critical to any aspect of environmental education and to every aspect of daily life. As education focuses more on our role within the natural and social environment there are opportunities to introduce the idea of EIA at an early level and in a variety of programs.

Curricular materials could encompass the content aspects of EIA as applicable, but the emphasis could be on learning the standards of good reasoning and engaging in practical reasoning about local impact-related issues. The first step would be to find and encourage educators with the experience and enthusiasm to teach practical reasoning in an EIA context. Curricular material such as that available from the Association for Value Education Research (1991) could be used for guidance in developing preliminary material on the principles of reasoning.

If the EIA process is more than a persuasive political compromise full of rhetoric and if there is a commitment to making the system defensible with a rational approach then education in practical reasoning can play a valuable role. One of the ways to begin addressing a spectrum of societal value choices in EIA is through the process of practical reasoning, by clarifying stakeholders’ perspectives, and by ensuring that stakeholders appreciate the implications of their views. Then it would be possible to discuss alternative choices and “to consider seriously whether a change in our basic beliefs and perceptions is not essential to get us where we want to go” (Rees 1988:274).

10.0 REFERENCES


### APPENDIX I

**COMPOSITION OF THE MULTI-AGENCY GOVERNMENTAL COMMITTEES**

1. **TSITIKA FOLLOW-UP COMMITTEE**

<table>
<thead>
<tr>
<th>Number of Persons</th>
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</tr>
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2. **JOHNSTONE STRAIT KILLER WHALE COMMITTEE**

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APPENDIX II

RESPONDENTS IN PHASES I, II, III OF CRITICAL ANALYSIS QUESTIONNAIRE

1. PHASE I  “Developing the Reasons”

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<td>(2)</td>
<td>- Independent</td>
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<td>Fishing Industry *</td>
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<td>6</td>
<td>Independent Scientists and Specialists</td>
</tr>
<tr>
<td>6</td>
<td>Informed Public *</td>
</tr>
<tr>
<td>3</td>
<td>Environmental Group Directors</td>
</tr>
<tr>
<td>1</td>
<td>Lawyer</td>
</tr>
<tr>
<td>1</td>
<td>Teacher</td>
</tr>
<tr>
<td>(1)</td>
<td>- College</td>
</tr>
</tbody>
</table>

31 TOTAL

2. PHASE II  “Piloting the Critical Analysis Questionnaire”

<table>
<thead>
<tr>
<th>Number of Persons</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Government Agencies</td>
</tr>
<tr>
<td>(1)</td>
<td>- Department of Fisheries</td>
</tr>
<tr>
<td>2</td>
<td>Forest Industry</td>
</tr>
<tr>
<td>(1)</td>
<td>- Labour</td>
</tr>
<tr>
<td>(1)</td>
<td>- Independent</td>
</tr>
<tr>
<td>2</td>
<td>Fishing Industry</td>
</tr>
<tr>
<td>2</td>
<td>Informed Public</td>
</tr>
</tbody>
</table>

7 TOTAL

* includes Native and non-Native individuals
3. **PHASE III**

“Respondents to the Critical Analysis Questionnaire”

<table>
<thead>
<tr>
<th>Number of Persons</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Government Agencies</td>
</tr>
<tr>
<td>(5)</td>
<td>- Ministry of Forests</td>
</tr>
<tr>
<td>(2)</td>
<td>- Department of Fisheries and Oceans</td>
</tr>
<tr>
<td>(1)</td>
<td>- Ministry of Environment</td>
</tr>
<tr>
<td>(2)</td>
<td>- Ministry of Parks</td>
</tr>
<tr>
<td>(1)</td>
<td>- Ministry of Tourism</td>
</tr>
<tr>
<td>6</td>
<td>Forest Industry</td>
</tr>
<tr>
<td>(2)</td>
<td>- Management</td>
</tr>
<tr>
<td>(3)</td>
<td>- Labour</td>
</tr>
<tr>
<td>(1)</td>
<td>- Public Representative</td>
</tr>
<tr>
<td>3</td>
<td>Fishing Industry *</td>
</tr>
<tr>
<td>1</td>
<td>Tourism Industry</td>
</tr>
<tr>
<td>6</td>
<td>Environmental Groups Directors</td>
</tr>
<tr>
<td>5</td>
<td>Arrested Environmental Activists</td>
</tr>
<tr>
<td>4</td>
<td>Independent Specialists</td>
</tr>
<tr>
<td>2</td>
<td>Teachers</td>
</tr>
<tr>
<td>(1)</td>
<td>- College</td>
</tr>
<tr>
<td>(1)</td>
<td>- University</td>
</tr>
<tr>
<td>1</td>
<td>Native Band Council</td>
</tr>
</tbody>
</table>

**TOTAL** 39

*includes Native and non-Native individuals

OVERALL TOTAL FOR ALL PHASES = 87 participants.
COMPONENTS OF CRITICAL ANALYSIS QUESTIONNAIRE

1. Initial Position

2. Reasons

3. Principle Tests

4. Opposite Reasons (reverse of 2. above)

5. Concluding Position

6. Background and Evaluation

Examples of these components are included in the following pages.
1. YOUR POSITION

Please put a check mark in the box √ beside the answer which best reflects your position on logging in the lower Tsitika valley.

Logging should proceed in the lower Tsitika Valley.

☐ AGREE
☐ DISAGREE

Please indicate how certain you feel about your answer.

☐ ABSOLUTELY CONVINCED
☐ REASONABLY CERTAIN
☐ HAVE SOME RESERVATIONS

If you marked “AGREE” above, please go to TAB “YES” in the blue section.

If you marked “DISAGREE” above, please go to TAB “NO” in the green section.
2. REASONS FOR YOUR POSITION

Please put check marks in the boxes ☑️ beside those reasons that you would select in support of your position on logging the lower Tsitika (check as many as you wish).

A. Logging the lower Tsitika would provide jobs in the timber industry *e.g.* logging, milling, *silvicultural* and other related jobs.

B. Logging the lower Tsitika would produce revenue for the provincial government and the timber companies.

C. Logging the lower Tsitika as part of that annual allowable cut allows the timber companies to meet the demand for domestic wood supplies.

D. Logging the lower Tsitika will help to keep the local resource-based communities alive.

E. Logging the lower Tsitika will profit the timber industry and will cause no significant loss to any other user group.

F. Logging in the lower Tsitika Valley allows residents in a resource-based community to pursue their chosen livelihood.

G. Logging the lower Tsitika would discourage environmental groups who constantly increase their demands for environmental protection.

H. Logging the lower Tsitika is legally *authorized* by the B.C. government through Tree Farm Licences agreements.

I. Logging the lower Tsitika was decided on the basis of careful planning procedures and extensive studies.

J. Logging the lower Tsitika will not significantly damage the aesthetic value of the region.

K. Logging the lower Tsitika is based on a plan for sustainable harvesting of the area.

L. Logging the lower Tsitika will have no known adverse effects on the area’s wildlife, including the killer whale habitat.

M. Logging the lower Tsitika is the most productive management option for this valuable old growth forest resource which would otherwise be wasted as the old trees die or burn down.

N. Logging the lower Tsitika is opposed mostly by people who are ill-informed about the timber industry.

O. Logging the lower Tsitika is economically beneficial and will not damage any of the best examples of old growth forest ecosystems in the province.

P. Logging the lower Tsitika benefits the general public by improving recreational access and the visibility of some wildlife species in the area.

over...
REASONS FOR YOUR POSITION

Please put check marks in the boxes ☑ beside the reasons that you would select in support of your position on not logging the lower Tsitika (check as many as you wish).

A. Not logging the lower Tsitika would have minimal negative effects on the timber industry (e.g. the number of jobs, corporate profits, government revenue, and volume of timber cut) since it represents such a small area.

B. Not logging the lower Tsitika would allow the other (non-timber) users to have a long-term sustainable future in the region, (e.g. tourism, fishing, hunting, research).

C. Not logging the lower Tsitika would protect this region’s biodiversity.

D. Not logging the lower Tsitika would prevent significant environmental damage including degradation of the habitat of fish, killer whales and other wildlife.

E. Not logging the lower Tsitika would avoid risking environmental damage including the degradation to wildlife habitat since present research is inadequate to provide error-proof management plans.

F. Not logging the lower Tsitika would conserve an area which has significant spiritual and emotional value for many people.

G. Not logging the lower Tsitika would show our respect for other living creatures in the ecosystem.

H. Not logging the lower Tsitika would protect an area that is considered sacred by the Tlowitsis-Mumtagila peoples and over which they have never relinquished their traditional rights.

I. Not logging the lower Tsitika would respect widespread public desire to protect a valuable publicly owned wilderness area for future generations.

J. Not logging the lower Tsitika would lead to restructuring of obsolete management plans for the area which do not reflect changing public attitudes towards the forest.

K. Not logging the lower Tsitika would help to protect an internationally recognized ecological feature of B.C.

L. Not logging the lower Tsitika would avoid further tarnishing Canada’s reputation as a country committed to environmental protection.

M. Not logging the lower Tsitika would set an example and encourage third world countries to consider the environmental costs of development and to preserve significant natural areas.

N. Not logging the lower Tsitika would represent increased public influence over the timber activities of large multinational corporations.

O. Not logging the lower Tsitika would protect the last significant example of a unique ecosystem.

over...
ADDITIONAL REASONS

If you have a reason, not mentioned on the previous page, that you would select in support of your position on logging the lower Tsitika Valley, please write it in the space below:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

MOST IMPORTANT REASONS

Please reread the list of reasons on the previous page and select up to three which you consider to be the most important reasons why logging should proceed in the lower Tsitika Valley. Enter the letters corresponding to each of your important reasons in the spaces below and on the yellow paper provided. Place the yellow paper on the table to be referred to during the next section.

(your selection of the three most important reasons) ______, ______, ______

NEXT

The next section investigates each of your important reasons using a series of probes. Please turn to the letter on the blue TAB corresponding to the letter of your first important reason.
3. PROBES FOR REASON A

One of the reasons you chose as important was that “logging the lower Tsitika would provide jobs in the timber industry e.g. logging, milling, silviculture and other related jobs”.

This reason implies that, in principle, you believe *We ought to do things that provide jobs*.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If jobs were to be lost in other ways such as by mechanization, would you oppose mechanization?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. If continuing an industry that provides jobs meant that there would be damage to a world renown scenic area would you support the industry?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. If you were involved in the fishing industry would you support the idea of providing jobs for people who engaged in an industry that damaged your livelihood?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. If there were other ways to provide jobs during tough economic times such as employees accepting a drop in salary in order to keep everyone employed, would you take a drop in salary to provide jobs?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “providing jobs in the timber industry e.g., logging, milling, silviculture and other related jobs” is an important reason for logging the lower Tsitika? | Y N |

Do you feel the reason should be modified? | Y N |

If yes how? | |

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
One of the reasons you chose as most important was that “not logging the lower Tsitika would protect the biodiversity of this region”.

This reason implies that, in principle, you believe “we ought to do things that protect biodiversity in a region”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. if you are a supervisor for a large logging company and for at least a decade you have known most of your crew, their families and their financial needs. If preserving biodiversity meant that some of these people would be jobless, with no viable alternative means of livelihood, would you support preserving biodiversity?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If significant steps were taken to preserve large natural areas for biodiversity and this meant that oil and gas extraction was cut back and prices rose considerably such that driving a car was unaffordable, would you still support the protection of biodiversity?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If you had just purchased a piece of property and an ecologist neighbour discovered that very rare plants grew in the most scenic and suitable spot to build a house, would you support preserving biodiversity and put your house in a less desirable site?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If you were diagnosed as having a fatal disease like AIDS and a rare plant species was found to be the only cure, would you agree to support the preservation of biodiversity and not use the plant until it could be cultivated or its constituents made synthetically?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “protecting biodiversity in a region” is an important reason for not logging the lower Tsitika? Y  N

Do you feel the reason should be modified? Y  N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
5. CONCLUSION

Now please indicate again your position on logging in the lower Tsitika Valley.

Put a check mark in the box beside the answer which best reflects your opinion.

Logging should proceed in the lower Tsitika Valley.

☐ AGREE
☐ DISAGREE

Please indicate how certain you feel about your answer.

☐ ABSOLUTELY CONVINCED
☐ REASONABLY CERTAIN
☐ HAVE SOME RESERVATIONS

If your position or your certainty have changed please explain why.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Now please turn to Red Tab 6
6. BACKGROUND AND EVALUATION

Please answer the following by putting a check mark in the appropriate box ✔.

1. Have you had any formal instruction in critically assessing or justifying positions in controversial issues?
   - YES, QUITE A BIT
   - YES, SOME
   - NO, NONE
   If yes, please explain.
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________

2. To what extent have you been involved in previous environmental impact assessments (EIA's)?
   - PARTICIPATED IN MANY
   - PARTICIPATED IN A FEW
   - NO PREVIOUS PARTICIPATION
   For those who have participated in EIA's please explain your role, for example, observer/researcher/impact evaluator . . .
   ______________________________________________________
   ______________________________________________________
   ______________________________________________________
MODEL OF CRITICAL ANALYSIS QUESTIONNAIRE

USED FOR PROJECT:

THE ROLE OF EDUCATION IN ENVIRONMENTAL IMPACT ASSESSMENT:
ANALYSIS OF PRACTICAL REASONING ABOUT THE TSITIKA WATERSHED ISSUE

by

Jennifer Balke

Faculty of Education

Simon Fraser University
Note: The University and those conducting this project subscribe to the ethical conduct of research and to the protection at all times of the interests of the participants. This information is given to you for your full understanding of the procedures involved.

