

April 2010

EVALUATING FOREST MANAGEMENT PLANNING AND IMPLEMENTATION UNDER THE *FOREST AND RANGE PRACTICES ACT*: FREP CULTURAL HERITAGE RESOURCE PROCESS EVALUATION PILOT PROJECT

Prepared by Lisa Levesque
Forest and range Evaluation Program
April 2010



Culturally modified western redcedar, Haida Gwaii
Photo: Lisa Levesque



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Management of forest and range resources is a complex process that often involves the balancing of ecological, social, and economic considerations. This evaluation report represents one facet of this process. Based on monitoring data and analysis, the author offers the following recommendations to those who develop and implement forest and range management policy, plans, and practices.

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CONTENTS

Executive Summary.....	3
Acknowledgements.....	12
List of Acronyms.....	13
1.0 Introduction.....	14
1.1 First Nations and Forest and Range Practices Act Planning.....	14
1.2 Cultural Heritage Resource Management Legislation in British Columbia.....	15
1.3 Report Structure?.....	16
2.0 Methods.....	16
2.1 Developing the Cultural Heritage Resource Process Evaluation Framework.....	16
2.1.1 Pilot Area Selection.....	16
2.1.2 Defining the Issues.....	16
2.1.3 Indicator Development.....	17
2.2 Data Collection.....	19
2.2.1 Interview Methodology.....	19
2.2.2 Data Analysis.....	20
3.0 Results and Discussion.....	21
3.1 First Nations Participation in Forest Management Planning (Indicator 1).....	21
3.1.1 Intent of the Indicator.....	21
3.1.2 Discussion of Results Pertaining to Indicator 1.....	21
3.2 Communication Following Forest Stewardship Plan Approval (Indicator 2).....	24
3.2.1 Intent of the Indicator.....	25
3.2.2 Discussion of Results Pertaining to Indicator 2.....	25
3.3 Cross-cultural Capacity (Indicator 3).....	31
3.3.1 Intent of the Indicator.....	32
3.3.2 Discussion of Results Pertaining to Indicator 3.....	32
3.4 Incorporation of Cultural Heritage Resource Values in Management Plans (Indicator 4).....	38
3.4.1 Intent of the Indicator.....	38
3.4.2 Discussion of Results Pertaining to Indicator 4.....	39
4.0 Looking Forward.....	41
4.1 Opportunities for Improvement.....	41
4.2 Recent Developments.....	45
4.3 Lessons Learned.....	46

4.4	Next Steps.....	47
4.5	Concluding Remarks.....	47
APPENDIX 1.	Glossary of Terms.....	48
APPENDIX 2.	Interview Questions for MFR District Respondents.....	52
APPENDIX 3.	Interview Questions for First Nations Respondents.....	54
APPENDIX 4.	Interview Questions for Proponent Respondents.....	56
References	58

EXECUTIVE SUMMARY

British Columbia First Nations increasingly desire a strategic role in resource management planning and decision making, a goal reflected in the shared New Relationship vision of First Nations leaders and the province of British Columbia. Many First Nations are explicitly pursuing direct control over forestry operations in order to ensure the conservation and protection of cultural heritage resources (CHRs) and values within their traditional territories.

The Forest and Range Evaluation Program (FREP) has designed a two-pronged evaluation model to assess the effectiveness of consultation/information sharing and planning processes influencing CHR management (“process evaluations”) as well as the resulting CHR management strategies and operational practices (“outcome evaluations”) under the *Forest and Range Practices Act (FRPA)*. Data collection protocols and results from CHR outcome evaluations are described in other FREP publications; this report focusses exclusively on a CHR Process Evaluation Pilot Project initiated in 2007. It describes the collaborative development of a CHR process evaluation indicator framework and data collection approach, presents results of the pilot project, and identifies opportunities to improve CHR management planning and implementation processes under *FRPA*. The report concludes with a discussion on how to proceed with future evaluations.

Data used to evaluate the process indicators were collected in three British Columbia Ministry of Forests and Range (MFR) districts through 18 open-ended, semi-structured interviews. Respondents were generally individuals with the most direct involvement in consultation (or referrals), information sharing, and (or) CHR management within their organization and fell into one of three distinct respondent groups:

1. First Nations staff,
2. forestry proponents (i.e., B.C. Timber Sales [BCTS] and major licensees), and
3. MFR district staff.

The pilot results summarized below provide a snapshot over a limited geographical area and may not fully capture variability across the province. More research is needed to determine whether these results reflect broader regional and (or) provincial trends, particularly in light of new strategic agreements and organizational developments that are changing the nature of consultation and land and resource planning with First Nations across the province.

KEY RESULTS

Indicator 1

Meaningful First Nations participation in forest management planning prior to forest stewardship plan (FSP) approval under FRPA.

Limited First Nations Participation in Forest Stewardship Plan Development

All proponents sent information packages with varied content to First Nations and invited written comment on FSP results and strategies. Most included an offer to meet with First Nations to discuss their FSP and some ensured that verbal follow-up was carried out to confirm that the information was received and understood by the appropriate staff person.

Despite these efforts, invitations to meet were infrequently taken and the majority of respondents from all groups noted that First Nations participation in FSP development and planning before approval was limited before, during, and after the formal 60-day review and comment period. No proponents interviewed for this study invited First Nations to collaborate on developing CHR results and strategies and none of the First Nations respondents initiated this kind of collaboration. Although several First Nations provided written comments regarding FSPs affecting their territory, in only one case did this input change a result or strategy for the CHR or other values. Most First Nations engagement came from those actively involved in the forest sector.

Barriers to First Nations Participation in Forest Management Planning under the Forest and Range Practices Act

Respondents from all groups frequently cited limited human and financial resources as the most significant barrier to First Nations collaboration in FSP development. Several First Nations and MFR respondents indicated that it was difficult to comment on FSP results and strategies because of highly technical and legal language. Some described FSPs as too broad to explain a proponent's strategic or operational vision for CHR management, and some expressed doubts about the ability to do this effectively over large, ecologically and culturally diverse operating areas (i.e., hundreds of thousands of hectares crossing several MFR districts and [or] First Nations' territories). Some First Nations respondents felt that the method used by proponents to solicit feedback was

ineffective and others did not recognize that opportunities to provide comment or meet with proponents had been available. Several respondents noted that opposition to FRPA might have prevented some First Nations from engaging with licensees.

Indicator 2

Clear and effective communication of cultural heritage resource information during post-FSP planning and implementation between First Nations, forestry proponents, and government staff.

Room for Improving Information-sharing and Referrals Processes

All respondents described serious challenges and dissatisfaction with existing referrals and information-sharing processes. There was a notable disparity in First Nations referrals processes: some respondents described well-established, efficient and spatially explicit processes; others described being frequently unable to address and respond to requests for information. Proponent and MFR respondents repeatedly noted that the frequent lack of response from First Nations led to considerable uncertainty about whether CHR concerns existed or were successfully addressed in a given area.

When CHR concerns were successfully identified through consultation or information-sharing processes, respondents from all three groups felt that government and proponents generally provided sufficient feedback on how these concerns were addressed through well-established processes.

Proponent and First Nations respondents referred to inconsistencies in the information-sharing processes used by the different MFR districts they interacted with. Similarly, several MFR and First Nations respondents mentioned that information-sharing processes varied considerably among proponents. Although a few respondents felt that achieving consistency was not necessarily possible or preferable, the majority indicated that increased consistency would be beneficial.

Challenges in Cultural Heritage Resource Information Management

Respondent groups commonly identified poor or inconsistent access to existing CHR information as a key barrier to effective management. Documented information often exists in several different and often incompatible

formats (e.g., interview transcriptions, hard-copy maps, ethnographic reports, audio-visual recordings, etc.); it is held by several different organizations and is frequently not catalogued in a central location or searchable database. Data is often not spatially explicit (e.g., general site description in lieu of geographic co-ordinates), making it difficult for planners and decision makers to use efficiently and effectively. Few government or other resources are currently available to improve CHR information collection and management within government or beyond.

Information-sharing Protocols and Agreements

Both formal (e.g., memoranda of understanding) and informal (e.g., verbal agreements) information-sharing protocols and agreements between First Nations and proponents or government respondents were in place, but were sporadic. Most First Nations respondents expressed considerable interest in establishing formal information-sharing agreements with proponents operating in their traditional territory, while one felt that formal agreements were not necessary if working relationships were positive.

Indicator 3

Technical, logistical, and cross-cultural capacity exists to enable informed and meaningful engagement in forest management planning and decision making affecting cultural heritage resources.

Human Resource Gaps

All respondents identified key First Nations human resource gaps inhibiting effective participation in forest management planning and decision making, including a lack of full-time referrals staff, field staff, skilled geographical information systems (GIS) technicians, and staff with post-secondary training or expertise in forestry, resource management, and (or) research. Some, mainly federally funded, capacity-building opportunities exist for First Nations, yet two First Nations respondents noted that funds were largely project-based and limited in scope and duration. Without stable long-term funding, building human resource capacity or engaging effectively in long-term multi-party strategic planning processes can be challenging.

Limited Training/Expertise in Cultural Resource Management

All MFR and proponent respondents reported having little to no formal training in archaeology, anthropology, or other cultural resource management specializations. Training on First Nation issues or cultural awareness occurred on an infrequent and irregular basis. One proponent required staff to complete a CHR training program annually, but no other government or industry respondents had a regular training program in place.

Adequate Infrastructure

In general, First Nations respondents reported having an adequate infrastructure to support forestry-related business; however, one or more respondents identified specific challenges: lack of transportation for field work, limited technology (internet access and spatial analysis (GIS), systems) and limited office space.

Limited Availability of Cultural Heritage Resource Information

The comprehensiveness and availability of CHR information varied substantially across respondent groups and across study areas. Much CHR knowledge remains undocumented or has not been ground-truthed. Several respondents mentioned that valuable information is lost as Elders and Traditional Knowledge Keepers pass away. Many noted that interpreting and using traditional knowledge within a Western science paradigm poses a continuing challenge for managers.