The questionnaire entitled: **LOGGING IN THE LOWER TSITIKA: WHAT DO YOU THINK AND WHY?** explores the various reasons for and against positions recorded during an environmental impact assessment (EIA) review. The EIA in the lower Tsitika Valley is used as a model. This research is based on a theory of reasoning outlined by Dr. J. Coombs at the University of British Columbia. The questionnaire is part of the research for a Master's thesis in environmental education at Simon Fraser University. It is funded in part by a grant from the Canadian Environmental Assessment Review Council, the research wing of the Federal Environmental Assessment Review Office.

The questionnaire will take approximately 30 minutes to complete. Answers will be recorded in a network of choices and there are no right or wrong answers. All responses to the questionnaire will be anonymous. Following compilation of the data, a summary of the results will be available for each group or individual that participated.

You have been asked to participate in this research project by Dr. Jennifer Balke, a graduate student in the Faculty of Education, Simon Fraser University. You may withdraw your participation in this project at any time.

You may direct any inquiry or complaint about this project to:

Dr. J. Balke, 335-2151
Dr. M. McClaren, 762-7600
Dr. R. Case, 291-3745

These individuals may also be reached by writing to:
Faculty of Education, Simon Fraser University, Burnaby, b.C. V5A1S6;

or to:

Dr. C. Day, 291-3067

Who can also be reached by writing to:
Natural Resources Management Program, Faculty of Applied Sciences, Simon Fraser University, Burnaby, B.C. V5A 1 S6

If you wish to receive a summary of the results of this questionnaire, please complete and detach this form and return it to Dr. J. Balke, or mail it to Dr. Balke at the:
Faculty of Education, Simon Fraser University, Burnaby, B.C. V5A1S6

NAME: ________________________________
ADDRESS: _______________________________________________________.
_________________________________________________________
LOGGING IN THE LOWER TSITIKA VALLEY:
WHAT DO YOU THINK AND WHY?

A CRITICAL ASSESSMENT QUESTIONNAIRE

JENNIFER BALKE
ENVIRONMENTAL EDUCATION
SIMON FRASER UNIVERSITY

FUNDED BY THE CANADIAN ENVIRONMENTAL ASSESSMENT RESEARCH COUNCIL
LOGGING IN THE LOWER TSITIKA VALLEY

This questionnaire is designed to examine the positions people hold on controversial issues and to explore the reasons for their positions. There are no right or wrong answers in the questionnaire. The intention is to find out what you think.

The topic of this questionnaire is the logging of the lower Tshitka valley on northeastern Vancouver Island. The logging of this area is a controversial issue and is currently the subject of a federal government environmental impact assessment.

This questionnaire consists of six sections:

1. YOUR POSITION
2. YOUR REASONS
3. PROBES INVESTIGATING YOUR REASONS
4. CONSIDERING THE OPPOSITE POSITION
5. CONCLUSION
6. BACKGROUND & EVALUATION

The size of the questionnaire is due to the network of possible choices. Although you will be asked questions in each section, you will only complete a small portion of the overall questionnaire.

Your participation in this questionnaire will make a valuable contribution to our understanding of the process of making choices in controversial environmental impact assessment issues.

Now, please turn to Red Tab "1".
1. YOUR POSITION

Please put a check mark in the box ✓ beside the answer which best reflects your position on logging in the lower Tshitika valley.

Logging should proceed in the lower Tshitika Valley.

☐ ‘AGREE
☐ DISAGREE

Please indicate how certain you feel about your answer.

☐ ABSOLUTELY CONVINCED
☐ REASONABLY CERTAIN
☐ HAVE SOME RESERVATIONS

If you marked “AGREE” above, please go to TAB “YES” in the blue section.

If you marked “DISAGREE” above, please go to TAB “NO” in the green section.
2. REASONS FOR YOUR POSITION

The “YES” tab denotes the section for those that agreed logging should proceed in the lower Tshitika Valley. In this section you will be asked for the reasons in support of your position.

First, you will be asked to select from a list of reasons generated by others knowledgeable about the issue.

Second, you can insert additional reasons if desired.

Third, you are asked to chose up to three of the most important reasons.
REASONS FOR YOUR POSITION

Please put check marks in the boxes ☑ beside those reasons that you would select in support of your position on logging the lower Tsitika (check as many as you wish).

A. Logging the lower Tsitika would provide jobs in the timber industry e.g. logging, milling, silvicultural and other related jobs. ☑ A

B. Logging the lower Tsitika would produce revenue for the provincial government and the timber companies. 0 B

C. Logging the lower Tsitika as part of that annual allowable cut allows the timber companies to meet the demand for domestic wood supplies. 0 C

D. Logging the lower Tsitika will help to keep the local resource-based communities alive. ☑ D

E. Logging the lower Tsitika will profit the timber industry and will cause no significant loss to any other user group. ☑ E

F. Logging in the lower Tsitika Valley allows residents in a resource-based community to pursue their chosen livelihood. 0 F

G. Logging the lower Tsitika would discourage environmental groups who constantly increase their demands for environmental protection. ☑ G

H. Logging the lower Tsitika is legally authorized by the B.C. government through Tree Farm Licences agreements. ☑ H

I. Logging the lower Tsitika was decided on the basis of careful planning procedures and extensive studies. 0 I

J. Logging the lower Tsitika will not significantly damage the aesthetic value of the region. ☑ J

K. Logging the lower Tsitika is based on a plan for sustainable harvesting of the area. ☑ K

L. Logging the lower Tsitika will have no known adverse effects on the area’s wildlife, including the killer whale habitat. 0 L

M. Logging the lower Tsitika is the most productive management option for this valuable old growth forest resource which would otherwise be wasted as the old trees die or burn down. 0 M

N. Logging the lower Tsitika is opposed mostly by people who are ill-informed about the timber industry. ☑ N

O. Logging the lower Tsitika is economically beneficial and will not damage any of the best examples of old growth forest ecosystems in the province. ☑ O

P. Logging the lower Tsitika benefits the general public by improving recreational access and the visibility of some wildlife species in the area. ☑ P

over . . .
ADDITIONAL REASONS

If you have a reason, not mentioned on the previous page, that you would select in support of your position on logging the lower Tsitika Valley, please write it in the space below:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

MOST IMPORTANT REASONS

Please reread the list of reasons on the previous page and select up to three which you consider to be the most important reasons why logging should proceed in the lower Tsitika Valley. Enter the letters corresponding to each of your important reasons in the spaces below and on the yellow paper provided. Place the yellow paper on the table to be referred to during the next section.

(your selection of the three most important reasons)   ,   ,   

NEXT

The next section investigates each of your important reasons using a series of probes. Please turn to the letter on the blue TAB corresponding to the letter of your first important reason.
PROBES FOR REASON B

One of the reasons you chose as important was that "logging the lower Tsitika would produce revenue for the provincial government and the timber companies".

This reason implies that, in principle, you believe "we ought to do things that produce revenue for the provincial government and timber companies".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If only a relatively small amount of revenue was to be produced by a project but the project would damage an internationally recognized natural area, would you support the project in order to produce the revenue?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. What if you were a native person and you felt that although the government and timber companies were making profits, they were at the same time desecrating areas which your ancestors held sacred and in which they had lived and were buried, would you support these revenue-generating activities?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. If a profitable mine which would generate revenue for the government and a large corporation and which would have significant side effects was proposed for a site adjacent to your home, would you support this revenue-producing mine?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. If an industry that brought in revenue for government and industry also jeopardized your children's long-term opportunities to make a living in the area, would you support the industry?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "producing revenue for the provincial government and the timber companies" is an important reason for logging the lower Tsitika?  Y N

Would you modify the reason?  Y N

If yes, how?

________________________________________________________

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
One of the reasons you chose as important was that “logging the lower Tsitika would help to keep the local resource-based communities alive”.

This reason implies that, in principle, you believe “we ought to do things that help to keep resource-based communities alive”.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Would you agree with keeping resource-based communities alive if it required financial subsidies from the provincial government or from urban centres?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If people in resource-based communities were provided with jobs but the considerable profits from the public resources went primarily to multinational corporations outside of the country, would you support keeping these resource-based communities alive?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. What if one resource use, that would keep the community alive, conflicted with another resource use? For example, if you were in the fishing industry would you support another resource user being allowed to threaten the future of your resource?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If the activities of some resource-based communities were unavoidably damaging to the future of certain ecosystems and also to human health and well-being, would you support keeping these resource-based communities be alive?</td>
<td>Y  N</td>
</tr>
<tr>
<td>5. What if you were a native person who had lived in a region for generations and in the last 50 years a non-native community had moved in and begun resource extraction. If the livelihood of the new community damaged your cultural heritage would you feel the new community should be supported?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “helping to keep the local resource-based communities alive” is an important reason for logging the lower Tsitika? Y  N

Would you modify the reason? Y  N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON E

One of the reasons you chose as important was that "logging the lower Tsitika will profit the timber companies and will cause no significant economic loss to any other user group".

This reason implies that, in principle, you believe "we ought to do things that profit one user group and won't cause significant economic loss to other user groups".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If a profitable industrial activity caused the extinction of an animal species that was of no economic value, would you accept this loss of a species because one user group profited and there was no economic loss to other user groups?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. Would you support making decisions on the basis of considering only the economic benefits of user groups if this applied to all public decisions such as schools, hospitals, etc?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. Would you agree that as long as no group suffers an economic loss it would be alright to discriminate against a group, such as preventing certain racial groups from sitting in the front of buses?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. Suppose your heavily used local community park was chosen as the site for the new sewage treatment facility, would you support the project as long as there would be no significant economic loss to anyone?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "doing things that profit the timber industry and will cause no significant economic loss to other user groups" is an important reason for logging the lower Tsitika?

Would you modify the reason?

If yes how?

Y  N

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON F

One of the reasons you chose as important was that "logging the lower Tsitika allows residents of resource-based communities to pursue their chosen livelihood".

This reason implies that, in principle, you believe "we ought to do things that allow residents of resource-based communities to pursue their chosen livelihood".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consider the consequences if everyone in resource-based communities wanted to work in the timber industry. Would you agree that things ought to be done to allow all of these people to pursue their chosen livelihood?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. Suppose some residents of resource-based communities wanted to farm. Do you agree that present Crown forest land should be available to other residents e.g. farmers, to allow them to pursue their chosen livelihood?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If some residents felt they could not continue to pursue their livelihood because of logging in the region, would you support stopping logging to allow these residents to pursue their chosen livelihood?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If a resident in the course of pursuing his chosen livelihood, was polluting a river such that the nearby communities could no longer use it for their water supply, should the resident be allowed to continue to pursue his chosen livelihood?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "allowing residents of resource-based communities to pursue their chosen livelihood" is an important reason for logging the lower Tsitika?  Y  N

Would you modify the reason?  Y  N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON G

One of the reasons you chose as important was that “logging the lower Tsitika would discourage environmental groups who constantly increase their demands for environmental protection”.

This reason implies that, in principle, you believe “we ought to do things that discourage environmental groups”.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If a local school’s environmental youth club had cleaned up a river that ran through town and were distributing leaflets about the identity and control of other local sources of pollution, would you discourage these students?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If an environmental group conducted a campaign to keep forested land in the agricultural land reserve from being turned into golf courses in order to preserve the working forest, would you discourage this group?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. Consider the effects that environmental groups have had on policies for clean air and water and the future consequences on air and water if everyone now thought environmental groups should be discouraged, do you still support doing things to discourage environmental groups?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If your spouse was employed by an environmental group would you do things that discouraged this environmental group?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “discouraging environmental groups who constantly increase their demands for environmental protection” is an important reason for logging the lower Tsitika?  

Would you modify the reason? | Y  N |

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
**PROBES FOR REASON 1**

One of the reasons you chose as important was that "logging the lower Tsitika was decided on the basis of careful planning procedures and extensive studies".

This reason implies that, in principle, you believe "we ought to do things that are based on careful planning procedures and extensive studies".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If 20 years ago a mining company had commissioned careful studies and plans for a surface pit mine adjacent to your town and in the interim the town had expanded into the area near the mine, would you support the company proceeding on the basis of those twenty-year old plans and studies?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. Would you support decisions for development around your community that were based on elaborate planning and extensive studies if the people doing the planning and studies stood to profit from the approved development?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. Suppose extensive studies undertaken 15 years ago, had laid out elaborate plans for the nuclear energy needs of your growing town and the development of nuclear power facilities was now beginning as dictated in the plans. Would you support this development on the basis of these plans despite changes in public attitudes about nuclear power?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. If unacceptable procedures such as profiting from raw log export were part of a forest company’s careful planning procedures and extensive studies for future logging in a forest region near your community, would you support the company merely because it had carried out careful plans and extensive studies?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "decisions made on the basis of careful planning procedures and extensive studies" is an important reason for logging the lower Tsitika?

Would you modify the reason? Y N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON J

One of the reasons you chose as important was that "logging the lower Tsitika will not significantly damage the aesthetic value of the region".

This reason implies that, in principle, you believe "we ought to do things that will not significantly damage the aesthetic value of a region".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If a highway rerouting was going to divide your town or neighbourhood and cut you off from the school and the shopping area, would you be satisfied with the plan if it didn’t significantly damage the aesthetics of the region?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If you valued the rural appearance of the farmland, would you accept an urban planner’s opinion that the aesthetic value of farmland would not be significantly damaged if a developer built a beautiful high-rise complex?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If a company wanted to use your local watershed for toxic waste and said that the waste was a tasteless, odourless, pleasant blue colour and wouldn't affect the aesthetic value of the region, would you support the company’s plan?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. Would you feel that “not significantly damaging the aesthetics of a region was acceptable” if the overall region when viewed from a distance appeared unaffected, but the small site where you lived was extensively damaged?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “not significantly damaging the aesthetic value of the region” is an important reason for logging the lower Tsitika? Y  N

Would you modify the reason? Y  N

If yes how?
__________________________________________________________________________

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON K

One of the reasons you chose as important was that “logging the lower Tsitika is based on a plan for sustainable harvesting of the area”.

This reason implies that, in principle, you believe “we ought to do things that are based on plans for sustainable use”.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The export of raw logs could be part of a plan for sustainable use of timber resources even though jobs from valued-added products would be lost. Would you support plans for sustainable use that involved raw log export?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If plans for the sustainable use of resources in an area involved extensive local environmental pollution, would you support these plans for the sustainable use of resources?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If there were two competing sustainable uses of the resources in an area, do you feel that deciding solely on the basis of sustainable use would fairly determine which industry should use the resource?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If an area had significant spiritual, hereditary or ecological value would you support development plans for this area that were based only on the idea of sustainable use?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “basing logging the lower Tsitika on a plan for sustainable harvesting of the area” is an important reason for logging the lower Tsitika? Y  N

Would you modify the reason? Y  N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON L

One of the reasons you chose as important was that “logging **the lower Tsitika will have no known adverse effect on the area’s wildlife resources including the killer whale habitat**”.

This reason implies that, in principle, you believe “we ought to do things that will have no known effect on wildlife resources”.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. As a native person would you support activities that had no known adverse effect on wildlife resources even if you felt that those activities would destroy significant aspects of your cultural heritage?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. Many wildlife managers would admit that our overall knowledge of the effects of our various activities on wildlife populations is very limited. For example, prior to the 1970’s there was no known evidence of the importance of killer whale activity in Robson Bight so that effects on the killer whales were unknown. Given our limited knowledge of effects, would you still agree with doing things that have no known adverse effect on wildlife resources?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. Would you agree to an activity in your local area that had no known effect on the wildlife resources but was severely damaging to the aesthetics of the area?</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. Would you support going ahead with a project that had no know effect on wildlife resources if studies of the effects of the project were in progress?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “**having no known adverse effect on wildlife resources**” is an important reason for logging the lower Tsitika?

Would you modify the reason?

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON 0

One of the reasons you chose as important was that "logging the lower Tsitika is economically beneficial and will not damage any of the best examples of old growth forest ecosystems in the province".

This reason implies that, in principle, you believe "we ought to do things that are economically beneficial and do not damage the best examples of ecosystems".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If your town had two rare landmarks should developers be allowed to destroy one and make a profit on the basis that the town had another landmark that they considered to be more valuable?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. If your district owned land adjacent to an excellent fishing river near your town and the district decided this land would become an industrial development on the basis that there are other better rivers for fishing in other parts of the province, would this be acceptable?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. Suppose your town had been built around a scenic waterfall and developers decided to divert the water for the new golf course. Would you accept their comments that the golf course will be profitable and that there are other, better waterfalls in the province?</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. If a company logged one of the last old growth forest ecosystems on the basis that there was a better example in another part of the province and then the better example was destroyed by fire, would you still support doing things that don’t damage the best examples of ecosystems?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “benefiting economically and not damaging any of the best examples of old growth forest ecosystems in the province” is an important reason for logging the lower Tsitika?  

Would you modify the reason?  

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON P

One of the reasons you chose as important was that “logging the lower Tsitika benefits the general public by improving recreational access and the visibility of some wildlife species in the area.”

This reason implies that, in principle, you believe “we ought to do things that provide some benefit to the general public.”

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If benefitting the general public meant that your only local community park or natural area was to be turned into shopping plaza would you support benefitting the general public in this case?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. Suppose an activity that was beneficial to the general public was severely detrimental to a group of people, would you still agree with engaging in this activity because it benefitted the general public?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. If a highway bypass proposal, designed to benefit the general public, was routed through the home that you had spent many years building and landscaping, would you support benefitting the general public in this case?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. If benefitting the general public would involve destroying a world class ecological or historical feature of B.C. would you consider this acceptable in order to benefit the general public?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “benefitting the general public by improving recreational access and the visibility of some wildlife species” is an important reason for logging the lower Tsitika? | Y N |

Would you modify the reason? | Y N |

If yes how? |

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
4. CONSIDERING THE OPPOSITE POSITION

The following are reasons people might give for disagreeing with logging proceeding in the lower Tsitika. Please put a check mark ☑ beside any which you think are good reasons (check as many as you wish);

A. Not logging the lower Tsitika would have minimal negative effects on the timber industry (e.g. the number of jobs, corporate profits, government revenue, and volume of timber cut) since it represents such a small area.

B. Not logging the lower Tsitika would allow the other (non-timber) users to have a long-term sustainable future in the region, (e.g. tourism, fishing, hunting, research).

C. Not logging the lower Tsitika would protect this region’s biodiversity.

D. Not logging the lower Tsitika would prevent significant environmental damage including degradation of the habitat of fish, killer whales and other wildlife.

E. Not logging the lower Tsitika would avoid environmental damage including the degradation to wildlife habitat since present research is inadequate to provide error-proof management plans.

F. Not logging the lower Tsitika would conserve an area which has significant spiritual and emotional value for many people.

G. Not logging the lower Tsitika would show our respect for other living creatures in the ecosystem.

H. Not logging the lower Tsitika would protect an area that is considered sacred by the Tlowitsis-Mumtagila peoples and over which they have never relinquished their traditional rights.

I. Not logging the lower Tsitika would respect widespread public desire to protect a valuable publicly owned wilderness area for future generations.

J. Not logging the lower Tsitika would lead to restructuring of obsolete management plans for the area which do not reflect changing public attitudes towards the forest.

K. Not logging the lower Tsitika would help to protect an internationally recognized ecological feature of B.C.

L. Not logging the lower Tsitika would avoid further tarnishing Canada’s reputation as a country committed to environmental protection.

M. Not logging the lower Tsitika would set an example and encourage third world countries to consider the environmental costs of development and to preserve significant natural areas.

N. Not logging the lower Tsitika would represent increased public influence over the timber activities of large multinational corporations.

O. Not logging the lower Tsitika would protect the last significant example of a unique ecosystem.

over...
Now please indicate again your position on logging in the lower Tsitika Valley.

Put a check mark in the box ☐ beside the answer which best reflects your opinion.

Logging should proceed in the lower Tsitika Valley.

☐ AGREE
☐ DISAGREE

Please indicate how certain you feel about your answer.

☐ ABSOLUTELY CONVINCED
☐ REASONABLY CERTAIN
☐ HAVE SOME RESERVATIONS

If your position or your certainty have changed please explain why.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Now please turn to Red Tab 6
2. REASONS FOR YOUR POSITION

The "NO" tab denotes the section for those that disagreed logging should proceed in the lower Tsitika Valley. In this section you will be asked for the reasons in support of your position.

First, you will be asked to select from a list of reasons generated by others knowledgeable about the issue.

Second, you can insert additional reasons if desired.

Third, you are asked to chose up to three of the most important reasons.
ADDITIONAL REASONS

If you have a reason, not mentioned on the previous page, that you would select in support of your position on not logging the lower Tsitika Valley, please write it in the space below:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

MOST IMPORTANT REASONS

Please reread the list of reasons on the previous page and select up to three which you consider to be the most important reasons why logging should not proceed in the lower Tsitika Valley. Enter the letters corresponding to each of your important reasons in the spaces below and on the yellow paper provided. Place the yellow paper on the table to be referred to during the next section.

(Your selection of the three most important reasons)  ___________  ______

NEXT

The next section investigates each of your important reasons using a series of probes. Please turn to the letter on the green TAB corresponding to the letter of your first important reason.
PROBES FOR REASON A

One of the reasons you chose as most important was that “not logging the lower Tsitika would have minimal negative effects on the timber industry (e.g. the number of jobs, corporate profits, government revenue, and volume of timber cut) since it represents such a small area”.

This reason implies that, in principle, you believe “we ought to do things that have minimal negative effects on an industry”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If the overall effects of an action were minimal to a large industry but were severely damaging to the local community of persons employed by that industry such that the people became jobless and homeless, would you still support doing something that had minimal effects on an industry?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. If having a minimal negative effect on an industry meant that the industry would no longer have the funds to support charitable causes or the arts, would you support doing things that minimum negative effects on the industry in this case?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. If you were going to lose your job as a result of the minimal negative effects on an industry and your spouse and two small children depended on your income? Would you support doing things that had minimal negative effects on your industry?</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. Often when funds are tight, industry lays off research staff whose work helps to ensure the future safety and success of the industry but who don’t contribute to immediate revenue. Would you support these cuts on the basis of their having minimal negative effects on the industry?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “having minimal negative effects on an Industry” is an important reason for not logging the lower Tsitika? | Y      N          |

Do you feel the reason should be modified? | Y      N          |

If yes, how? |  |

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON B

One of the reasons you chose as most important was that “not logging the lower Tsitika would allow the other (than timber) users to have a long-term sustainable future in the region, (e.g., tourism, fishing, hunting, research)”. 

This reason implies that, in principle, you believe “we ought to do things that allow other (than timber) users to have a long term sustainable future in a region”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Would you be willing to give up your job in an industry which allowed you to make five times the salary of people in other industries using the same resource, if this meant that people in the other user industries would have a long-term sustainable future?</td>
<td>Y       N</td>
</tr>
<tr>
<td>2. If allowing other (than timber) users than forestry to have long term sustainable futures in certain regions meant that timber harvesting levels dropped and wood prices increased, would you be willing to pay this additional cost for wood and paper items?</td>
<td>Y       N</td>
</tr>
<tr>
<td>3. What if allowing other (than timber) users to have a sustainable future in a region meant that many businesses in the local community had to close? would you support giving other (than timber) users a sustainable future in this case?</td>
<td>Y       N</td>
</tr>
<tr>
<td>4. If huge multinational companies, whose profits go out of the country, were the users who were to have a long-term sustainable future in the region, would you still support allowing other (than timber) users to have a long-term sustainable future in a region?</td>
<td>Y       N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “allowing other (than timber) users to have a long-term sustainable future in the region” is an important reason for not logging the lower Tsitika? Y   N

Do you feel the reason should be modified? Y   N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON C

One of the reasons you chose as most important was that “not logging the lower Tsitika would protect the biodiversity of this region”.

This reason implies that, in principle, you believe “we ought to do things that protect biodiversity in a region”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If you are a supervisor for a large logging company and for at least a decade you have known most of your crew, their families and their financial needs. If preserving biodiversity meant that some of these people would be jobless, with no viable alternative means of livelihood, would you support preserving biodiversity?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. If significant steps were taken to preserve large natural areas for biodiversity and this meant that oil and gas extraction was cut back and prices rose considerably such that driving a car was unaffordable, would you still support the protection of biodiversity?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. If you had just purchased a piece of property and an ecologist neighbour discovered that very rare plants grew in the most scenic and suitable spot to build a house, would you support preserving biodiversity and put your house in a less desirable site?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. If you were diagnosed as having a fatal disease like AIDS and a rare plant species was found to be the only cure, would you agree to support the preservation of biodiversity and not use the plant until it could be cultivated or its constituents made synthetically?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “protecting biodiversity in a region“ is an important reason for not logging the lower Tsitika? Y N

Do you feel the reason should be modified? Y N

If yes, how?__________________________________________________________________________

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON D

One of the reasons you chose as most important was that “not logging the lower Tsitika would prevent significant environmental damage including the degradation of the habitat of fish, killer whales, and other wildlife”.

This reason implies that, in principle, you believe “we ought to do things that prevent significant environmental damage”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you willing to immediately stop buying newspapers and other bleached or non-recycled paper products to prevent significant degradation of the environment by pulp mill effluent?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. If you checked the environmental impacts of your job and found it to be unavoidably contributing to significant environmental damage, would you quit?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. Are you prepared to accept a marked decline in the availability of commodities if everyone took action to prevent significant environmental damage?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. Knowing that automobile emissions cause significant environmental damage would you be willing to use public transit wherever possible, even if it is not as convenient in order to prevent environmental damage?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “doing things that prevent significant environmental damage” is an important reason for not logging the lower Tsitika? Y N

Do you feel the reason should be modified? Y N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON E

One of the reasons you chose as most important was that "not logging the lower Tsitika would avoid risking environmental damage including the degradation of wildlife habitat since the present research is inadequate to provide error-proof management plans".

This reason implies that, in principle, you believe "we ought to do things that avoid risking damage to wildlife habitat areas since present research is inadequate to provide error-proof management plans."