Several respondents from all three groups noted that poor working relationships and concerns about data use and confidentiality continue to inhibit CHR information sharing with government agencies and industry. Ongoing concerns include the fear of loss or damage to sites should their location become known or made public, and the loss of intellectual property rights.

Respondents from all groups noted that their organizations had few, formally established knowledge-transfer processes to prevent the loss of knowledge resulting from frequent staff turnover. Particularly vulnerable was knowledge that had been verbally shared during meetings or field visits and that remained undocumented.

Indicator 4

Strategic, operational, and site-level management plans meaningfully incorporate the conservation or protection of Aboriginal cultural heritage values and resources.

Limited First Nation Involvement in Government-led Strategic Planning

First Nation involvement in strategic land and resource management planning processes led by the provincial government was minimal in the pilot areas. All respondents who commented on this issue felt that CHR concerns were consequently perceived as poorly represented in existing high-level plans (i.e., land and resource management plans and sustainable resource management plans); several observed that there have been few opportunities to create new plans or update existing ones. Several respondents described other regional or sub-regional strategic planning processes that may address CHR concerns in the non-legal realm, including processes required for third-party sustainable forest certification or watershed planning. A general lack of integration among these processes was mentioned by several respondents.

These results may not reflect recent developments outside the study areas, particularly on the Coast where innovative agreements (e.g., Coastal Reconciliation Protocol signed in December 2009) and new legal management objectives for cultural resources and values were recently established (i.e., South Central and Central and North Coast Land Use Orders).

Gaps In Addressing Cultural Heritage Resources

The pilot areas had few examples of regional or district-level CHR management protocols, standards, or thresholds (e.g., cultural trail management protocols, culturally modified tree management policies, etc.). Combined with differing priorities among First Nations, particularly in areas with overlapping territorial boundaries, managers often experience uncertainty about how best to address CHR concerns.

Site plans and silviculture prescriptions provide detailed operational information about forestry activities, yet CHR site locations and management approaches were observed to be inconsistently documented in these plans.

First Nation Land Use Plans

First Nations often prepare land use plans outside of provincial government-led processes. These plans reflect unique visions and management goals for their traditional territory, and frequently identify important geographical areas or specific CHRs of local concern. When made readily available to other forest managers, the plans are increasingly used in the study areas for planning and decision making. Dialogue and guidance is required to determine how these plans will be more formally integrated with existing provincial government-approved plans.

CONCLUDING REMARKS

In British Columbia, many factors directly and indirectly affect the management of First Nations land-based cultural resources and values, both within a forestry context and beyond. The findings presented here provide a snapshot over a limited geographical area and may not fully capture variability across the province; more research is needed to determine whether these pilot results reflect broader regional and (or) provincial trends. Nevertheless, many valuable insights were gained from this study that should serve to stimulate important dialogue and build awareness and understanding about these complex issues among First Nations, professionals, and practitioners. While this work focussed specifically on forest management processes under *FRPA*, much of the discussion may be relevant beyond a forestry context.

Since data were collected for this study in February 2008, the nature of consultation and land and resource planning with First Nations across the province has continued to evolve. Key developments include:

- new case law dealing with Aboriginal rights, title, and consultation;
- the emergence of New Relationship commitments;
- recent initiatives aimed at co-ordinating First Nations consultation among government resource management agencies;
- new tenure and revenue-sharing opportunities for First Nations; and
- innovative shared planning and decision-making frameworks emerging in some areas of the province (e.g., Nanwakolas Strategic Engagement Agreement, Coastal Reconciliation Protocol, Kunst'aa guu–Kunst'aayah).

In light of these influential changes, it will be critical to review and, if necessary, update the FREP process indicator framework for future regional or provincial application.

NEXT STEPS AND RECOMMENDATIONS:

In order to communicate lessons learned and improvement opportunities for professionals and decision makers to help improve First Nations consultation:

Recommendation 1

FREP staff facilitate a workshop aimed at transferring future work on “CHRV process (consultation)” project from FREP to the First Nations Consultation Branch. Target audience for the workshop is the First Nations Consultation Branch (MFR), Provincial Resource Management Co-ordination Project and First Nations Initiatives Division (ILMB).

Recommendation 2

Publish and distribute this Report and an associated Extension Note.

For future consideration by the agencies/initiatives listed in recommendation 1, whose mandate and (or) resources could support this work in the near term.

Recommendation 3

Using a collaborative approach, develop best practices for CHR management planning and implementation processes under FRPA. As reflected in this report, include guidance for all forest professionals including proponents, First Nations and government staff. Provide opportunity for review and comment of draft best practices by forest professionals including proponents, First Nations and government staff.

For the longer term when sufficient resources are available:

Recommendation 4:

Conduct provincial FREP Process Evaluations at periodic intervals. Preparation for future evaluations will require:

A. Review and consideration of necessary changes to the process indicator framework for provincial application.

B. Drafting a statement of proposed direction for conducting process evaluations at a broader provincial scale that considers the use of other data collection tools (e.g., survey) and (or) more quantitative measures for data collection.

4C. Distribution of pilot results, revised framework, and the statement of proposed direction to a broader audience of First Nations, industry representatives, and government staff for feedback on the potential for provincial application.

Conducting further research to evaluate the FREP CHR process indicators on a larger geographical scale, determine whether the results discussed in this report are indicative of provincial trends and identify new issues/ trends.

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LIST OF ACRONYMS

BCTS	British Columbia Timber Sales
CHR	Cultural heritage resource
CMT	Culturally modified tree
EBM	Ecosystem-based management
FNQ2	First Nations Quick Queries database (restricted government-only access)
FREP	Forest and Range Evaluation Program
FRO	Forest and Range Opportunity Agreement
<i>FRPA</i>	<i>Forest and Range Practices Act</i>
FPPR	Geographical Information System
FSP	Forest Stewardship Plan
GIS	Geographical Information System
<i>HCA</i>	<i>Heritage Conservation Act</i>
ILMB	Integrated Land Management Bureau
LRMP	Land and Resource Management Plan
LUP	Land Use Plan
MFR	B.C. Ministry of Forests and Range
RPF	Registered professional forester
SFMP	Sustainable Forest Management Plan
SRMP	Sustainable Resource Management Plan
WLP	Woodlot Licence Plan

1.0 INTRODUCTION

British Columbia's forest lands have held spiritual, cultural, ecological, and economic significance for First Nations millennia. First Nations' perspectives on the cultural resources and values associated with forests are as diverse as the peoples themselves, and dialogue on how best to manage these resources in a contemporary context continues to evolve.

First Nations increasingly desire a strategic role in forest resource management planning and decision making, including the management of land-based cultural heritage resources (CHRs) and values (Budwha 2005; Wyatt 2008; Krishnaswamy et al. 2009). The New Relationship vision¹ recognizes this goal, and commits First Nations leaders and the Province of British Columbia to exploring shared planning and decision-making processes for land and resource management. In some areas of the province, strategic collaboration with First Nations in natural resource management is facilitated through new government-to-government decision-making models and reconciliation agreements (e.g., Coast Reconciliation Protocol [2009], Kunst'aa Guu–Kunst'aayah Reconciliation Protocol²) as well as multi-party planning processes involving First Nations, the forest industry, government, and other strategic partners (e.g., **ecosystem-based management** [EBM]).³ At the same time, many First Nations are pursuing more direct control over forestry operations in their traditional territories through tenure, **joint venture**, or other business partnership opportunities (National Aboriginal Forestry Association 2000; British Columbia Ministry of Forests and Range 2006b; Wyatt 2008).

The Forest and Range Evaluation Program (FREP) is a resource stewardship initiative established by the B.C. Ministry of Forests and Range (MFR) as a foundation of the results-based **Forest and Range Practices Act** (*FRPA*) model to monitor and evaluate the status of the province's forest and range resources.⁴ The CHR value is one of the 11 *FRPA* values monitored by FREP. The CHR evaluation program aims to gain insight into the following question:

Are cultural heritage resources being conserved, and where necessary protected, for First Nations cultural and traditional use as a result of forest practices?

Evaluating the outcomes of forest practices through field-based monitoring can provide first-hand information about the post-harvest status of CHRs and other forest resources on the ground, and can inform improvements to forest practices. It is equally important to consider whether adequate pre-harvest strategic and operational planning, information-sharing processes, data, and tools exist for managers to understand what CHR values exist and where they are located on the land base, and to minimize impacts to these often finite resources and values during forestry operations.

The FREP CHR program designed a two-pronged evaluation model to address both the outcomes of forest practices ("outcome evaluations") and the effectiveness of processes influencing CHR management under *FRPA* ("process evaluations"). Field-monitoring protocols and results from CHR outcome evaluations will continue to be detailed in other FREP publications (e.g., Province of British Columbia 2009a, 2009b). This report focusses exclusively on the collaborative development, implementation, and results of the CHR Process Evaluation Pilot Project initiated in 2007. Although this pilot project was designed to examine planning and decision-making processes under *FRPA* in relation to CHR management, many of the issues discussed here are relevant to other *FRPA* values and to First Nation involvement in natural resource management planning and consultation beyond a forestry context.