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you agree with avoiding the risk of damage to wildlife habitat because of inadequate research, would you support funding biological research even if the funding must be diverted from health and social service programs?</td>
<td>Y      N</td>
</tr>
<tr>
<td>To avoid risking damage to the remaining old growth forest habitat, old growth wood harvesting is dramatically decreased. Since available second growth will not meet the existing demand, the price of wood supplies would increase dramatically. Would you support these increased prices to avoid risking damage to wildlife habitat areas?</td>
<td>Y      N</td>
</tr>
<tr>
<td>In some cases management plans have been designed to protect endangered species. Would you disagree with using these plans to manage areas with endangered species because of the risk of damaging wildlife habitat since present research is inadequate to provide error-proof management plans?</td>
<td>Y      N</td>
</tr>
<tr>
<td>If you were the owner of a tourist facility which utilized the wildlife habitat of a rare and vulnerable wildlife species would you support stopping your industry to avoid risking damage to wildlife habitat areas because of the impossibility to produce error-proof management plans based on present research?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "avoiding risking environmental damage to wildlife habitat since the present research is inadequate to provide error-proof management plans" is an important reason for not logging the lower Tsitika?  

Do you feel the reason should be modified?  

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON F

One of the reasons you chose as most important was that “not logging the lower Tsitika would mean the conservation of an area which has significant spiritual and emotional value for many people.”

This reason implies that, in principle, you believe “we ought to do things that conserve sites which have significant spiritual and emotional value for many people.”

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
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<tbody>
<tr>
<td>1. If the preservation of an old church and graveyard meant that the construction of a needed hospital would not proceed in your community, would you support conserving these sites because they have significant spiritual and emotional value for many people?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If your house plans were opposed by the community on the grounds that the trees and gardens to be damaged during the construction had significant spiritual and emotional value to the community, would you respect these people’s values and not build your house?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. Suppose that preservation of an area with important spiritual and emotional value for some groups of people meant that another group of people would lose their jobs and their homes, would you support preserving these areas?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If preserving an area that had significant spiritual and emotional value to an elite group of people meant that a housing project for some needy people could not be built, would you favour the preservation of the area?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that **conserving an area which has significant spiritual and emotional value for many people** is an important reason for not logging the lower Tsitika?  

Y  N

Do you feel the reason should be modified?

Y  N

If yes, how?


Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON H

One of the reasons you chose as most important was that “not logging the lower Tsitika would protect an area that is considered sacred to the Tlowitlisis-Mumtagila peoples and over which they have never relinquished their traditional rights”.

This reason implies that, in principle, you believe “we ought to do things that protect areas sacred to Canada’s aboriginal peoples, over which they have never relinquished their traditional rights”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If a land claim settlement with Canada’s aboriginal peoples meant that your house was now located in sacred Native territory and you would be required to conform to their policies, would you still support protecting areas that are sacred to Canada’s aboriginal peoples and over which they have never relinquished their traditional rights?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If protecting all areas sacred to Canada’s aboriginal peoples cost taxpayers a great deal of money, and fewer tax dollars were available for other programs including many social services, would you still support protecting these areas?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If preservation of a particular area sacred to Canada’s aboriginal peoples conflicted directly with your job, would you support saving areas sacred to the Native peoples?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If everyone supported protecting areas that are sacred to the aboriginal peoples, and this meant that resource development slowed and costs, for example, of wood, paper or oil products soared, would you still agree with protecting these sacred areas?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “protecting an area that is considered sacred to the Tlowitlisis-Mumtagila peoples and over which they have never relinquished their traditional rights” is an important reason for not logging the lower Tsitika?  

Do you feel the reason should be modified?  

If yes, how?  

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
**PROBES FOR REASON 1**

One of the reasons you chose as most important was that "not logging the lower Tsitika would respect widespread public desire to protect a valuable publicly owned wilderness area for future generations".

This reason implies that, in principle, you believe "we ought to do things that respect widespread public desire to protect valuable publicly owned wilderness areas for future generations".

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Consider yourself in an industry which is a mainstay of the provincial economy and which is suffering extensive labour reductions and plant closures. If the public desire to save wilderness areas for future generations, conflicted with your industry's ability to function, would you still support addressing the public concerns for wilderness?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. Suppose addressing the widespread public desire for the preservation of wilderness lands required tax dollars also needed to assist impoverished children, would you support the public's desire for wilderness over all other issues?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. If everyone respected public desire to protect natural areas and as a result resource development declined and there was widespread unemployment and high commodity prices, would you still agree with respecting public desire for wilderness areas.</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. If you thought that widespread public opinion on a particular issue was ill-informed would you still support things that are examples of widespread public opinion for this cause?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “respecting the widespread public desire to protect a valuable publicly owned wilderness area for future generations” is an important reason for not logging the lower Tsitika? Y N

Do you feel the reason should be modified? Y N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
**PROBES FOR REASON L**

One of the reasons you chose as most important was that “not logging the lower Tsitika would avoid further tarnishing Canada’s reputation as a country committed to environmental protection”.

This reason implies that, in principle, you believe “we ought to do things that avoid tarnishing Canada’s reputation as a country committed to environmental protection”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If openly discussing present environmental problems in Canada was tarnishing Canada’s reputation as a country committed to environmental protection, would you support keeping quiet about these problems to avoid tarnishing Canada’s reputation?</td>
<td>Y</td>
</tr>
<tr>
<td>2. Suppose avoiding tarnishing Canada’s reputation as a country committed to environmental protection required that many industries had to reorganize resulting in massive unemployment, huge losses in government tax revenue and excessive prices of ordinary goods, are you prepared to accept these consequences in order to avoid tarnishing Canada’s reputation?</td>
<td>Y</td>
</tr>
<tr>
<td>3. If your job was identified as having unavoidable negative effects on the environment, would you be prepared to quit to avoid tarnishing Canada’s reputation as a nation committed to environmental protection?</td>
<td>Y</td>
</tr>
<tr>
<td>4. Excessive energy consumption by Canadian’s tarnishes our reputation as a nation committed to environmental protection. Are you willing to make dramatic cuts in all of your energy demands to avoid further tarnishing our reputation?</td>
<td>Y</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “avoiding further tarnishing Canada’s reputation as a country committed to environmental protection” is an important reason for not logging the lower Tsitika?  

**Y**  

Do you feel the reason should be modified?  

**Y**  

If yes, how?  

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to **Green TAB 4**.
One of the reasons you chose as most important was that "not logging the lower Tsitika would set an example and encourage third world countries to consider the environmental costs of development and to preserve significant natural areas".

This reason implies that, in principle, you believe "we ought to do things that would set an example and encourage third world countries to consider the cost of development and to preserve significant natural areas".

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Would you be willing to quit your job if you found that it caused unavoidable environmental damage, in order to set an example of environmental awareness to third world countries?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. If setting a positive environmental example to third world countries meant not purchasing commodities, made in countries where the industry damages the environment, would you support doing without these bargain-priced goods in order to set that example?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. Would you be willing to pay higher taxes to support employees of Canadian industries that damage natural areas, who would lose their jobs as a result of setting a positive environmental example to third world countries?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. What if, in order to set a positive example to third world countries, many people in Canada were left unemployed and money for other government programs to protect the environment was severely reduced, would you support setting this example?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "setting an example and encouraging third world countries to consider the costs of development and to preserve significant natural areas" is an important reason for not logging the lower Tsitika? | Y N |

Do you feel the reason should be modified? | Y N |

If yes, how? |

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON N

One of the reasons you chose as most important was that "not logging the lower Tsitika would represent increased public influence over the timber activities of the large multinational corporations".

This reason implies that, in principle, you believe “we ought to do things that represent increased public influence over the activities of large multinational corporations.”

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If increased public influence over multinationals meant that the companies were pressured to increase activities that caused environmental problems, would you support increased public influence in this case?</td>
<td>Y    N</td>
</tr>
<tr>
<td>2. What if increased public influence over the activities of multinationals lead to a complicated battleground of conflicting opinions that was ineffective in advising the corporation, would you still agree with increased public influence?</td>
<td>Y    N</td>
</tr>
<tr>
<td>3. If the idea of increased public influence over corporate activities deterred corporations from investing in B.C. and the economy and standard of living in this province was adversely affected, would you be willing to accept a more impoverished life style in order to have increased public influence?</td>
<td>Y    N</td>
</tr>
<tr>
<td>4. Consider that increased public influence became an expected method of monitoring the activities of multinationals. Thus, on top of your regular job, as a member of the public, you would be expected to voluntarily check the activities of companies in your area. Would you still support the idea of increased public influence?</td>
<td>Y    N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “representing increased public influence over the timber activities of the large multinational corporations” is an important reason for not logging the lower Tsitika?

Do you feel the reason should be modified? Y N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON 0

One of the reasons you chose as most important was that “not logging the lower Tsitika would protect the last significant example of a unique ecosystem”.

This reason implies that, in principle, you believe “we ought to do things that protect the last significant example of a unique ecosystem.”

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If government officials told you that using your land, which you had recently purchased, would adversely affect the last remaining ecosystem of a rare wildflower, would you support protecting this last remaining ecosystem and agree not use your land?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. If high compensation costs had to be paid to resource extraction companies in order to protect the last remaining ecosystems, would you support paying these fees in order to protect the ecosystems?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. Would you support protecting the last remaining unique ecosystems if it meant that the general public was no longer able to even visit these areas at will?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. If the last remaining unique natural ecosystems were on the land of aboriginal peoples and protecting these ecosystems meant that growing Native populations who had lived for centuries on these lands, would have to be relocated, would you support protecting the last remaining ecosystems?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “protecting the last significant example of a unique ecosystem” is an important reason for not logging the lower Tsitika? Y N

Do you feel the reason should be modified? Y N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
4. CONSIDERING THE OPPOSITE POSITION

The following are reasons people might give for agreeing with the logging proceeding in the lower Tsitika. Please put a check mark ☑ beside any which you think are good reasons (check as many as you wish).

A. Logging the lower Tsitika would provide jobs in the timber industry e.g. logging, milling, silvicultural and other related jobs. ☑ A

B. Logging the lower Tsitika would produce revenue for the provincial government and the timber companies. ☑ B

C. Logging the lower Tsitika as part of that annual allowable cut allows the timber companies to meet the demand for domestic wood supplies. ☑ C

D. Logging the lower Tsitika will help to keep the local resource-based communities alive. ☑ D

E. Logging the lower Tsitika will profit the timber industry and will cause no significant loss to any other user group. ☑ E

F. Logging in the lower Tsitika Valley allows residents in a resource-based community to pursue their chosen livelihood. ☑ F

G. Logging the lower Tsitika would discourage environmental groups who constantly increase their demands for environmental protection. ☑ G

H. Logging the lower Tsitika is legally authorized by the B.C. government through Tree Farm Licences agreements. ☑ H

I. Logging the lower Tsitika was decided on the basis of careful planning procedures and extensive studies. ☑ I

J. Logging the lower Tsitika will not significantly damage the aesthetic value of the region. ☑ J

K. Logging the lower Tsitika is based on a plan for sustainable harvesting of the area. ☑ K

L. Logging the lower Tsitika will have no known adverse effects on the area's wildlife, including the killer whale habitat. ☑ L

M. Logging the lower Tsitika is the most productive management option for this valuable old growth forest resource which would otherwise be wasted as the old trees die or burn down. ☑ M

N. Logging the lower Tsitika is opposed mostly by people who are ill-informed about the timber industry. ☑ N

O. Logging the lower Tsitika is economically beneficial and will not damage any of the best examples of old growth forest ecosystems in the province. ☑ O

P. Logging the lower Tsitika benefits the general public by improving recreational access and the visibility of some wildlife species in the area. ☑ P

over . . .
5. CONCLUSION

Now please indicate again your position on logging in the lower Tsitika Valley.
Put a check mark in the box ☑ beside the answer which best reflects your opinion.

Logging should proceed in the lower Tsitika Valley.

☐ AGREE
☐ DISAGREE

Please indicate how certain you feel about your answer.

☐ ABSOLUTELY CONVINCED
☐ REASONABLY CERTAIN
☐ HAVE SOME RESERVATIONS

If your position or your certainty have changed please explain why.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Now please turn to Red Tab 6
6. BACKGROUND AND EVALUATION

Please answer the following by putting a check mark in the appropriate box.

1. Have you had any formal instruction in critically assessing or justifying positions in controversial issues?

☐ YES, QUITE A BIT
☐ YES, SOME
☐ NO, NONE

If yes, please explain.
________________________________________________________________________
________________________________________________________________________

2. To what extent have you been involved in previous environmental impact assessments (EIA's)?

☐ PARTICIPATED IN MANY
☐ PARTICIPATED IN A FEW
☐ NO PREVIOUS PARTICIPATION

For those who have participated in EIA's please explain your role, for example, observer/researcher/impact evaluator . . .
________________________________________________________________________
________________________________________________________________________
3. Have you had any formal instruction in the process of environmental impact assessment?

☐ YES, QUITE A BIT
☐ YES, SOME
☐ NO, NONE

If YES, please indicate where you received this instruction and what it involved.

________________________________________________________________________

________________________________________________________________________

4. Did the probes cause you to reevaluate your position on logging in the lower Tsiti ka Valley?

☐ YES, CAUSED CONSIDERABLE REEVALUATION
☐ YES, CAUSED SOME REEVALUATION
☐ NO, CAUSED NO REEVALUATION

Comments:

________________________________________________________________________

________________________________________________________________________

5. What were the sources of information that contributed to the development of your position on logging the lower Tsitika Valley?

________________________________________________________________________

________________________________________________________________________

6. Are there any other comments about the questionnaire or about logging in the lower Tsitika Valley you would like to mention?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Thank you for **completing** this questionnaire. **The** data will be **used in** developing programs for enhancing dialogue in controversial environmental impact assessment issues.
The University and those conducting this project subscribe to the ethical conduct of research and to the protection at all times of the interests of the participants. This information is given to you for your full understanding of the procedures involved.

The questionnaire entitled:
LOGGING IN THE LOWER TSITIKA: WHAT DO YOU THINK AND WHY?
explores the various reasons for and against positions recorded during an environmental impact assessment (EIA) review. The EIA in the lower Tsitika Valley is used as a model. This research is based on a theory of reasoning outlined by Dr. J. Coombs at the University of British Columbia. The questionnaire is part of the research for a Master’s thesis in environmental education at Simon Fraser University. It is funded in part by a grant from the Canadian Environmental Assessment Review Council, the research wing of the Federal Environmental Assessment Review Office.

The questionnaire will take approximately 30 minutes to complete. Answers will be recorded in a network of choices and there are no right or wrong answers. All responses to the questionnaire will be anonymous. Following compilation of the data, a summary of the results will be available for each group or individual that participated.

You have been asked to participate in this research project by Dr. Jennifer Balke, a graduate student in the Faculty of Education, Simon Fraser University. You may withdraw your participation in this project at any time.

You may direct any inquiry or complaint about this project to:

Dr. J. Balke, 335-2151
Dr. M. McClaren, 762-7600
Dr. R. Case, 291-3745
These individuals may also be reached by writing to the:
Faculty of Education, Simon Fraser University, Burnaby, B.C. V5A 1 S6;

or to:

Dr. C. Day, 291-3067
Who can also be reached by writing to the:
Natural Resources Management Program, Faculty of Applied Sciences, Simon Fraser University, Burnaby, B.C. V5A1S6

If you wish to receive a summary of the results of this questionnaire, please complete and detach this form and return it to Dr. J. Balke, or mail it to Dr. Balke at the:
Faculty of Education, Simon Fraser University, Burnaby, B.C. V5A1S6

NAME: ________________________________
ADDRESS: ________________________________
MODEL OF CRITICAL ANALYSIS QUESTIONNAIRE

USED FOR PROJECT:

THE ROLE OF EDUCATION IN ENVIRONMENTAL IMPACT ASSESSMENT:
ANALYSIS OF PRACTICAL REASONING ABOUT THE TSITIKA WATERSHED ISSUE

by

Jennifer Balke

Faculty of Education

Simon Fraser University
LOGGING IN THE LOWER TSITIKA VALLEY:

WHAT DO YOU THINK AND WHY?

A CRITICAL ASSESSMENT QUESTIONNAIRE

JENNIFER BALKE
ENVIRONMENTAL EDUCATION
SIMON FRASER UNIVERSITY

FUNDED BY THE CANADIAN ENVIRONMENTAL ASSESSMENT RESEARCH COUNCIL
LOGGING IN THE LOWER TSITIKA VALLEY

This questionnaire is designed to examine the positions people hold on controversial issues and to explore the reasons for their positions. There are no right or wrong answers in the questionnaire. The intention is to find out what you think.

The topic of this questionnaire is the logging of the lower Tsitika valley on northeastern Vancouver Island. The logging of this area is a controversial issue and is currently the subject of a federal government environmental impact assessment.

This questionnaire consists of six sections:

1. YOUR POSITION
2. YOUR REASONS
3. PROBES INVESTIGATING YOUR REASONS
4. CONSIDERING THE OPPOSITE POSITION
5. CONCLUSION
6. BACKGROUND & EVALUATION

The size of the questionnaire is due to the network of possible choices. Although you will be asked questions in each section, you will only complete a small portion of the overall questionnaire.

Your participation in this questionnaire will make a valuable contribution to our understanding of the process of making choices in controversial environmental impact assessment issues.

Now, please turn to Red Tab "1".
1. YOUR POSITION

Please put a check mark in the box ✔ beside the answer which best reflects your position on logging in the lower Tsitika valley.

Logging should proceed in the lower Tsitika Valley.

☐ ‘AGREE
☐ DISAGREE

Please indicate how certain you feel about your answer.

☐ ABSOLUTELY CONVINCED
☐ REASONABLY CERTAIN
☐ HAVE SOME RESERVATIONS

If you marked “AGREE” above, please go to TAB “YES” in the blue section.

If you marked “DISAGREE” above, please go to TAB “NO” in the green section.
2. REASONS FOR YOUR POSITION

The “YES” tab denotes the section for those that agreed logging should proceed in the lower Tsitika Valley. In this section you will be asked for the reasons in support of your position.

First, you will be asked to select from a list of reasons generated by others knowledgeable about the issue.

Second, you can insert additional reasons if desired.

Third, you are asked to chose up to three of the most important reasons.
REASONS FOR YOUR POSITION

Please put check marks in the boxes ✔ beside those reasons that you would select in support of your position on logging the lower Tsitika (check as many as you wish).

A. Logging the lower Tsitika would provide jobs in the timber industry e.g. logging, milling, silvicultural and other related jobs. □ A

B. Logging the lower Tsitika would produce revenue for the provincial government and the timber companies. □ B

C. Logging the lower Tsitika as part of that annual allowable cut allows the timber companies to meet the demand for domestic wood supplies. □ C

D. Logging the lower Tsitika will help to keep the local resource-based communities alive. □ D

E. Logging the lower Tsitika will profit the timber industry and will cause no significant loss to any other user group. □ E

F. Logging in the lower Tsitika Valley allows residents in a resource-based community to pursue their chosen livelihood. □ F

G. Logging the lower Tsitika would discourage environmental groups who constantly increase their demands for environmental protection. □ G

H. Logging the lower Tsitika is legally authorized by the B.C. government through Tree Farm Licences agreements. □ H

I. Logging the lower Tsitika was decided on the basis of careful planning procedures and extensive studies. □ I

J. Logging the lower Tsitika will not significantly damage the aesthetic value of the region. □ J

K. Logging the lower Tsitika is based on a plan for sustainable harvesting of the area. □ K

L. Logging the lower Tsitika will have no known adverse effects on the area’s wildlife, including the killer whale habitat. □ L

M. Logging the lower Tsitika is the most productive management option for this valuable old growth forest resource which would otherwise be wasted as the old trees die or burn down. □ M

N. Logging the lower Tsitika is opposed mostly by people who are ill-informed about the timber industry. □ N

O. Logging the lower Tsitika is economically beneficial and will not damage any of the best examples of old growth forest ecosystems in the province. □ O

P. Logging the lower Tsitika benefits the general public by improving recreational access and the visibility of some wildlife species in the area. □ P

over.
ADDITIONAL REASONS

If you have a reason, not mentioned on the previous page, that you would select in support of your position on logging the lower Tsitika Valley, please write it in the space below:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

MOST IMPORTANT REASONS

Please reread the list of reasons on the previous page and select up to three which you consider to be the most important reasons why logging should proceed in the lower Tsitika Valley. Enter the letters corresponding to each of your important reasons in the spaces below and on the yellow paper provided. Place the yellow paper on the table to be referred to during the next section.

(your selection of the three most important reasons)  , , ,

NEXT

The next section investigates each of your important reasons using a series of probes. Please turn to the letter on the blue TAB corresponding to the letter of your first important reason.
**PROBES FOR REASON A**

One of the reasons you chose as important was that “logging the lower Tsitika would provide jobs in the timber industry e.g. logging, milling, silviculture and other related jobs”.

This reason implies that, in principle, you believe “we ought to do things that provide jobs”.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If jobs were to be lost in other ways such as by mechanization, would you oppose mechanization?</td>
<td>Y \ N</td>
</tr>
<tr>
<td>2. If continuing an industry that provides jobs meant that there would be damage to a world renown scenic area would you support the industry?</td>
<td>Y \ N</td>
</tr>
<tr>
<td>3. If you were involved in the fishing industry would you support the idea of providing jobs for people who engaged in an industry that damaged your livelihood?</td>
<td>Y \ N</td>
</tr>
<tr>
<td>4. If there were other ways to provide jobs during tough economic times such as employes accepting a drop in salary in order to keep everyone employed, would you take a drop in salary to provide jobs?</td>
<td>Y \ N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “providing jobs in the timber industry e.g., logging, milling, silviculture and other related jobs” is an important reason for logging the lower Tsitika? Y \ N

Do you feel the reason should be modified? Y \ N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON B

One of the reasons you chose as important was that "logging the lower Tsitika would produce revenue for the provincial government and the timber companies".

This reason implies that, in principle, you believe "we ought to do things that produce revenue for the provincial government and timber companies".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If only a relatively small amount of revenue was to be produced by a project but the project would damage an internationally recognized natural area, would you support the project in order to produce the revenue?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. What if you were a native person and you felt that although the government and timber companies were making profits, they were at the same time desecrating areas which your ancestors held sacred and in which they had lived and were buried, would you support these revenue-generating activities?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. If a profitable mine which would generate revenue for the government and a large corporation and which would have significant side effects was proposed for a site adjacent to your home, would you support this revenue-producing mine?</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. If an industry that brought in revenue for government and industry also jeopardized your children’s long-term opportunities to make a living in the area, would you support the industry?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “producing revenue for the provincial government and the timber companies” is an important reason for logging the lower Tsitika? Y N

Would you modify the reason? Y N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON D

One of the reasons you chose as important was that "logging the lower Tsitika would help to keep the local resource-based communities alive".

This reason implies that, in principle, you believe "we ought to do things that help to keep resource-based communities alive".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Would you agree with keeping resource-based communities alive if it required financial subsidies from the provincial government or from urban centres?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If people in resource-based communities were provided with jobs but the considerable profits from the public resources went primarily to multinational corporations outside of the country, would you support keeping these resource-based communities alive?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. What if one resource use, that would keep the community alive, conflicted with another resource use? For example, if you were in the fishing industry would you support another resource user being allowed to threaten the future of your resource?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If the activities of some resource-based communities were unavoidably damaging to the future of certain ecosystems and also to human health and well-being, would you support keeping these resource-based communities be alive?</td>
<td>Y  N</td>
</tr>
<tr>
<td>5. What if you were a native person who had lived in a region for generations and in the last 50 years a non-native community had moved in and begun resource extraction. If the livelihood of the new community damaged your cultural heritage would you feel the new community should be supported?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "helping to keep the local resource-based communities alive" is an important reason for logging the lower Tsitika?  

Would you modify the reason?  

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON D

One of the reasons you chose as important was that “logging the lower Tsitika would help to keep the local resource-based communities alive”.

This reason implies that, in principle, you believe “we ought to do things that help to keep resource-based communities alive”:

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

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<tr>
<th>PROBES</th>
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<tbody>
<tr>
<td>1. Would you agree with keeping resource-based communities alive if it required financial subsidies from the provincial government or from urban centres?</td>
<td>Y    N</td>
</tr>
<tr>
<td>2. If people in resource-based communities were provided with jobs but the considerable profits from the public resources went primarily to multinational corporations outside of the country, would you support keeping these resource-based communities alive?</td>
<td>Y    N</td>
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<tr>
<td>3. What if one resource use, that would keep the community alive, conflicted with another resource use? For example, if you were in the fishing industry would you support another resource user being allowed to threaten the future of your resource?</td>
<td>Y    N</td>
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<tr>
<td>4. If the activities of some resource-based communities were unavoidably damaging to the future of certain ecosystems and also to human health and well-being, would you support keeping these resource-based communities alive?</td>
<td>Y    N</td>
</tr>
<tr>
<td>5. What if you were a native person who had lived in a region for generations and in the last 50 years a non-native community had moved in and begun resource extraction. If the livelihood of the new community damaged your cultural heritage would you feel the new community should be supported?</td>
<td>Y    N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “helping to keep the local resource-based communities alive” is an important reason for logging the lower Tsitika? Y    N

Would you modify the reason? Y    N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON E

One of the reasons you chose as important was that "logging the lower Tsitika will profit the timber companies and will cause no significant economic loss to any other user group".

This reason implies that, in principle, you believe "we ought to do things that profit one user group and won't cause significant economic loss to other user groups".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If a profitable industrial activity caused the extinction of an animal species that was of no economic value, would you accept this loss of a species because one user group profited and there was no economic loss to other user groups?</td>
<td>Y   N</td>
</tr>
<tr>
<td>2. Would you support making decisions on the basis of considering only the economic benefits of user groups if this applied to all public decisions such as schools, hospitals, etc?</td>
<td>Y   N</td>
</tr>
<tr>
<td>3. Would you agree that as long as no group suffers an economic loss it would be alright to discriminate against a group, such as preventing certain racial groups from sitting in the front of buses?</td>
<td>Y   N</td>
</tr>
<tr>
<td>4. Suppose your heavily used local community park was chosen as the site for the new sewage treatment facility, would you support the project as long as there would, be no significant economic loss to anyone?</td>
<td>Y   N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "doing things that profit the timber industry and will cause no significant economic loss to other user groups" is an important reason for logging the lower Tsitika?  

Would you modify the reason?  

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
One of the reasons you chose as important was that “logging the lower Tsitika allows residents of resource-based communities to pursue their chosen livelihood”.