1.1 First Nations and Forest and Range Practices Act Planning

Under *FRPA*, results and strategies for a number of forest resource values are developed by proponents and submitted to the **Crown** for approval in a **forest stewardship plan** (FSP) or woodlot licence plan (WLP). These plans are the primary strategic planning documents for a given operating area and act as key initial mechanisms for exchanging information with First Nations, government agencies, and the public about proposed forestry activities. Although the Crown has a legal obligation to consult with First Nations on decisions related to resource development within their asserted traditional territories, it has delegated some procedural aspects of its legal consultation obligations to proponents seeking a particular approval by requiring them to undertake review and comment with First Nations in

1 For the full text of the New Relationship vision and principles, see: http://www.gov.bc.ca/arr/newrelationship/down/new_relationship.pdf

2 For the full text of these agreements, see http://www.newrelationship.gov.bc.ca/agreements_and_leg/reconciliation.html

3 For more information on EBM, see: <http://ilmbwww.gov.bc.ca/citbc/ebm.html>

4 For more information about FREP, please visit the program's website: <http://www.for.gov.bc.ca/hfp/frep/>

relation to their FSP (B.C. Ministry of Forests 2005). Review and comment by First Nations during FSP development is intended to decrease the need for further information sharing by proponents and consultation by government on site-specific decisions (i.e., cutting or road permit applications), an assumption that is discussed in detail in this report.

1.2 Cultural Heritage Resource Management Legislation in British Columbia

For many First Nation individuals and communities, cultural resources and values associated with the land include a complex spectrum of geographically defined sites and features as well as the physical, cultural, ecological, and spiritual connections between them. Although there are commonalities, each First Nation in British Columbia has a unique interpretation of what the term “cultural heritage resource” represents and a unique historical and contemporary relationship to their **traditional territory**. Knowledge about these relationships, and the sites and features that provide physical evidence of them on the land, is often considered sensitive because of concerns around the use and misuse of this information.

Current provincial legislation attempts to define and provide management parameters for CHR values in a number of ways. The *Forest Act* broadly defines a CHR as “an object, a site or the location of a traditional societal practice that is of historical, cultural or archaeological significance to British Columbia, a community or an Aboriginal People.”⁵ Under *FRPA*, the management objective set by government for the CHR value is, “to conserve, and where necessary, protect, First Nations cultural heritage resources that are (a) the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and (b) not regulated under the *Heritage Conservation Act*.” Unlike most other *FRPA* values, there are no default practice requirements for the CHR value in the Forest Planning and Practices Regulation (FPPR). Instead, the FPPR outlines a number of “factors” that forestry proponents must consider when developing FSP results or strategies to meet the CHR objective including (but not limited to): the relative value or importance, abundance or scarcity of a particular CHR; and the historical extent of a traditional use by an aboriginal people.⁶

5 RSBC 1996, Chapter 157, *Forest Act*, Section 1. See: <http://www.for.gov.bc.ca/tasb/legsregs/>

6 For the full text of the Forest and Range Practices Regulation (B.C. Reg. 14/2004), Schedule 1, Section 4, see: <http://www.for.gov.bc.ca/tasb/legsregs/>

The management of provincial heritage resources is regulated by the *Heritage Conservation Act (HCA)*. Two mechanisms within the *HCA* are used to protect provincial heritage resources: designation and automatic protection. The Province distinguishes between heritage sites and archaeological sites to help clarify the different programmatic approaches for each sector. “Archaeological sites” usually refer to heritage sites that are automatically protected by the *HCA* although, more formally, these are sites where archaeological techniques form the primary means of investigation. The sites automatically protected are those containing physical evidence of human use or occupation prior to 1846, burial sites of historic or archaeological significance, and Aboriginal rock carvings and paintings.⁷ As noted in the *Forest Act* definition above, some CHRs are archaeological sites managed under the *HCA*, and others are managed under *FRPA*.

Heritage sites usually consist of built structures but, as indicated above, can be defined more broadly. The Province works with communities to help identify sites that are important at the local and regional level, and these sites can be protected through heritage designation under the *Local Government Act*. Occasionally, sites will be recognized as provincially important and will be designated a provincial heritage site and protected under the *HCA*.

The Province has a predominately regulatory role in the management of archaeological sites. Sites protected through provincial designation or by automatic protection may not be altered without a permit issued by government. Permit applications are adjudicated by the Archaeology Branch (Ministry of Tourism, Culture and the Arts) to determine whether alteration of the archaeological site is in the public interest.

Beyond provincial legislation, many First Nations have established, or are working towards establishing, heritage policies, guidelines, agreements, bylaws, or protocols to guide cultural and (or) archaeological resource management within their traditional territories (for further discussion, see: Mason and Bain 2003; Budwha 2005; Nicholas 2006; Klassen 2008). These efforts reflect a desire shared by many First Nations to have a more dominant role in the practice of archaeology and control over cultural resource management in their traditional territories.

7 Refer to *HCA* Section 13 (“heritage protection”; http://www.bclaws.ca/Recon/document/freeside/--H--/HeritageConservationAct_RSBC1996_c.187/00_96187_01.xml#section13) for a full description of automatically protected site types

1.3 Report Structure

Section 2 outlines the participatory approach used to develop and subsequently evaluate the pilot CHR process indicator framework. Section 3 presents the detailed interview results and discussion relating to each of the four CHR process indicators. Based on these initial results, the author proposes potential opportunities to improve CHR management planning and implementation for consideration by professionals and practitioners. Also included are an overview of recent policy developments and innovative collaborative agreements with First Nations, important lessons learned from the pilot, and proposed next steps for CHR process evaluations at a provincial scale (Section 4). Terms having a technical meaning specific to this report are defined in Appendix 1 and appear in **boldface** at first mention.

2.0 METHODS

The following section provides information about the participatory methods used to conceptualize and develop the CHR process evaluation framework, which consists of four indicators and several sub-elements, and to design and test an approach for evaluating these indicators.

2.1 Developing the Cultural Heritage Resource Process Evaluation Framework

2.1.1 Pilot Area Selection

Participatory program development and implementation are considered critical to the success of the FREP CHR effectiveness evaluation program. Participatory research methods and program development can improve relevance and credibility among participants, but are generally more time consuming than using a “top-down” approach. It was therefore considered important to balance the value of achieving wide representation among First Nations in this pilot project with the financial and logistical constraints of using a participatory approach. Consequently, the first step was to explore and build working relationships with a small number of First Nations in selected MFR districts.

Pilot MFR districts were sought in each of the three MFR regions (Figure 1). FREP relied on the expertise of regional Aboriginal Affairs Managers who recommended candidate districts that had sufficient capacity to participate in the project, had expressed past interest in CHR management issues, and had positive working relationships with

First Nations or First Nation organizations in their districts. Three districts were selected for the project — one in each of the **Southern** and **Northern Forest Interior Regions**, and one in the **Coast Forest Region**.

2.1.2 Defining the Issues

To define the scope of a process indicator evaluation framework, four information-sharing workshops were held in each of the pilot districts in November 2006. Before each session, an introductory information package and formal invitation was sent to selected First Nation Chiefs and Councils and local **licensees**, including **BC Timber Sales** (BCTS) offices. Each workshop session was attended by 10–20 representatives from First Nations and First Nation organizations, forestry proponents, MFR offices, and a small number of other government agencies. The primary goals of these sessions were to:

- 1) identify critical local issues of concern to parties involved in CHR management within the forest sector; and
- 2) build relationships between FREP and potential project partners.

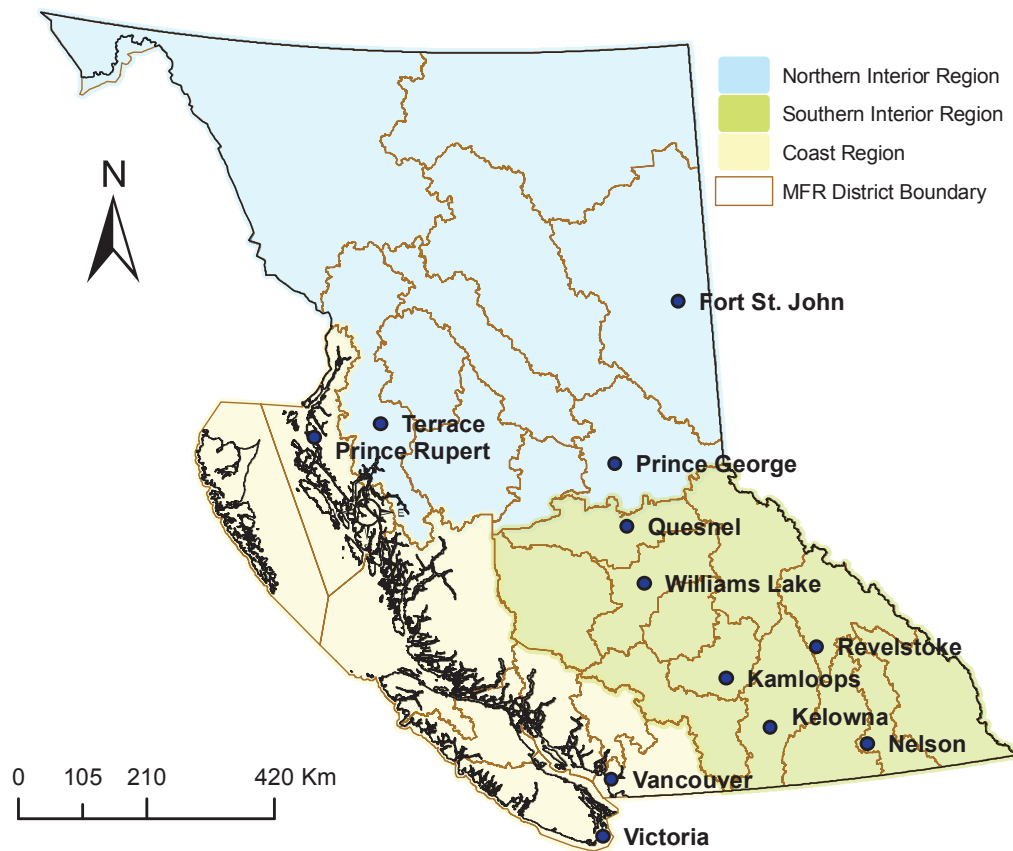


Figure 1. Ministry of Forests and Range regional boundaries (see Glossary of Terms in Appendix 1 for a description of each MFR region).