This reason implies that, in principle, you believe “we ought to do things that allow residents of resource-based communities to pursue their chosen livelihood”.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
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<tbody>
<tr>
<td>1. Consider the consequences if everyone in resource-based communities wanted to work in the timber industry. Would you agree that things ought to be done to allow all of these people to pursue their chosen livelihood?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. Suppose some residents of resource-based communities wanted to farm. Do you agree that present Crown forest land should be available to other residents e.g. farmers, to allow them to pursue their chosen livelihood?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If some residents felt they could not continue to pursue their livelihood because of logging in the region, would you support stopping logging to allow these residents to pursue their chosen livelihood?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If a resident in the course of pursuing his chosen livelihood, was polluting a river such that the nearby communities could no longer use it for their water supply, should the resident be allowed to continue to pursue his chosen livelihood?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “allowing residents of resource-based communities to pursue their chosen livelihood” is an important reason for logging the lower Tsitika? Y  N

Would you modify the reason? Y  N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
One of the reasons you chose as important was that "logging the lower Tsitika would discourage environmental groups who constantly increase their demands for environmental protection".

This reason implies that, in principle, you believe "we ought to do things that discourage environmental groups".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

**PROBES**

1. If a local school's environmental youth club had cleaned up a river that ran through town and were distributing leaflets about the identity and control of other local sources of pollution, would you discourage these students?
   - Y  N

2. If an environmental group conducted a campaign to keep forested land in the agricultural land reserve from being turned into golf courses in order to preserve the working forest, would you discourage this group?
   - Y  N

3. Consider the effects that environmental groups have had on policies for clean air and water and the future consequences on air and water if everyone now thought environmental groups should be discouraged, do you still support doing things to discourage environmental groups?
   - Y  N

4. If your spouse was employed by an environmental group would you do things that discouraged this environmental group?
   - Y  N

Having answered the probes, do you still feel that “discouraging environmental groups who constantly increase their demands for environmental protection” is an important reason for logging the lower Tsitika?

- Y  N

Would you modify the reason?

- Y  N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON H

One of the reasons you chose as important was that “logging the lower Tsitika is legally authorized by the B.C. government through Tree Farm Licences”.

This reason implies that, in principle, you believe “we ought to do things that are legally authorized by the B.C. government”.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

### PROBES

<table>
<thead>
<tr>
<th>PROBES</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. If a mining company had mineral claims under your town’s new church or community centre and the company was proposing to develop the claims, would you support the company because it is legally authorized to proceed?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. Daily fining of polluting industries is legally authorized by the B.C. government. Would you support fining polluting pulp mills on a daily basis because it is legally authorized by the government of B.C.?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. Would you support a forest company’s legally authorized five-year plan for their tree farm licence (TFL) if it meant that due to problems elsewhere in the TFL, the forest cover around your community would be severely over-harvested?</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. If a foreign-owned forest company was maximizing its export profits without respecting the local forestry community, would you support the actions of this company merely because they had been legally authorized by the government of B.C.?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that logging being “legally authorized by the B.C. government through Tree Farm licences” is an important reason for logging the lower Tsitika?  

Would you modify the reason?  

If yes how?  

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON I

One of the reasons you chose as important was that “logging the lower Tsitika was decided on the basis of careful planning procedures and extensive studies.”

This reason implies that, in principle, you believe “we ought to do things that are based on careful planning procedures and extensive studies”.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. if 20 years ago a mining company had commissioned careful studies and plans for a surface pit mine adjacent to your town and in the interim the town had expanded into the area near the mine, would you support the company proceeding on the basis of those twenty-year old plans and studies?</td>
<td>Y, N</td>
</tr>
<tr>
<td>2. Would you support decisions for development around your community that were based on elaborate planning and extensive studies if the people doing the planning and studies stood to profit from the approved development?</td>
<td>Y, N</td>
</tr>
<tr>
<td>3. Suppose extensive studies undertaken 15 years ago, had laid out elaborate plans for the nuclear energy needs of your growing town and the development of nuclear power facilities was now beginning as dictated in the plans. Would you support this development on the basis of these plans despite changes in public attitudes about nuclear power?</td>
<td>Y, N</td>
</tr>
<tr>
<td>4. If unacceptable procedures such as profiting from raw log export were part of a forest company’s careful planning procedures and extensive studies for future logging in a forest region, would you support the company merely because it had carried out careful plans and extensive studies?</td>
<td>Y, N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “decisions made on the basis of careful planning procedures and extensive studies” is an important reason for logging the lower Tsitika?  

Would you modify the reason?  

If yes how?  

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON J

One of the reasons you chose as important was that "logging the lower Tsitika will not significantly damage the aesthetic value of the region.”

This reason implies that, in principle, you believe “we ought to do things that will not significantly damage the aesthetic value of a region”.

Please indicate your answer to each of the probes which follow Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
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</thead>
<tbody>
<tr>
<td>1. If a highway rerouting was going to divide your town or neighbourhood and cut you off from the school and the shopping area, would you be satisfied with the plan if it didn’t significantly damage the aesthetics of the region?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If you valued the rural appearance of the farmland, would you accept an urban planners opinion that the aesthetic value of farmland would not be significantly damaged if a developer built a beautiful high-rise complex?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If a company wanted to use your local watershed for toxic waste and said that the waste was a tasteless, odourless, pleasant blue colour and wouldn’t affect the aesthetic value of the region, would you support the company’s plan?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. Would you feel that “not significantly damaging the aesthetics of a region was acceptable” if the overall region when viewed from a distance appeared unaffected, but the small site where you lived was extensively damaged?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “not significantly damaging the aesthetic value of the region” is an important reason for logging the lower Tsitika?

Would you modify the reason? Y  N

If yes how?

______________________________________________________________________

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON K

One of the reasons you chose as important was that “logging the lower Tsitika is based on a plan for sustainable harvesting of the area”.

This reason implies that, in principle, you believe “we ought to do things that are based on plans for sustainable use”.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

### PROBES

<table>
<thead>
<tr>
<th>PROBES</th>
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<tbody>
<tr>
<td>1. The export of raw logs could be part of a plan for sustainable use of timber resources even though jobs from valued-added products would be lost. Would you support plans for sustainable use that involved raw log export?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. if plans for the sustainable use of resources in an area involved extensive local environmental pollution, would you support these plans for the sustainable use of resources?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If there were two competing sustainable uses of the resources in an area, do you feel that deciding solely on the basis of sustainable use would fairly determine which industry should use the resource?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If an area had significant spiritual, hereditary or ecological value would you support development plans for this area that were based only on the idea of sustainable use?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “basing logging the lower Tsitika on a plan for sustainable harvesting of the area” is an important reason for logging the lower Tsitika? Y  N

Would you modify the reason? Y  N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON L

One of the reasons you chose as important was that “logging the lower Tsitika will have no known adverse effect, on the area’s wildlife resources including the killer whale habitat”.

This reason implies that, in principle, you believe we ought to do things that will have no known effect on wildlife resources.

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

PROBES

1. As a native person would you support activities that had no known adverse effect on wildlife resources even if you felt that those activities would destroy significant aspects of your cultural heritage?  
   Y    N

2. Many wildlife managers would admit that our overall knowledge of the effects of our various activities on wildlife populations is very limited. For example, prior to the 1970’s there was no known evidence of the importance of killer whale activity in Robson Bight so that effects on the killer whales were unknown. Given our limited knowledge of effects, would you still agree with doing things that have no known adverse effect on wildlife resources?  
   Y    N

3. Would you agree to an activity in your local area that had no known effect on the wildlife resources but was severely damaging to the aesthetics of the area?  
   Y    N

4. Would you support going ahead with a project that had no known effect on wildlife resources if studies of the effects of the project were in progress?  
   Y    N

Having answered the probes, do you still feel that “having no known adverse effect on wildlife resources” is an important reason for logging the lower Tsitika?

Y    N

Would you modify the reason?  
Y    N

If yes how?  

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON M

One of the reasons you chose as important was that “logging the lower Tsitika would be the most productive management option for this valuable old growth forest resource which would otherwise be wasted as the old trees die of bum down”.

This reason implies that, in principle, you believe “we ought to do things that are the most productive management options so as not to waste valuable resources.”

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
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<tbody>
<tr>
<td>1. If a forest company decides that their most productive management option is to export raw logs to Japan even though they would lose the local advantages of value-added products, would you support adopting the most productive management option in this case?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. If there was evidence of potentially valuable resources (other than timber) existing in the growth forest and you agreed we ought to chose the most productive management option, would you support halting the timber harvest until all the resources are known and the most productive management option can be selected?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. Would you agree to exercising the most productive management option for resources if it meant that there would be significant damage to other values such as aesthetic, ecological or scientific?</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. Would you support using the resource in the most productive way even if it meant that other less productive users lost their jobs?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “using the most productive management option for this valuable old growth forest resource which would otherwise be wasted as the old trees die or fall down” is an important reason for logging the lower Tsitika?

Would you modify the reason? | Y      N |

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
**PROBES FOR REASON N**

One of the reasons you chose as important was that “logging the lower Tsitika is opposed mostly by people who are ill-informed about the timber industry.”

This reason implies that you believe “we ought to do things that are opposed mostly by people who are ill-informed.”

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

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<tbody>
<tr>
<td>1. If a radioactive waste deposit site was proposed for an area adjacent to your home, should the construction be allowed to proceed merely because your community which opposes the site is ill-informed about radioactive waste?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If an industry proposed activities that would damage a world renowned tourist site would you agree that the activity should go ahead if the opponents are ill-informed about the industry?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. Should mandatory AIDS testing be introduced because most of the people opposed to testing are ill-informed about AIDS?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If radical changes in the education system were proposed, should they be accepted merely if most objections came from people ill-informed about the technical details of the educational process?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “being opposed mostly by people who are ill-informed about the timber industry” is an important reason for logging the lower Tsitika? | Y  N |

Would you modify the reason? | Y  N |

If yes how? |

Refer to the yellow paper. Please go to the lettered tab of your next reason. if you have answered probes for all of your important reasons, proceed to **Blue TAB 4.**
PROBES FOR REASON 0

One of the reasons you chose as important was that “logging the lower Tsitika is economically beneficial and will not damage any of the best examples of old growth forest ecosystems in the province.”

This reason implies that, in principle, you believe “we ought to do things that are economically beneficial and do not damage the best examples of ecosystems.”

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
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</thead>
<tbody>
<tr>
<td>1. If your town had two rare landmarks should developers be allowed to destroy one and make a profit on the basis that the town had another landmark that they considered to be more valuable?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. If your district owned land adjacent to an excellent fishing river near your town and the district decided this land would become an industrial development on the basis that there are other better rivers for fishing in other parts of the province, would this be acceptable?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. Suppose your town had been built around a scenic waterfall and developers decided to divert the water for the new golf course. Would you accept their comments that the golf course will be profitable and that there are other, better waterfalls in the province?</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. If a company logged one of the last old growth forest ecosystems on the basis that there was a better example in another part of the province and then the better example was destroyed by fire, would you still support doing things that don’t damage the best examples of ecosystems?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “benefiting economically and not damaging any of the best examples of old growth forest ecosystems in the province” is an important reason for logging the lower Tsitika?

Would you modify the reason? Y N

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
PROBES FOR REASON P

One of the reasons you chose as important was that "logging the lower Tsitika benefits the general public by improving recreational access and the visibility of some wildlife species in the area."

This reason implies that, in principle, you believe "we ought to do things that provide some benefit to the general public".

Please indicate your answer to each of the probes which follow. Spaces below each probe have been provided if you wish to explain your answer.

<table>
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<tr>
<th>PROBES</th>
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</thead>
<tbody>
<tr>
<td>1. If benefitting the general public meant that your only local community park or natural area was to be turned into shopping plaza would you support benefitting the general public in this case?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. Suppose an activity that was beneficial to the general public was severely detrimental to a group of people, would you still agree with engaging in this activity because it benefitted the general public?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. If a highway bypass proposal, designed to benefit the general public, was routed through the home that you had spent many years building and landscaping, would you support benefitting the general public in this case?</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. If benefitting the general public would involve destroying a world class ecological or historical feature of B.C. would you consider this acceptable in order to benefit the general public?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "benefitting the general public by improving recreational access and the visibility of some wildlife species" is an important reason for logging the lower Tsitika?

Would you modify the reason?

If yes how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered probes for all of your important reasons, proceed to Blue TAB 4.
4. CONSIDERING THE OPPOSITE POSITION

The following are reasons people might give for disagreeing with logging proceeding in the lower Tsitika. Please put a check mark ☑ beside any which you think are good reasons (check as many as you wish),

A. Not logging the lower Tsitika would have minimal negative effects on the timber industry (e.g. the number of jobs, corporate profits, government revenue, and volume of timber cut) since it represents such a small area. ☑ A

B. Not logging the lower Tsitika would allow the other (non-timber) users to have a long-term sustainable future in the region, (e.g. tourism, fishing, hunting, research). ☐ B

C. Not logging the lower Tsitika would protect this region's biodiversity. ☐ C

D. Not logging the lower Tsitika would prevent significant environmental damage including degradation of the habitat of fish, killer whales and other wildlife. ☐ D

E. Not logging the lower Tsitika would avoid significant environmental damage including the degradation to wildlife habitat since present research is inadequate to provide error-proof management plans. ☐ E

F. Not logging the lower Tsitika would conserve an area which has significant spiritual and emotional value for many people. ☐ F

G. Not logging the lower Tsitika would show our respect for other living creatures in the ecosystem. ☐ G

H. Not logging the lower Tsitika would protect an area that is considered sacred by the Tlowsitsis-Mumtagila peoples and over which they have never relinquished their traditional rights. ☑ H

I. Not logging the lower Tsitika would respect widespread public desire to protect a valuable publicly owned wilderness area for future generations. ☑ I

J. Not logging the lower Tsitika would lead to restructuring of obsolete management plans for the area which do not reflect changing public attitudes towards the forest. ☑ J

K. Not logging the lower Tsitika would help to protect an internationally recognized ecological feature of B.C. ☑ K

L. Not logging the lower Tsitika would avoid further tarnishing Canada’s reputation as a country committed to environmental protection. ☑ L

M. Not logging the lower Tsitika would set an example and encourage third world countries to consider the environmental costs of development and to preserve significant natural areas. ☑ M

N. Not logging the lower Tsitika would represent increased public influence over the timber activities of large multinational corporations. ☐ N

O. Not logging the lower Tsitika would protect the last significant example of a unique ecosystem. ☑ O

over...
5. CONCLUSION

Now please indicate again your position on logging in the lower Tsiti ka Valley. 
Put a check mark in the box beside the answer which best reflects your opinion.