A draft process indicator framework was derived from a literature review and scan of existing indicator frameworks that evaluate various aspects of First Nation involvement in forest management planning and implementation at multiple scales. Four distinct themes emerged from this initial scan:

- 1) First Nations resources/capacity
- 2) Participation in forest management planning and decision making
- 3) Documentation of CHR information
- 4) Effective consultation and communication of CHR information

These themes were used as a starting point for workshop discussions. Participants also had an opportunity to provide written feedback on proposed indicator themes. Discussions were candid and constructive, and common concerns emerged. Feedback indicated that participants valued the opportunity to be exposed to the perspectives

of others and to share experiences related to CHR management under *FRPA*.

Workshop dialogue and written comments were incorporated into a draft process indicator framework in preparation for a subsequent Provincial Dialogue Session held in March 2007. At this session, participants discussed the revised process indicator framework in greater detail, suggested revisions, and collaboratively determined the next steps for the pilot project. Key among them was the establishment of a joint First Nations–government working group tasked with finalizing the indicator framework and designing a mutually acceptable implementation plan for data collection and analysis.

2.1.3 Indicator Development

Working group participants were sought from within the four original pilot districts, and a joint First Nations–government working group was assembled in June 2007. Working group members included representatives from

four First Nations (Nak'azdli, Tseshaht, Hupacasath, and Ulkatcho), staff from three MFR districts (Chilcotin, South Island, and Fort St. James) and two MFR regional offices (Northern Interior and Southern Interior), and advisors from the Integrated Land Management Bureau (ILMB) and MFR Aboriginal Affairs Branch. Proponents (licensees and BCTS) were not invited to participate in the working group because it was felt that building trust and working relationships between First Nations and government staff

was a key goal that may have been compromised with the presence of proponents.

The working group met bi-weekly via conference call between June and October 2007. The team successfully developed a final CHR process evaluation framework consisting of four indicators and several sub-elements (Figure 2), and concurrently developed a pilot implementation approach and associated data collection tools to evaluate the indicators.

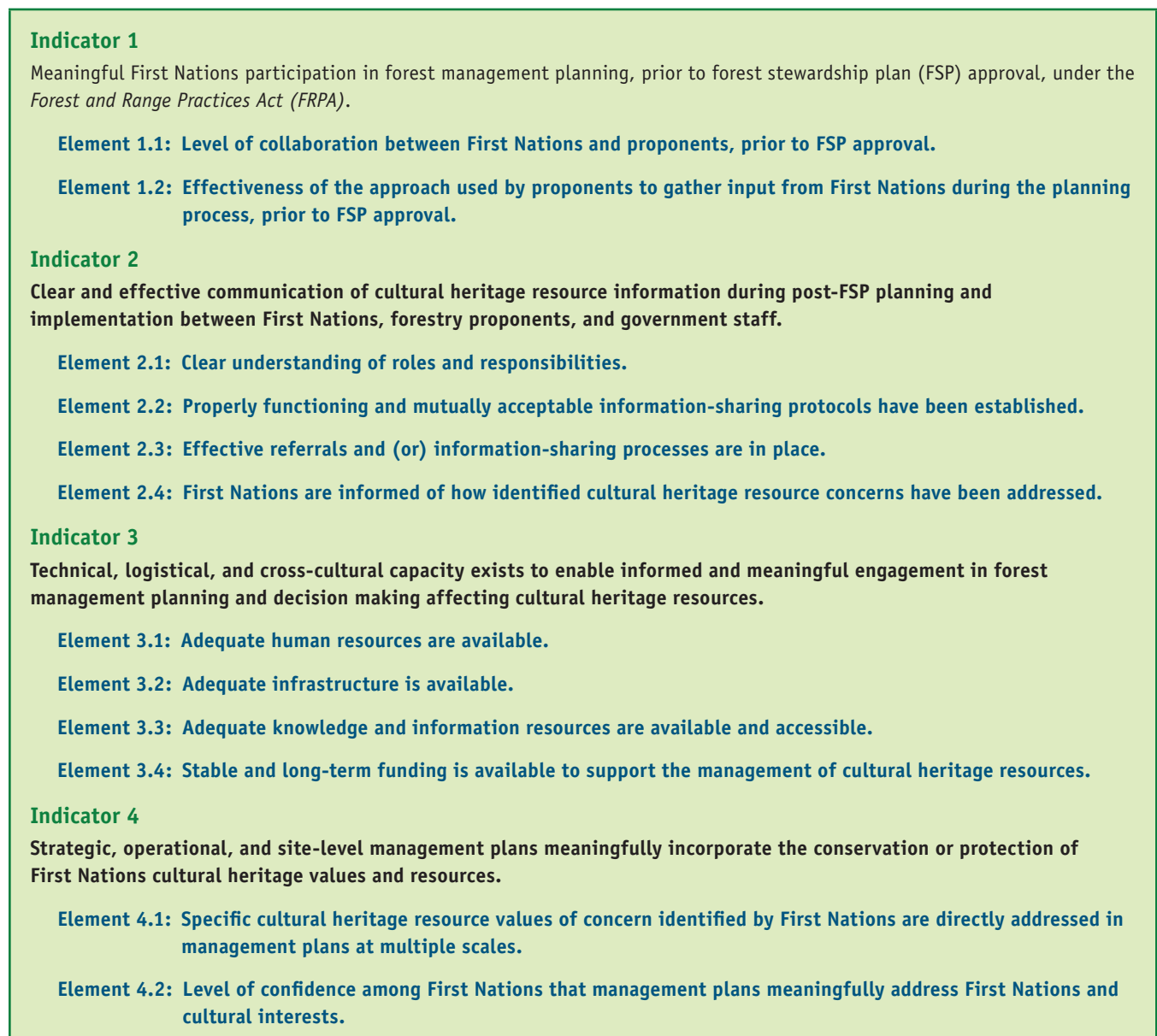


Figure 2. FREP CHR Process Evaluation Framework (version 3, 2007). Note: This framework is a product of a FREP pilot research project only, and does not represent in whole or in part the official position of the Crown or the B.C. Ministry of Forests and Range.

2.2 Data Collection

The working group considered a number of quantitative and qualitative data collection approaches. It was decided that open-ended, semi-structured interviews held in person would be best received by First Nations respondents (i.e., compared to other approaches such as online surveys). It was also deemed important to capture as much detail about the issues as possible in the initial pilot stage. This information could then be used to aid the design of future, possibly more quantitative, data collection tools (e.g., survey).

Because the MFR currently does not have established guidelines for research involving humans, guiding principles and ethical protocols outlined in the Tri-Council Policy Statement⁸ were adopted and observed throughout the research by the project team.

2.2.1 Interview Methodology

The working group designed interview questions concurrently with the indicator framework (Appendix 2–4). Interview questions were tailored to each of three respondent groups: MFR operational staff (Appendix 2), First Nations (Appendix 3), and proponents (licensees and BCTS; Appendix 4). Interview questions were subsequently reviewed and revised by subject matter experts. Participating First Nation Chiefs and Councils were offered the opportunity to comment on the indicators and interview questions before data collection began.

All working group members were invited to be part of the interview team. Team members could choose to take on the role of “lead interviewer” or “observer.” Lead interviewers took a primary role in communicating with

respondents, conducting the interview, and organizing interview logistics. Observers assisted with note-taking during the interview, but mainly used this opportunity to gain exposure to interview techniques and skills. In total, the interview team consisted of six interviewers and four observers. Before conducting the interviews, the interview team attended a 1-day interview skills training session in Vancouver.

Invitations requesting prospective interview respondents and suggested selection criteria were sent to First Nation Chiefs and Councils, BCTS managers, woodlands managers, and MFR district managers. Prospective respondents were then contacted directly by the project co-ordinator or lead interviewers to explain the project in further detail and to arrange interview logistics (Table 1).

Working relationships between respondents existed in all pilot areas; however, interview responses were typically more general and did not always pertain directly to other respondents in the study. For example, a First Nations respondent would typically comment on experiences with all proponents operating in their traditional territory, not only the ones interviewed. Similarly, district staff provided a general perspective on interactions between all parties in their district, not only those interviewed. The identity of all interview respondents was, and remains confidential; interviews were therefore “blind” and respondents were unaware of who else was being interviewed.

As well, it is important to recognize the differing perspectives of respondents from across the province and the scale of their jurisdiction or operations. For example, the total number of approved FSPs in an MFR district or the total number of First Nations that a particular proponent regularly interacts with varied across respondents (Table 2). Similarly, given that proponents’ operating areas can extend into multiple MFR districts, some responses pertained to MFR districts or First Nations not represented in this study. Analysis showed few instances of where this operational context had a direct influence on study results.

⁸ This statement was developed jointly by three Agencies (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council, and Social Sciences and Humanities Research Council) to guide all research involving humans funded by the Agencies. Last accessed online April 4, 2008 at: <http://www.pre.ethics.gc.ca/english/policystatement/policystatement.cfm>

Table 1: Profile of interview respondents

Respondent group	Selection criteria	No. of completed interviews	No. of organizations represented	Example of respondents
MFR district staff	Staff person(s) responsible for referrals, information sharing, or First Nations consultation, and (or) CHR management	6	3 MFR districts	<ul style="list-style-type: none"> • Tenures Forester • Tenures Planning Forester/Officer • District Manager
First Nations	Person(s) with the most detailed working knowledge of forest management under FRPA, referrals processes, and (or) CHR information management for referrals and information sharing within the band or First Nation	6	6	<ul style="list-style-type: none"> • Natural Resource Manager • Chief • Fisheries staff • Forestry Liaison Worker • Economic Development Officer
Proponent	Person(s) responsible for information sharing with First Nations, and (or) who has the most familiarity with FSP results and strategies developed by the company/BCTS Office for the CHR value	6	3 BCTS offices 2 licensees	<ul style="list-style-type: none"> • Operations Forester • Forestry Supervisor • Planning Forester • Planning Officer

Table 2: Summary of respondents' jurisdiction and (or) operational context

Perspective	District A	District B	District C
MFR district staff			
No. of FSPs or WLPs	<ul style="list-style-type: none"> • 7 approved FSPs • 6 transitional FSPs 	<ul style="list-style-type: none"> • 11–12 approved FSPs • 20 WLPs (approx.) 	5 approved FSPs
No. of First Nations with traditional territory in the district	34	11	7
Proponents			
No. of First Nations affected by the FSP	Proponent 1: 40–50 Proponent 2: 24	Proponent 3: 8–10 Proponent 4: 20	Proponent 5: 18

To minimize bias and the likelihood of interviewers having personal or working relationships with respondents in their region, interview teams (typically one interviewer and one observer) travelled to other areas of the province to conduct interviews. A total of 18 interviews were completed on a voluntary basis across the province in January and February 2008 representing six First Nations/First Nation organizations, three MFR districts (two respondents per district), and five proponents (three BCTS offices, two forestry licensees). Interviews were recorded on audiotape upon written consent of the respondent and supplemented with written notes.