Logging should proceede in the lower Tsitika Valley.

☐ AGREE
☐ DISAGREE

Please indicate how certain you feel about your answer.

☐ ABSOLUTELY CONVINCED
☐ REASONABLY CERTAIN
0 HAVE SOME RESERVATIONS

If your position or your certainty have changed please explain why.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Now please turn to Red Tab 6
2. REASONS FOR YOUR POSITION

The “NO” tab denotes the section for those that disagreed logging should proceed in the lower Tsitika Valley. In this section you will be asked for the reasons in support of your position.

First, you will be asked to select from a list of reasons generated by others knowledgeable about the issue.

Second, you can insert additional reasons if desired.

Third, you are asked to chose up to three of the most important reasons.
REASONS FOR YOUR POSITION

Please put check marks in the boxes ✔ beside the reasons that you would select in support of your position on not logging the lower Tsitika (check as many as you wish).

A. Not logging the lower Tsitika would have minimal negative effects on the timber industry (e.g. the number of jobs, corporate profits, government revenue, and volume of timber cut) since it represents such a small area. ✔

B. Not logging the lower Tsitika would allow the other (non-timber) users to have a long-term sustainable future in the region, (e.g. tourism, fishing, hunting, research). □

C. Not logging the lower Tsitika would protect this region’s biodiversity. □

D. Not logging the lower Tsitika would prevent significant environmental damage including degradation of the habitat of fish, killer whales and other wildlife. □

E. Not logging the lower Tsitika would avoid significant environmental damage including the degradation to wildlife habitat since present research is inadequate to provide error-proof management plans. □

F. Not logging the lower Tsitika would conserve an area which has significant spiritual and emotional value for many people. □

G. Not logging the lower Tsitika would show our respect for other living creatures in the ecosystem. □

H. Not logging the lower Tsitika would protect an area that is considered sacred by the Tlowitsis-Mumtagila peoples and over which they have never relinquished their traditional rights. □

I. Not logging the lower Tsitika would respect widespread public desire to protect a valuable publicly owned wilderness area for future generations. □

J. Not logging the lower Tsitika would lead to restructuring of obsolete management plans for the area which do not reflect changing public attitudes towards the forest. □

K. Not logging the lower Tsitika would help to protect an internationally recognized ecological feature of B.C. □

L. Not logging the lower Tsitika would avoid further tarnishing Canada’s reputation as a country committed to environmental protection. □

M. Not logging the lower Tsitika would set an example and encourage third world countries to consider the environmental costs of development and to preserve significant natural areas. □

N. Not logging the lower Tsitika would represent increased public influence over the timber activities of large multinational corporations. □

O. Not logging the lower Tsitika would protect the last significant example of a unique ecosystem. □

over . . .
ADDITIONAL REASONS

If you have a reason, not mentioned on the previous page, that you would select in support of your position on not logging the lower Tsitika Valley, please write it in the space below:

________________________________________________________________________________
________________________________________________________________________________
________________________________________________________________________________

MOST IMPORTANT REASONS

Please reread the list of reasons on the previous page and select up to three which you consider to be the most important reasons why logging should not proceed in the lower Tsitika Valley. Enter the letters corresponding to each of your important reasons in the spaces below and on the yellow paper provided. Place the yellow paper on the table to be referred to during the next section.

(your selection of the three most important reasons)  , ,

NEXT

The next section investigates each of your important reasons using a series of probes. Please turn to the letter on the green TA6 corresponding to the letter of your first important reason.
PROBES FOR REASON A

One of the reasons you chose as most important was that “not logging the lower Tsitika would have minimal negative effects on the timber industry (e.g. the number of jobs, corporate profits, government revenue, and volume of timber cut) since it represents such a small area”.

This reason implies that, in principle, you believe “we ought to do things that have minimal negative effects on an industry”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If the overall effects of an action were minimal to a large industry but were severely damaging to the local community of persons employed by that industry such that the people became jobless and homeless, would you still support doing something that had minimal effects on an industry?</td>
<td>Y     N</td>
</tr>
<tr>
<td>2. If having a minimal negative effect on an industry meant that the industry would no longer have the funds to support charitable causes or the arts, would you support doing things that minimum negative effects on the industry in this case?</td>
<td>Y     N</td>
</tr>
<tr>
<td>3. If you were going to lose your job as a result of the minimal negative effects on an industry and your spouse and two small children depended on your income? Would you support doing things that had minimal negative effects on your industry?</td>
<td>Y     N</td>
</tr>
<tr>
<td>4. Often when funds are tight, industry lays off research staff whose work helps to ensure the future safety and success of the industry but who don’t contribute to immediate revenue. Would you support these cuts on the basis of their having minimal negative effects on the industry?</td>
<td>Y     N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “having minimal negative effects on an industry” is an important reason for not logging the lower Tsitika? Y     N

Do you feel the reason should be modified? Y     N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
One of the reasons you chose as most important was "not logging the lower Tsitika would allow the other (than timber) users to have a long-term sustainable future in the region, (e.g., tourism, fishing, hunting, research)."

This reason implies that, in principle, you believe "we ought to do things that allow other (than timber) users to have a long term sustainable future in a region."

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Would you be willing to give up your job in an industry which allowed you to make five times the salary of people in other industries using the same resource, if this meant that people in the other user industries would have a long-term sustainable future?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If allowing other (than timber) users than forestry to have long term sustainable futures in certain regions meant that timber harvesting levels dropped and wood prices increased, would you be willing to pay this additional cost for wood and paper items?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. What if allowing other (than timber) users to have a sustainable future in a region meant that many businesses in the local community had to close? would you support giving other (than timber) users a sustainable future in this case?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If huge multinational companies, whose profits go out of the country, were the users who were to have a long-term sustainable future in the region, would you still support allowing other (than timber) users to have a long-term sustainable future in a region?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “allowing other (than timber) users to have a long-term sustainable future in the region” is an important reason for not logging the lower Tsitika? Y  N

Do you feel the reason should be modified? Y  N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON C

One of the reasons you chose as most important was that “not logging the lower Tsitika would protect the biodiversity of this region”.

This reason implies that, in principle, you believe “we ought to do things that protect biodiversity in a region”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If you are a supervisor for a large logging company and for at least a decade you have known most of your crew, their families and their financial needs. If preserving biodiversity meant that some of these people would be jobless, with no viable alternative means of livelihood, would you support preserving biodiversity?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If significant steps were taken to preserve large natural areas for biodiversity and this meant that oil and gas extraction was cut back and prices rose considerably such that driving a car was unaffordable, would you still support the protection of biodiversity?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If you had just purchased a piece of property and an ecologist neighbour discovered that very rare plants grew in the most scenic and suitable spot to build a house, would you support preserving biodiversity and put your house in a less desirable site?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If you were diagnosed as having a fatal disease like AIDS and a rare plant species was found to be the only cure, would you agree to support the preservation of biodiversity and not use the plant until it could be cultivated or its constituents made synthetically?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “protecting biodiversity in a region” is an important reason for not logging the lower Tsitika? Y  N

Do you feel the reason should be modified? Y  N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
One of the reasons you chose as most important was that "not logging the lower Tsitika would prevent significant environmental damage including the degradation of the habitat of fish, killer whales, and other wildlife".

This reason implies that, in principle, you believe "we ought to do things that prevent significant environmental damage".

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Are you willing to immediately stop buying newspapers and other bleached or non-recycled paper products to prevent significant degradation of the environment by pulp mill effluent?</td>
<td>Y    N</td>
</tr>
<tr>
<td>2. If you checked the environmental impacts of your job and found it to be unavoidably contributing to significant environmental damage, would you quit?</td>
<td>Y    N</td>
</tr>
<tr>
<td>3. Are you prepared to accept a marked decline in the availability of commodities if everyone took action to prevent significant environmental damage?</td>
<td>Y    N</td>
</tr>
<tr>
<td>4. Knowing that automobile emissions cause significant environmental damage would you be willing to use public transit wherever possible, even if it is not as convenient in order to prevent environmental damage?</td>
<td>Y    N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "doing things that prevent significant environmental damage" is an important reason for not logging the lower Tsitika? Y    N

Do you feel the reason should be modified? Y    N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
One of the reasons you chose as most important was that "not logging the lower Tsitika would avoid risking environmental damage including the degradation of wildlife habitat since the present research is inadequate to provide error-proof management plans".

This reason implies that, in principle, you believe “we ought to do things that avoid risking damage to wildlife habitat areas since present research is inadequate to provide error-proof management plans."

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

### PROBES

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If you agree with avoiding the risk of damage to wildlife habitat because of inadequate research, would you support funding biological research even if the funding must be diverted from health and social service programs?</td>
<td>Y      N</td>
</tr>
<tr>
<td>2. To avoid risking damage to the remaining old growth forest habitat, old growth wood harvesting is dramatically decreased. Since available second growth will not meet the existing demand, the price of wood supplies would increase dramatically. Would you support these increased prices to avoid risking damage to wildlife habitat areas?</td>
<td>Y      N</td>
</tr>
<tr>
<td>3. In some cases management plans have been designed to protect endangered species. Would you disagree with using these plans to manage areas with endangered species because of the risk of damaging wildlife habitat since present research is inadequate to provide error-proof management plans?</td>
<td>Y      N</td>
</tr>
<tr>
<td>4. If you were the owner of a tourist facility which utilized the wildlife habitat of a rare and vulnerable wildlife species would you support stopping your industry to avoid risking damage to wildlife habitat areas because of the impossibility to produce error-proof management plans based on present research?</td>
<td>Y      N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "avoiding risking environmental damage to wildlife habitat since the present research is inadequate to provide error-proof management plans" is an important reason for not logging the lower Tsitika?

Do you feel the reason should be modified?  

If yes, how?

---

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON F

One of the reasons you chose as most important was that “not logging the lower Tsitika would mean the conservation of an area which has significant spiritual and emotional value for many people”.

This reason implies that, in principle, you believe “we ought to do things that conserve sites which have significant spiritual and emotional value for many people”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If the preservation of an old church and graveyard meant that the construction of a needed hospital would not proceed in your community, would you support conserving these sites because they have significant spiritual and emotional value for many people?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If your house plans were opposed by the community on the grounds that the trees and gardens to be damaged during the construction had significant spiritual and emotional value to the community, would you respect these people’s values and not build your house?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. Suppose that preservation of an area with important spiritual and emotional value for some groups of people meant that another group of people would lose their jobs and their homes, would you support preserving these areas?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If preserving an area that had significant spiritual and emotional value to an elite group of people meant that a housing project for some needy people could not be built, would you favour the preservation of the area?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “conserving an area which has significant spiritual and emotional value for many people” is an important reason for not logging the lower Tsitika? Y  N

Do you feel the reason should be modified? Y  N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON G

One of the reasons you chose as most important was that "not logging the lower Tsitika would show our respect for the other living creatures in the ecosystem:

This reason implies that, in principle, you believe "we ought to do things that show our respect for other living creatures in an ecosystem".

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Given that most industrial projects do not show respect for other living creatures, in fact they often adversely impact other creatures, would you support the stopping of all activities that do not show respect for other living creatures?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If you had a choice of building your house on a barren recently damaged site or in a pristine forested area, out of respect for the creatures still living in the forested area, would you choose the barren site?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If showing respect for other creatures meant that you would lose your job, would you support showing respect for other living creatures?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. Consider the drastic changes in our overall lifestyles if everyone supported showing respect for other creatures in the ecosystem, would you support these changes if it was the only way to show respect for other creatures?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "showing our respect for the other living creatures in the ecosystem" is an important reason for not logging the lower Tsitika?

Do you feel the reason should be modified?

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON H

One of the reasons you chose as most important was that “not logging the lower Tsitika would protect an area that is considered sacred to the Tlowitis-Mumtagila peoples and over which they have never relinquished their traditional rights”.