2.2.2 Data Analysis

All original interview recordings were sent to the project co-ordinator for storage in Victoria, B.C.; all other copies were destroyed to protect the anonymity of respondents. Interviews were transcribed and supplemented by interviewers' written notes.

Each interview question corresponded with one of the four process indicators. Individual responses to each question were then grouped by respondent type, and compiled in a master summary document for each individual indicator. All responses and data extracted from the responses was summarized and analyzed anonymously. A coding and content analysis was completed on all interview data.

3.0 RESULTS AND DISCUSSION

The following section summarizes the pilot results and is organized into four subsections corresponding to each of the four process indicators.

These results do not reflect provincial trends, but rather the practical experiences and illustrative insights from respondents in three pilot MFR districts. Considerably more research will be needed to determine whether these results reflect provincial or regional trends. Nevertheless, these pilot results have substantial value for stimulating dialogue and building understanding among First Nations, professionals, and practitioners involved in CHR management or resource management generally.

Each subsection provides a description of the original intent of the indicator, detailed interview results and associated discussion.

3.1 First Nations Participation in Forest Management Planning (Indicator 1)

Indicator 1

Meaningful First Nations participation in forest management planning prior to forest stewardship plan (FSP) approval, under the *Forest and Range Practices Act (FRPA)*.

Element 1.1: Level of collaboration between First Nations and proponents in FSP development.

Element 1.2: Effectiveness of the approach used by proponents to gather input from First Nations during the planning process, prior to FSP approval.

3.1.1 Intent of the Indicator

The intent of Indicator 1 is to explore the scale and nature of First Nations participation in forest management planning under *FRPA* with a specific focus on First Nations collaboration in the development of FSPs.

Under the results-based *FRPA* framework, forestry proponents (excluding minor tenure holders) must develop FSPs or WLPs that consist primarily of management results and (or) strategies for each *FRPA* resource value. An FSP or WLP is the primary strategic planning document guiding forestry activities within a given operating area, and acts as a key initial mechanism for exchanging information with First Nations, government agencies, and the public about proposed forestry activities. Additional information

is frequently shared with First Nations throughout the operational planning process (B.C. Ministry of Forests and Range 2008). As no woodlot licence holders were interviewed for this study, this report focusses primarily on FSP planning and implementation; however, many of the issues discussed here may also be applicable to WLP processes.

Although the legal obligation to consult with First Nations on forestry-related decisions and other interests within their asserted traditional territories rests with the Crown, some procedural aspects of these consultation obligations have been delegated to forestry proponents seeking a particular approval. Proponents are required to make “reasonable efforts” to meet with First Nations affected by their FSP to review the plan and solicit comments before the plan is finalized (B.C. Ministry of Forests 2005; B.C. Ministry of Forests and Range 2006a). To gain meaningful First Nations input in the forest management planning process, MFR has encouraged proponents to collaborate with First Nations early in the development of an FSP.

Information sharing and (or) collaboration with First Nations can be challenging when a particular FSP covers a very large operating area (i.e., covering multiple **timber supply areas** or MFR districts) as it will likely affect multiple First Nations with differing capacities and resources, political views, CHR management priorities, and interests in forestry-related issues. Similarly, multiple FSPs can often affect one Nation’s asserted traditional territory, making it challenging for First Nations with limited resources to be integrally involved in the development of all FSPs.

3.1.2 Discussion of Results Pertaining to Indicator 1

Collaborating and building relationships with First Nations can occur before making the considerable investment required for FSP development. Once an FSP is developed, there are three distinct stages in the FSP planning process during which proponents reported engaging with First Nations:

- 1) before the 60-day review and comment period (before the FSP has been submitted for approval);
- 2) during the legally required 60-day public review and comment period (or 30-day review and comment period for WLPs); and
- 3) after the 60-day review and comment period had ended, but before FSP approval.

All respondents were asked to comment on the level of collaboration between proponents and First Nations in the development of FSP results and strategies for the CHR value. More specifically, they were asked to comment on:

- the strategy used by proponents to solicit collaboration and (or) to seek input from First Nations on their FSP;
- the stage in the FSP planning process during which collaboration and (or) input was sought; and
- whether First Nations utilized available opportunities to collaborate on FSP development and (or) provide input on the FSP before FSP approval.

Proponent Perspectives

The term “collaboration” was used during interviews to include possible collaboration with First Nations on the development of CHR results and strategies, yet respondents had differing interpretations of the term. All proponents described different approaches for seeking First Nations collaboration and (or) input on their draft FSP (Figure 3).

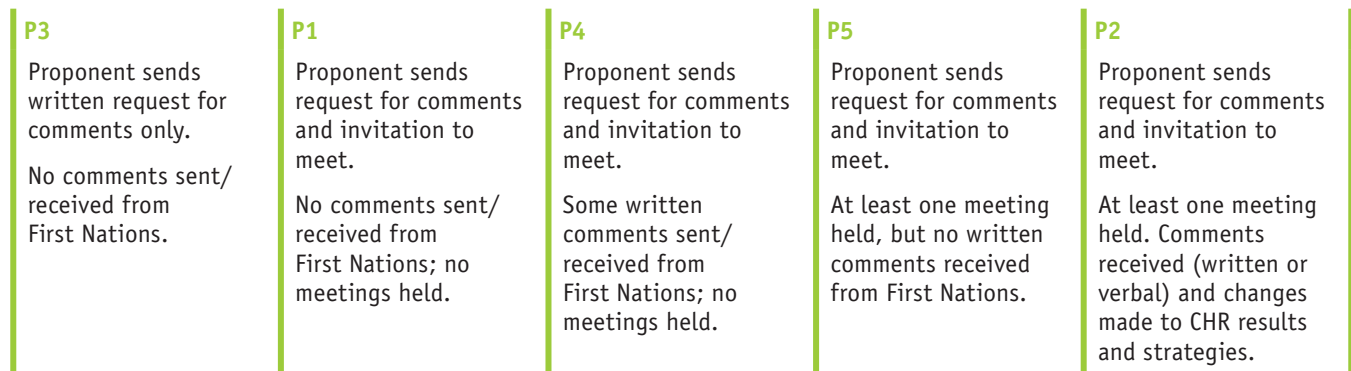


Figure 3. Range of approaches used, and First Nations responses to requests for input on FSP results and strategies. “P1–P5” indicate the five different proponents interviewed for this study.

In all cases, an initial information package containing the FSP and a range of other information was sent to First Nations. All packages included at least:

- an introductory letter,
- a copy of the draft FSP, and
- FSP-supporting documents.

A number of proponents provided additional information in the package including some combination of:

- detailed large-scale maps (1:50 000) of the operating area or Forest Development Unit maps;
- a PowerPoint presentation explaining *FRPA* and the introduction of forest stewardship plans; or
- a written invitation to meet and discuss *FRPA* and the FSP.

Three (of five) proponents indicated that First Nations requested additional information after the original package was received, including:

- additional information on CHR results and strategies; and
- additional, maps detailing the proposed location of all **cutblocks** and roads.

Four of five proponents offered a written invitation to meet and discuss the FSP. All proponents followed up with First Nations via a series of phone calls or emails, but relatively few proponents held face-to-face meetings (two of five). All proponents reported seeking input from First Nations before the 60-day period, and said that they were open to accepting all feedback regardless of when it was received. The one proponent that did not offer to meet with First Nations received no response.

In one case, a meeting was held with 10–12 First Nation communities to discuss *FRPA* and the company's draft FSP results and strategies. Although First Nations were invited to provide follow-up comments or recommendations after the meeting, no comments were received and no changes were made to the FSP as a result of the meeting. This lack of follow-up could be interpreted in several ways:

- First Nations satisfaction with the plan and a feeling that no further follow-up was required;
- insufficient resources to follow-up; and (or)
- an indication that the plan was not clearly understood or meeting participants were unsure how to effectively provide input.

A second proponent held several separate meetings with various First Nations to discuss its proposed FSP, and occasionally invited district staff to be present. Changes were made to the proponent's CHR strategy as a result of these meetings, and a follow-up letter was sent to First Nations highlighting these changes. Notably, this was the only proponent who reported providing feedback to First Nations about changes made to the FSP.

In a third case, various First Nations submitted written comments at all three stages of the FSP development process. A formal information-sharing process was subsequently set up by the proponent with one First Nation, yet it was unclear whether changes were actually made to the FSP as a result of this process.

First Nations Perspectives

First Nations perspectives differed and sometimes contradicted those of proponents operating in their territory. Two First Nations respondents said that only one proponent (of many) invited them to meet and discuss the proposed FSP. The first felt that the input they provided during this meeting was successfully incorporated into the FSP. The second noted that they did not have sufficient resources to follow up with relevant information and recommendations to the proponent following the meeting despite having a strong desire to do so. Two other First Nations respondents reported that no proponents had invited them to participate in FSP development and two were unsure about what efforts had been made. Generally, the latter responses indicated that an individual's work experience in forestry-related matters and (or) time working for a band/Nation may have influenced their ability to respond to some of the interview questions in this study. Similarly, these factors may have contributed

to the ability of these Nations to respond to referrals or information-sharing requests in general.