This reason implies that, in principle, you believe “we ought to do things that protect areas sacred to Canada’s aboriginal peoples, over which they have never relinquished their traditional rights”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If a land claim settlement with Canada’s aboriginal peoples meant that your house was now located in sacred Native territory and you would be required to conform to their policies, would you still support protecting areas that are sacred to Canada’s aboriginal peoples and over which they have never relinquished their traditional rights?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. If protecting all areas sacred to Canada’s aboriginal peoples cost taxpayers a great deal of money, and fewer tax dollars were available for other programs including many social services, would you still support protecting these areas?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If preservation of a particular area sacred to Canada’s aboriginal peoples conflicted directly with your job, would you support saving areas sacred to the Native peoples?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. If everyone supported protecting areas that are sacred to the aboriginal peoples, and this meant that resource development slowed and costs, for example, of wood, paper or oil products soared, would you still agree with protecting these sacred areas?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “protecting an area that is considered sacred to the Tlowitis-Mumtagila peoples and over which they have never relinquished their traditional rights” is an important reason for not logging the lower Tsitika? Y  N

Do you feel the reason should be modified? Y  N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON 1

One of the reasons you chose as most important was that "not logging the lower Tsitika would respect widespread public desire to protect a valuable publicly owned wilderness area for future generations."

This reason implies that, in principle, you believe "we ought to do things that respect widespread public desire to protect valuable publicly owned wilderness areas for future generations."

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

**PROBES**

1. Consider yourself in an industry which is a mainstay of the provincial economy and which is suffering extensive labour reductions and plant closures. If the public desire to save wilderness areas for future generations, conflicted with your industry's ability to function, would you still support addressing the public concerns for wilderness?
   - Y  N

2. Suppose addressing the widespread public desire for the preservation of wilderness lands required tax dollars also needed to assist impoverished children, would you support the public's desire for wilderness over all other issues?
   - Y  N

3. If everyone respected public desire to protect natural areas and as a result resource development declined and there was widespread unemployment and high commodity prices, would you still agree with respecting public desire for wilderness areas?
   - Y  N

4. If you thought that widespread public opinion on a particular issue was ill-informed would you still support things that are examples of widespread public opinion for this cause?
   - Y  N

Having answered the probes, do you still feel that "respecting the widespread public desire to protect a valuable publicly owned wilderness area for future generations" is an important reason for not logging the lower Tsitika?

- Y  N

Do you feel the reason should be modified?

- Y  N

If yes, how?

__________________________

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON J

One of the reasons you chose as most important was that “not logging the lower Tsitika would lead to restructuring of obsolete management plans for the area which do not reflect changing public attitudes towards the forest”.

This reason implies that, in principle, you believe “we ought to do things that would lead to restructuring of obsolete management plans which do not reflect changing public attitudes”:

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

PROBES

1. If you had put together an industrial development plan for a region using existing knowledge and views, but public values towards your industry changed repeatedly over time, would you support the continual restructuring of the old plans and absorb the losses in time and profits?

2. If you had always lived in a scenic community and, over the years, developers had bought up much of the local property, would you support restructuring the obsolete community plan to allow developers to satisfy increasing public demands for house construction in scenic areas?

3. If a growing public awareness of environmental pollution resulted in proposed changes to auto exhaust emission standards in B.C. and only electric vehicles were to be driven in cities, would you support restructuring the old plan for vehicle emissions even if you couldn’t afford an electric car?

4. Consider that you have all your life savings invested in a recycling operation. Your town’s obsolete zoning plan is to be restructured due to increased public interest in moving all businesses out to an industrial site. Moving and rebuilding would put you heavily in debt, would you still support restructuring obsolete plans?

Having answered the probes, do you still feel that “restructuring of obsolete management plans for the area which do not reflect changing public attitudes towards the forest” is an important reason for not logging the lower Tsitika?

Do you feel the reason should be modified?

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON K

One of the reasons you chose as most important was that "not logging the lower Tsitika would help to protect an internationally recognized ecological feature of B.C.".

This reason implies that, in principle, you believe "we ought to do things that protect internationally recognized ecological features of B.C.”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If your company had hired workers and purchased equipment because it had been given legal rights to utilize an area and the government then decided that the area's important ecological features required protection. If it meant that your company could no longer operate, would you support protection of these ecological features?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. If you had seen international opinion concerning valuable ecological features change several times over the years, and you didn’t know if the present opinion had merit would you support protecting current internationally recognized ecological features of B.C.?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. If protecting internationally recognized ecological features of B.C. meant a rise in taxes to cover compensation payments to companies, social services to those left unemployed and fees for maintenance of these features, would you still support protecting these features?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. If the mere presence of visitors in your favorite regularly used, park was found to be damaging to a recognized ecological feature of B.C., would you agree with preventing any access to the park to protect this ecological feature of B.C.?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “helping to protect an Internationally recognized ecological feature of B.C.” is an important reason for not logging the lower Tsitika? Y N

Do you feel the reason should be modified? Y N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON L

One of the reasons you chose as most important was that "not logging the lower Tsitikawould avoid further tarnishing Canada’s reputation as a country committed to environmental protection".

This reason implies that, in principle, you believe “we ought to do things that avoid tarnishing Canada’s reputation as a country committed to environmental protection”.

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If openly discussing present environmental problems in Canada was</td>
<td>Y     N</td>
</tr>
<tr>
<td>tarnishing Canada’s reputation as a country committed to environmental protection, would you support keeping quiet about these problems to avoid tarnishing Canada’s reputation?</td>
<td></td>
</tr>
<tr>
<td>2. Suppose avoiding tarnishing Canada’s reputation as a country committed to environmental protection required that many industries had to reorganize resulting in massive unemployment, huge losses in government tax revenue and excessive prices of ordinary goods, are you prepared to accept these consequences in order to avoid tarnishing Canada’s reputation?</td>
<td>Y     N</td>
</tr>
<tr>
<td>3. If your job was identified as having unavoidable negative effects on the environment, would you be prepared to quit to avoid tarnishing Canada’s reputation as a nation committed to environmental protection?</td>
<td>Y     N</td>
</tr>
<tr>
<td>4. Excessive energy consumption by Canadian’s tarnishes our reputation as a nation committed to environmental protection. Are you willing to make dramatic cuts in all of your energy demands to avoid further tarnishing our reputation?</td>
<td>Y     N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “avoiding further tarnishing Canada’s reputation as a country committed to environmental protection” is an important reason for not logging the lower Tsitika?

Do you feel the reason should be modified?

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON M

One of the reasons you chose as most important was that "not logging the lower Tsitika would set an example and encourage third world countries to consider the environmental costs of development and to preserve significant natural areas".

This reason implies that, in principle, you believe "we ought to do things that would set an example and encourage third world countries to consider the cost of development and to preserve significant natural areas."

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Would you be willing to quit your job if you found that it caused unavoidable environmental damage, in order to set an example of environmental awareness to third world countries?</td>
<td>Y N</td>
</tr>
<tr>
<td>2. If setting a positive environmental example to third world countries meant not purchasing commodities, made in countries where the industry damages the environment, would you support doing without these bargain-priced goods in order to set that example?</td>
<td>Y N</td>
</tr>
<tr>
<td>3. Would you be willing to pay higher taxes to support employees of Canadian industries that damage natural areas, who would lose their jobs as a result of setting a positive environmental example to third world countries?</td>
<td>Y N</td>
</tr>
<tr>
<td>4. What if, in order to set a positive example to third world countries, many people in Canada were left unemployed and money for other government programs to protect the environment was severely reduced, would you support setting this example?</td>
<td>Y N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that "setting an example and encouraging third world countries to consider the costs of development and to preserve significant natural areas" is an important reason for not logging the lower Tsitika?  

Do you feel the reason should be modified?  

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
PROBES FOR REASON N

One of the reasons you chose as most important was that "not logging the lower Tsitika would represent increased public influence over the timber activities of the large multinational Corporations:"

This reason implies that, in principle, you believe "we ought to do things that represent increased public influence over the activities of large multinational Corporations."

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

### PROBES

<table>
<thead>
<tr>
<th>Probe</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If increased public influence over multinationals meant that the companies were pressured to increase activities that caused environmental problems, would you support increased public influence <em>in this case</em>?</td>
<td>Y  N</td>
</tr>
<tr>
<td>2. What if increased public influence over the activities of multinationals lead to a complicated battleground of conflicting opinions that was ineffective in advising the corporation, would you still agree with increased public influence?</td>
<td>Y  N</td>
</tr>
<tr>
<td>3. If the idea of increased public influence over corporate activities deterred corporations from investing in B.C. and the economy and standard of living in this province was adversely affected, would you be willing to accept a more impoverished life style in order to have increased public influence?</td>
<td>Y  N</td>
</tr>
<tr>
<td>4. Consider that increased public influence became an expected method of monitoring the activities of multinationals. Thus, on top of your regular job, as a member of the public, you would be expected to voluntarily check the activities of companies in your area. Would you still support the idea of increased public influence?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “representing increased public influence over the timber activities of the large multinational corporations” is an important reason for not logging the lower Tsitika? Y  N

Do you feel the reason should be modified? Y  N

If yes, how?

---

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
One of the reasons you chose as most important was that “not logging the lower Tsitika would protect the last significant example of a unique ecosystem.”

This reason implies that, in principle, you believe “we ought to do things that protect the last significant example of a unique ecosystem.”

Please indicate your answer to each of the probes which follow. Spaces have been provided if you wish to explain your answer.

**PROBES**

<table>
<thead>
<tr>
<th>PROBES</th>
<th>Circle your answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>If government officials told you that using your land, which you had recently purchased, would adversely affect the last remaining ecosystem of a rare wildflower, would you support protecting this last remaining ecosystem and agree not use your land?</td>
<td>Y  N</td>
</tr>
<tr>
<td>If high compensation costs had to be paid to resource extraction companies in order to protect the last remaining ecosystems, would you support paying these fees in order to protect the ecosystems?</td>
<td>Y  N</td>
</tr>
<tr>
<td>Would you support protecting the last remaining unique ecosystems if it meant that the general public was no longer able to even visit these areas at will?</td>
<td>Y  N</td>
</tr>
<tr>
<td>If the last remaining unique natural ecosystems were on the land of aboriginal peoples and protecting these ecosystems meant that growing Native populations who had lived for centuries on these lands, would have to be relocated, would you support protecting the last remaining ecosystems?</td>
<td>Y  N</td>
</tr>
</tbody>
</table>

Having answered the probes, do you still feel that “protecting the last significant example of a unique ecosystem” is an important reason for not logging the lower Tsitika? Y  N

Do you feel the reason should be modified? Y  N

If yes, how?

Refer to the yellow paper. Please go to the lettered tab of your next reason. If you have answered the probes for all of your important reasons, proceed to Green TAB 4.
4. CONSIDERING THE OPPOSITE POSITION

The following are reasons people might give to agreeing with the logging proceeding in the lower Tsitika. Please put a check mark ✅ beside any which you think are good reasons (check as many as you wish).

A. Logging the lower Tsitika would provide jobs in the timber industry e.g. logging, milling, silvicultural and other related jobs.

B. Logging the lower Tsitika would produce revenue for the provincial government and the timber companies.

C. Logging the lower Tsitika as part of that annual allowable cut allows the timber companies to meet the demand for domestic wood supplies.

D. Logging the lower Tsitika will help to keep the local resource-based communities alive.

E. Logging the lower Tsitika will profit the timber industry and will cause no significant loss to any other user group.

F. Logging in the lower Tsitika Valley allows residents in a resource-based community to pursue their chosen livelihood.

G. Logging the lower Tsitika would discourage environmental groups who constantly increase their demands for environmental protection.

H. Logging the lower Tsitika is legally authorized by the B.C. government through Tree Farm Licences agreements.

I. Logging the lower Tsitika was decided on the basis of careful planning procedures and extensive studies.

J. Logging the lower Tsitika will not significantly damage the aesthetic value of the region.

K. Logging the lower Tsitika is based on a plan for sustainable harvesting of the area.

L. Logging the lower Tsitika will have no known adverse effects on the area’s wildlife, including the killer whale habitat.

M. Logging the lower Tsitika is the most productive management option for this valuable old growth forest resource which would otherwise be wasted as the old trees die or burn down.

N. Logging the lower Tsitika is opposed mostly by people who are ill-informed about the timber industry.

O. Logging the lower Tsitika is economically beneficial and will not damage any of the best examples of old growth forest ecosystems in the province.

P. Logging the lower Tsitika benefits the general public by improving recreational access and the visibility of some wildlife species in the area.

over . . .
5. CONCLUSION

Now please indicate again your position on logging in the lower Tsitika Valley.
Put a check mark in the box ✓ beside the answer which best reflects your opinion.

Logging should proceed in the lower Tsitika Valley.

☐ AGREE
☐ DISAGREE

Please indicate how certain you feel about your answer.

☐ ABSOLUTELY CONVINCED
☐ REASONABLY CERTAIN
☐ HAVE SOME RESERVATIONS

If your position or your certainty have changed please explain why.

_________________________________________________________________
_________________________________________________________________
_________________________________________________________________

Now please turn to Red Tab 6
6. BACKGROUND AND EVALUATION

Please answer the following by putting a check mark in the appropriate box.

1. Have you had any formal instruction in critically assessing or justifying positions in controversial issues?

[ ] YES, QUITE A BIT
[ ] YES, SOME
[ ] NO, NONE

If yes, please explain.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. To what extent have you been involved in previous environmental impact assessments (EIA's)?

[ ] PARTICIPATED IN MANY
[ ] PARTICIPATED IN A FEW
[ ] NO PREVIOUS PARTICIPATION

For those who have participated in EIA's please explain your role, for example, observer/researcher/impact evaluator . . .

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

over . . .