A few plausible explanations exist for the discrepancy between First Nations and proponent perspectives. It is possible that the information was not received or was not forwarded to the correct staff person, especially where no verbal follow-up occurred. Or, the parties may have interpreted the term "collaboration" differently. For example, while a proponent may consider sending an information package and meeting request to be a reasonable invitation to collaborate, a First Nation might view the same approach as simply an opportunity to provide comment versus collaboration.

Notably, two First Nations respondents stated that different approaches were often used by woodlot licence holders as opposed to large tenure holders in seeking their input, suggesting that the former appeared to be comparatively more open to working directly with the Nation. Specifically, both said that larger companies were more likely to seek their input once the review and comment period had already started, whereas the woodlot owners sent proposed plan information before the review and comment period began. The latter approach was viewed as more collaborative.

Ministry of Forests and Range District Perspectives

In all districts, MFR staff thought that most, if not all, proponents had invited First Nations to participate in the FSP process outside of the 60-day review and comment period, although estimated that only a few (1–3) First Nations provided input.

District staff noted that most First Nations who provided feedback on the FSP were involved in the forest sector. For example, the Nation may have held a joint venture with a forestry company or had their own forest tenure. This latter fact is supported in the literature, with some authors observing that increased First Nations participation in the forest sector through various economic and tenure opportunities generally leads to increased awareness and engagement in forest management planning processes (e.g., Wilson and Graham 2005; Wyatt 2008).

One MFR respondent observed that many First Nations have competing social (e.g., education, health, etc.) or resource management issues (e.g., oil and gas development, range concerns, etc.) that take priority over involvement in

forest management. They noted that the limited capacity among First Nations could result in a lack of response to requests for input on FSPs or other forestry decisions resulting in considerable uncertainty for licence holders and Crown decision makers.

Key Challenges and Opportunities

Although views were not universally shared, respondents agreed on a number of key challenges that impeded the effective engagement of First Nations in the development of FSPs (and other strategic planning processes generally). Table 3 summarizes these views.

Table 3. Key challenges perceived by respondents as impeding effective First Nations collaboration in FSP development

Perceived challenge	Description
FSP results and strategies are difficult to comment on and (or) measure	Results and strategies contained in FSPs are perceived as too broad and difficult to measure, and do not provide sufficient information for readers to understand a proponent’s strategic or operational activities on the land base. Technical and legal language in FSPs is difficult for most to understand and comment on.
Limited First Nations capacity to respond or participate in FSP development	First Nations often do not have the staff, financial, technical, or logistical capacity to actively participate in FSP development, even when they desire to do so.
Method used by proponents to solicit input from First Nations perceived as ineffective	Several First Nations expressed that face-to-face meetings to discuss the plans were very important, yet these opportunities were either perceived as unavailable or out of reach (insufficient resources). Using appropriate language for the knowledge level of the audience is critical to getting effective participation and input; this was perceived as lacking in a number of cases.
Lack of familiarity and satisfaction with, and (or) political opposition to, FRPA	Some First Nations were unable or unwilling to collaborate in the development of FSPs because they were/are either politically opposed to FRPA, or not sufficiently familiar with the new results-based framework and associated processes.

3.2 COMMUNICATION FOLLOWING FOREST STEWARDSHIP PLAN APPROVAL (INDICATOR 2)

Indicator 2

Clear and effective communication of cultural heritage resource information during post-FSP planning and implementation between First Nations, forestry proponents, and government staff.

Element 2.1: Clear understanding of roles and responsibilities.

Element 2.2: Effective referrals and (or) information-sharing processes are in place.

Element 2.3: Properly functioning and mutually acceptable information-sharing protocols have been established.

Element 2.4: First Nations are informed of how identified cultural heritage resource concerns have been addressed.

3.2.1 Intent of the Indicator

The intent of Indicator 2 is to evaluate the effectiveness of information-sharing and (or) referrals processes after an FSP has been approved, with particular regard to the identification and utilization of CHR information in operational planning.

Under *FRPA*, the FSP is the primary strategic planning document for a given operating area; however, it does not include site-level information about harvesting or road-building activities within that area. Although well-crafted results and strategies, or the use of default practice requirements, are intended to decrease the need for detailed information sharing on operational decisions after an FSP has been approved, this information is still regularly requested by First Nations (B.C. Ministry of Forests and Range 2008). In light of government's ongoing legal consultation obligations regarding operational decisions (the "referrals process"), as well as regular information sharing between proponents and First Nations, it is important to investigate how these processes are functioning, and how effectively they address First Nations CHR concerns.

First, understanding other organizations' decision-making processes and staff responsibilities, or essentially knowing who to talk to, is a basic requirement of successful communication (Element 2.1). This can be more challenging when staff turnover is frequent.

Next, having mutually acceptable information-sharing processes in place, whether formal or legally established (e.g., memoranda of understanding, information-sharing protocols signed by both parties), or informal (e.g., verbal discussion of an acceptable process), can provide certainty and clarify expectations for all parties (Elements 2.2 and 2.3). These processes can be used to establish timelines, outline responsibilities, describe the types of information to be shared, how new information will be collected, and where it will be stored. The quality of working relationships and available resources can directly affect the ability to design and implement such processes.

Finally, following the information-sharing or consultation stage, it is critical to communicate what happens to the information that is shared, particularly how it has or has not influenced management plans or decisions. Providing feedback to First Nations on how their concerns have been addressed improves professional accountability, builds transparency, and has strong potential to improve trust and working relationships with First Nations (Element 2.4).

3.2.2 Discussion of Results Pertaining to Indicator 2

Understanding of Roles and Responsibilities (Element 2.1)

When asked if they had a clear understanding of the appropriate MFR and industry contacts within their traditional territories, First Nations respondents unanimously reported that they were well aware of the appropriate contacts. When they did not know, respondents said they were comfortable contacting the company or district office and simply asking for the most appropriate contact person. One respondent observed that appropriate contact information was typically contained in letters, reports, or plans sent to their Nation.

Proponents generally responded favourably to this question as well. Several commented that they regularly maintain a contact list for all First Nations in their operating area. Most relayed that much of their correspondence (including the request for FSP review and comment) was addressed to the Chief and Council, although depending on the decision or issue, they would also send detailed information directly to a natural resources/forestry worker, or council member holding the forestry portfolio for a particular band. One proponent also proactively notifies First Nations any time staff changes occur within their own office to maintain open lines of communication. Several respondents commented on the challenge of keeping up with increasing staff changes.

Referrals and (or) Information-sharing Processes (Element 2.2)

All respondents were asked to rate the effectiveness of current referrals processes (Table 4). Responses from all groups clearly indicate a general dissatisfaction with the success of these processes and considerable room for improvement. District staff tended to rate strategic and operational consultation differently, always rating strategic consultation lower. Other respondent groups did not make this distinction.

"We're a pretty mobile workforce on both sides and sometimes it's hard to keep track of who the best [contact] person is."

— Proponent respondent

Table 4: Respondent ranking of referrals processes

Respondent group	Average rating on a scale of 1 (extremely poor) to 10 (excellent)
First Nations	3
Proponents	6
District staff	Operational decisions: 4.5
	Strategic-level consultation: 3

The following discussion provides an overview of the range of existing referrals and information-sharing processes among the three respondent groups.

District Referrals Processes

District staff described a complex combination of processes often tailored to individual First Nation needs and capacities. Working relationships between licensees and First Nations, and the scale and nature of the proposed activity, were important factors shaping the depth and approach to communication and referrals processes used by districts. The MFR has developed a consultation matrix that provides guidance on the appropriate level of consultation for a given decision, ranging from notification to deep consultation.

Two district respondents noted that although some initial resistance was evident after *FRPA* implementation, many proponents have since been actively engaged in information sharing directly with First Nations. This shift reduced the need for in-depth district consultation in some cases, particularly where First Nations completed comprehensive impact analyses, and (or) used a coded letter⁹ system to indicate the level of concern with a proposed development; this system was commonly used in two of three pilot districts.

One MFR district implemented a post-FSP policy requiring proponents to send a comprehensive information-sharing package directly to First Nations, which included large-scale maps showing all proposed developments and an invitation to meet and discuss the plans. Similarly, several proponents committed (in the form of an FSP strategy) to

9 Several First Nations reported using a “coded letter” system of responding to referrals or requests for information sharing: a “green letter” is sent when no concerns exist; a “yellow letter” is sent when some concerns exist requiring further dialogue or analysis; and a “red letter” is sent when major concerns exist and the First Nation does not want development to proceed. While protocol varies across districts, district follow-up is typically proportional to the level of concern expressed by the letter; highest when a red letter is sent.

meet regularly with First Nations to discuss operational plans. These proponents noted that working with First Nations early in the planning process, before cutblock engineering, was an extremely beneficial investment of time and resources in the longer term.

In keeping with government’s legal obligations, all MFR districts follow up with formal consultation before an approval is issued regardless of the level of previous licensee–First Nation engagement or information sharing. This involves sending a formal letter outlining the proposed development and asking First Nations to identify any concerns. The process may also involve a phone call or in-person meeting to ensure that no unresolved issues remain. Whether this meeting occurs depends on individual district policies, First Nation interests, and the nature and implications of the development. Some districts ensure that verbal follow-up occurs when a development approval has been made in an area known as sensitive or having high cultural value to local First Nations.

Several MFR respondents observed that valuable information is often received outside of formal consultation processes (e.g., during a meeting or conversation about a different topic, or expressed by a community member directly to the MFR as opposed to through the band council). All district respondents stressed that they consider all information brought forward in their final decision, regardless of how and when it is brought forward.

Finally, the Microsoft® Outlook-based First Nations Consultation Tracking (FNCT) tool¹⁰ was described by a few district respondents as extremely useful, leading to major improvements in tracking communications with First Nations. BCTS has since adapted the tool to create a referrals-based tracking system, and other agencies are beginning to utilize components of the tool as well.

First Nations Referrals Processes

First Nations in the study areas reported diverse approaches to managing and responding to referrals and information-sharing requests. Four of six respondents felt that they had a well-established process in place and one

10 The FNCT project uses Microsoft Outlook as a tool to support MFR headquarters, branch, region, and district office record keeping of all consultations with First Nations. This tool promotes information sharing, prompt and co-ordinated consultation efforts, optimization of system development costs, and the enforcement of information recording, storing, and retrieval standards. It will also enable long-term tracking and reporting on consultation efforts of the MFR.

band had no established process. The last respondent did not comment on process details. A number of common steps taken by First Nations in response to referrals emerged from the interviews. These are compared across three selected respondents in Table 5. Note that some steps may not have been fully described by respondents, and the descriptive information is primarily intended to illustrate the variation in approaches used by First Nations.

The level of technical sophistication across bands was inextricably linked to the capacity available within a

community, a theme that has been widely discussed in the literature (e.g., Mabee and Hoburg 2004; Wilson and Graham 2005; Stevenson and Perreault 2008; Krishnaswamy et al. 2009). One respondent noted that having professional expertise within the band as opposed to one or few generalists responding to all inquiries from multiple government agencies would be a significant improvement. Several respondents noted the lack of targeted financial support for First Nations to participate in referrals processes, although perspectives on who should be responsible for providing this financial support varied.

Table 5. Descriptions of steps taken by First Nations during referrals and information-sharing processes

Step	First Nation 1	First Nation 2	First Nation 3
Referral is received	Referral filed and acknowledgement letter is sent out to MFR or proponent	Most proponents electronically submit spatially explicit development proposals via a web-accessible system managed by the Nation (fee-for-service arrangement). Paper referrals are sent to Nation’s stewardship department	Referral tracked in Microsoft® Access database and hard copy filed
Initial information gathering and analysis	2-week preliminary review to determine whether more information is required including comparison to land use plan to identify any major conflicts Comprehensive run through GIS database to determine whether further cultural and (or) ecological concerns exist	Comprehensive spatial analysis of potential cultural and ecological impacts is completed, and initial report and maps produced for community review Paper referrals tracked in Microsoft® Excel database; electronic referrals are tracked automatically; all go to a central filing system	Referrals worker assesses potential impacts to band members, and Traditional Knowledge Keepers based on best available information When potential impacts are identified, families and individuals contacted to discuss the proposal
Detailed analysis and (or) community review	Not described	Package sent by Nation to individual band decision makers which includes: original referral, results of spatial analysis, and suggested management recommendations. Community either accepts the recommendations, or asks for more work to be completed	Monthly community meeting held to review all pending referrals; licensee sometimes present for this review (note: this hadn’t happened for some time)
Referral response sent	Red, yellow, or green letter sent to licensee identifying concerns and next steps	Standard response package (includes letter, data tables from analysis, community comments and recommendations) sent back to the proponent via email	Letter sent identifying all identified CHR concerns in the area
Develop recommendations and (or) negotiate accommodation	If conflict was identified, field crews sent out to complete pre-harvest CHR assessment, and determine need for further field assessments Meeting with proponents held as needed to discuss CHR management options or compensation if the block cannot be moved or amended	Proponent makes necessary changes to proposal or contacts Nation for further discussion; a revised map is sometimes provided by the licensee. Final map with any changes goes to the Chief who makes final approval	Not described

Proponent Perspectives

Several proponent respondents described similar processes for addressing the cultural interests of First Nations. If concerns are identified at the initial analysis stage, either a meeting is held or a field assessment is completed. Usually, a liaison worker, resource manager, or forestry worker within a band is involved in these field assessments, but where necessary, traditional landholders or professional archaeologists may also be involved.

One proponent described an added level of collaboration. If any CHR concerns are identified during the field visit, an **archaeological impact assessment** may be requested and is completed by a mutually agreed upon archaeologist. Subsequently, an action plan is jointly developed with the affected First Nation(s) for managing the cultural concerns on that particular cutblock.

Many proponents continue to use processes previously established under the Forest Practices Code to share site-level, operational information with First Nations. In some cases, most of the CHR information that is ultimately considered by a proponent is shared through these processes. Nevertheless, government's legal obligation to consult remains with the Crown as a final check before development approval.

Proponents described providing a variety of information to First Nations about proposed operational activities, including:

- FSP and supporting documentation
- Tabular information summary including size of cutblock, **stand age**, first or second growth, volume of timber harvest, **species composition** (cedar focus in some cases), **harvest and road tables**
- Maps including forest inventory information, location of streams and riparian areas, timber harvest areas, retention areas
- Digital image of the area
- Spatial files (upon request)
- Archaeological impact assessments

Several proponents noted that they tailored communication to each individual community, and that each community preferred a different combination and format of information. They described using the following approaches to share operational information and discuss potential impacts to CHRs.

- Send information package, followed up by a meeting to discuss details and review plans
- Submit harvest or road-building proposal directly to First Nation's electronic system for analysis of potential cultural/ecological impacts
- Hold an annual information-sharing meeting in each community to discuss all proposed operations for the year

Several proponents agreed that a lack of response from First Nations led to a high level of uncertainty about how well they were addressing CHR concerns, noting that "silence leaves a lot of questions."

Due to this frequent lack of response from First Nations, one company attempted to proactively anticipate and accommodate the interests of First Nations in the following ways during planning and harvesting.

- Modify cutblock design to accommodate the interests of First Nations where concerns are likely (e.g., design of wildlife corridors and riparian corridors in hunting/trapping areas, consideration of First Nations site access, avoidance of known cultural use areas)
- Use of seasonal logging restrictions in certain areas
- Modify species retention strategies (e.g., birch retention strategy in FSP)
- Retain vertical structure to improve wildlife habitat

Although this proactive approach can be efficient and effective, it is critical to involve First Nations in determining whether the proposed activities adequately address their concerns, a fact recently highlighted in *Klahoose First Nation v. Sunshine Coast Forest District*.¹¹

Barriers To Successful Information Sharing

One MFR respondent noted that the strain on First Nations resources could be lessened by co-ordinating and (or) standardizing the approaches of the many resource management agencies currently liaising and consulting with First Nations on myriad decisions. Several First Nations respondents supported this view, and one added that the MFR's response to their Nation's requests for information was frustratingly slow. Another noted that receiving referrals and information from multiple agencies

¹¹ *Klahoose First Nation v. Sunshine Coast Forest District (District Manager)*, 2008 BCSC 1642.

and companies, all in different formats and with varying levels of detail and content, is a significant challenge. Recognizing these concerns, the provincial government has since taken steps and directed resources towards co-ordinating consultation with First Nations through the Resource Management Co-ordination Project.

One First Nation respondent suggested that having decision-making tools to prioritize or rank referrals within their band might alleviate pressure on limited resources. Similarly, two respondents (proponent and First Nation) agreed that developing a standard approach or “best practices” for consultation and referrals would be a significant improvement.

Who Is Doing the Consulting?

In one MFR district, a local First Nations knowledge holder was hired to play a liaison role, and was very effective at bridging the gap between traditional land managers, band decision makers, and the MFR. This experience points to the potential long-term benefits of building Aboriginal capacity and expertise within the B.C. Forest Service, particularly where individuals are interested in living and working in their traditional territory.

All three respondent groups acknowledged that frequent staff turnover created challenges in sharing information. Much CHR information remains undocumented and “in the minds” of individual staff because of confidentiality concerns and, in some instances, a lack of centralized and spatially explicit data management tools. Consequently, a considerable amount of information is lost due to increasingly frequent staff changes in all organizations. Several respondents agreed that knowledge transfer to new staff could definitely be improved and possibly formalized. Only two respondents indicated that their respective organizations had a formalized process for ensuring effective knowledge transfer.

Additionally, given the importance of developing positive working relationships, staff turnover can often lead to major steps backwards in building trust between parties and subsequent delays or conflicts. One possible solution to facilitate these difficult transitions is to ensure that someone with an existing working relationship introduces new MFR staff to local First Nations in person.

Several MFR respondents noted the importance of choosing the right individuals to undertake consultations. One respondent noted that most consultation is done

by district staff with limited decision-making authority, which added to the strain on an already time-consuming and cumbersome consultation process. Another mentioned the importance of hiring or training people in interpersonal skills, given the critical importance of building strong relationships and trust. They described a situation in which a technically adept staff member was sent to explain recent regulatory changes to a community, but simply did not have the experience or cultural awareness to interact with community members in a constructive fashion. The result was described as “disastrous” because the parties were simply “not speaking the same language.”

A few industry and government respondents observed that internal First Nation community dynamics could affect how CHR information is shared and utilized. Underdeveloped or undeveloped community review processes, or the absence of formal communication mechanisms (e.g., community meetings) for members to stay informed about proposed developments and voice their concerns to community decision makers, can lead to loss of, or damage to, CHRs. Within some First Nations, conflict between government-imposed governance structures (i.e., band council) and hereditary governance structures can prevent effective communication of CHR concerns. In other cases, conflicting views exist among community members and community leaders regarding acceptable levels of resource development on the land base, and what is required to ensure the conservation or protection of cultural values. In some communities or for some individuals, traditional knowledge is considered so sensitive that knowledge holders will not share it with anyone, not even community decision makers. Damage to CHR sites can result from an unwillingness to discuss or identify concerns.

Cultural Heritage Resource Information Storage and Management

Effective resource management processes and decisions are critically dependent on the quality and availability of information. Thus, effective information and data management is a vital component of effective CHR information sharing and management. When CHR information is simply not available, or can't be efficiently accessed, a significant barrier exists for both First Nations responding to requests for information as well as forest managers attempting to manage these resources. Limited skills and resources can significantly decrease the ability of organizations to fill this critical information gap.

Cultural heritage resource information exists in many different formats, is collected at different geographical scales (e.g., for a large traditional territory, for a small watershed, at the cutblock level, etc.), and can be held in several locations by multiple parties. All three respondent groups currently hold CHR data in multiple formats, with First Nations having the following diverse collections of CHR information.

- Audio-visual: interview tapes, videocassettes, CDs, and DVDs
- Transcriptions of oral histories/accounts and interviews
- Books
- Reports (e.g., archaeological studies, research reports, etc.)
- Paper maps
- Digital maps: **Geographical Information System (GIS)** database or spatial map layers

Respondents described using some combination of paper filing (used by all respondents), searchable databases used to catalogue existing information, and GIS databases for storing spatial information.

Over the past two decades, First Nations and other land managers have increasingly focussed on creating and storing cultural information spatially in GIS to improve data accessibility, facilitate **land use planning**, and improve capacity for effective impact analyses (e.g., Tobias 2000; Mabee and Hoburg 2004; Leroux et al. 2007). Several organizations in British Columbia and Canada are dedicated to developing or facilitating access to educational and financial resources in order to build GIS capacity among First Nations in the province (e.g., the Aboriginal Mapping Network,¹² the First Nations Technology Council,¹³ and GeoConnections¹⁴).

Geographical information systems use geographical co-ordinates to organize or link information to its physical location on the ground; however, CHR information is often geographically referenced in other ways. For example, CHR data can be organized by map sheet, by forest licence, by opening number, by traditional territory, by house territory, or by local place name. Consolidating

12 See Aboriginal Mapping Network website: <http://www.nativemaps.org/>

13 See First Nations Technology Council website: <http://www.fntc.info/>

14 See GeoConnections website: <http://www.geoconnections.org/en/communities/aboriginal/index.html>

these disparate sources of information into an efficient, searchable format can be extremely challenging.

In this study, two (of six) First Nations respondents routinely used spatially enabled databases that integrate both cultural and ecological information for resource management planning, responding to referrals, and undertaking research in their territories. Other information (i.e., audiovisual recordings) remains stored and (or) catalogued in Microsoft® Excel or Access databases.

At the other end of the spectrum, two First Nations respondents explicitly noted having no central repository or comprehensive database for cultural information. The remaining two First Nations respondents indicated that although database(s) have been constructed, they are not spatially enabled, and much of the existing information has yet to be catalogued. For example, completed interviews still required transcription, or cultural sites that had been identified through interviews or archival research had not been located in the field.

Among proponents, all but one stored at least some cultural information in a GIS database, several routinely created and filed digital copies of all information received from First Nations, and all continue to rely on paper filing to some degree, with one proponent exclusively so.

Among the three MFR districts, one had a GIS database of cultural information in development, one relied exclusively on paper filing, and the third used a combination of security-rated paper and digital filing of CHR information. Currently, two spatially enabled, searchable databases of CHR information are in use by MFR districts; other non-spatial cataloguing systems are more commonly (but not universally) used.

Information-sharing and Consultation Protocols and Agreements (Element 2.3)

Formally established information-sharing protocols, agreements, or strategies can be useful to clarify expectations, timelines, and parameters for consultation or information-sharing processes. Informal arrangements can work in some circumstances, but more formal, documented processes are beneficial when working relationships are tenuous, when the prevailing political or economic climates are unstable, or when frequent changes in community leadership occur over short election cycles (Wilson and Graham 2005; B.C. Ministry of Forests and Range 2008).

Similar to the findings of Hickey and Nelson (2005), respondents from all groups identified several different types of information-sharing arrangements and (or) mechanisms for economic participation that were key to improving communication between parties regarding cultural concerns.

- Contracting or “**fee-for-service**” relationship
- Compensation agreement
- Joint venture
- **Information-sharing or consultation protocol**
- **Memorandum of understanding (MOU)** or information-sharing agreement
- **Treaty interim measures agreement**
- FSP information-sharing strategy

In this study, two First Nations had formal agreements in place with a number of proponents and both were interested in establishing similar agreements with the remaining companies operating in their territories. Three reported having no such agreements in place, citing a lack of resources, but all were interested and felt that there were benefits to establishing agreements. Conversely, one First Nation respondent observed that working relationships with local companies and the district office were very good, and there was no need to direct already-limited resources towards developing information-sharing agreements.

One First Nation had an information-sharing agreement in place associated with a Forest and Range Opportunity (FRO) agreement. Two other First Nation respondents indicated that such agreements were in development. The remaining respondents mentioned an interest in establishing similar information-sharing agreements with the district, but the process had not yet begun.¹⁵

Three proponents had formal, documented agreements in place with at least one First Nation in their operating area. A few had several, and were working on more. One company had established a standard internal information-sharing protocol, and also tailored specific information-sharing processes to the needs of individual bands (these processes are undocumented). In this latter case, three fee-for-service arrangements were also in place with individual bands and were described as working well.

¹⁵ Since conducting the interviews, an additional 19 FROs have been signed with First Nations for a total of 132 agreements (as of August 2009). For more information, see: http://www.for.gov.bc.ca/haa/FN_Agreements.htm

The two remaining proponents did not have any formal agreements in place with specific First Nations, but relied on standard information-sharing protocols that were developed internally or in collaboration with other local licensees. The level of First Nations involvement in the development of these protocols was not clear from the interview responses, but as discussed earlier, First Nations understanding and acceptance of the approach would likely greatly benefit from their involvement.

Feedback Processes (Element 2.4)

An important step in information-sharing processes is providing feedback to First Nations about how their concerns have been addressed. Some proponents described sending information-sharing packages that outlined a summary of the concerns mentioned in meetings or field visits and the proposed mitigation strategy. A new map showing changes made to cutblock design is often included in this package. All proponents felt that their feedback processes were well established.

All but one First Nation respondent indicated that MFR district feedback processes were generally well established, and they almost always received feedback from districts regarding how their concerns had been addressed. One First Nation respondent commented that the feedback process could be more formal and consistent across government agencies, an issue that may be addressed through the previously mentioned Resource Management Co-ordination Project.

3.3 Cross-cultural Capacity (Indicator 3)

Indicator 3

Technical, logistical, and cross-cultural capacity exists to enable informed and meaningful engagement in forest management planning and decision making affecting cultural heritage resources.

- Element 3.1: Adequate human resources are available.**
- Element 3.2: Adequate infrastructure is available.**
- Element 3.3: Adequate knowledge and information resources are available and accessible.**
- Element 3.4: Stable and long-term funding is available to support the management of CHRs.**

3.3.1 Intent of the Indicator

One of the most significant, widely recognized barriers to effective First Nations participation in the forest sector is a lack of capacity (e.g., Aboriginal Capacity Working Group 2007; Stevenson and Perreault 2008; Wyatt 2008; Krishnaswamy et al. 2009). “Capacity” has been defined in many ways. The National Aboriginal Forestry Association’s Aboriginal Capacity Working Group offers one definition that highlights the complexity of the issue.

“At the Aboriginal community level, capacity includes the broad abilities to design communal responses to environmental and natural resource management issues, seize the opportunity to improve community socio-economic conditions, and develop strategies to protect and enhance the community’s varied interests—traditional or contemporary.

Capacity includes a set of assets or resources available to a community; the socio-political conditions that present opportunities to develop and apply the assets or resources as a means to increased community well-being; and the outcomes that are achieved relative to community aspirations. All of these components are integral to Aboriginal capacity building (National Aboriginal Forestry Association 2007:1).”

Although many efforts and resources have focussed on building technical and human capacity within Aboriginal communities, capacity challenges are not one-sided. Provincial government and industry resource managers face similar capacity challenges, one of which is building the capacity necessary to understand Aboriginal governance, knowledge systems, and cultural values and to meaningfully incorporate these in forest management planning and decision making.

The intent of this indicator is to examine the critical resources required by Aboriginal communities to engage in forest management under *FRPA*, and by government and industry to more meaningfully incorporate traditional knowledge systems and cultural values in management decisions. It is not intended to address the very broad and complex issue of community capacity as highlighted in the National Aboriginal Forestry Association definition.

3.3.2 Discussion of Results Pertaining to Indicator 3

Human Resources (Element 3.1)

First Nation Perspectives

Referrals staff, formally trained researchers, forestry and natural resource professionals, and GIS technical staff are critical assets enabling First Nation communities to engage in forest management or land use planning processes. A number of existing federal initiatives are devoted to providing First Nation peoples with the necessary skills to fulfill these job functions,¹⁶ and several provincial programs are focussed more specifically on building GIS capacity among First Nations.¹⁷ Yet, the vast majority of funding is available on a project-by-project basis, making it extremely difficult to use these funds to support long-term employment opportunities within First Nation organizations and communities.

Within the six communities involved in this study, human resources remain limited and a notable discrepancy in available resources exists among different First Nations. Two or more respondents highlighted five main human resource gaps that limit successful participation in forest management planning.

- Lack of trained GIS staff
- Lack of referrals staff
- Lack of research capacity
- Lack of staff with professional forestry certification and (or) training
- Inability to hire full-time staff due to lack of stable funding

Only three of the First Nations respondents had a full-time staff person devoted to responding to and processing referrals (Table 6). In the remaining three cases, an individual in a natural resources portfolio, who also fills numerous other responsibilities and often has limited

¹⁶ These include: The First Nations Forestry Program, Aboriginal Skills and Employment Partnership, Building Environmental Aboriginal Human Resources, Indian and Northern Affairs Canada programs, Canadian Aboriginal Economic Development Program, the Environmental Capacity Development Initiative, the Aboriginal Skills Development Program, and the Aboriginal Capacity and Development Research Environments program. See Stevenson and Perreault (2008) for details about these initiatives.

¹⁷ Examples include the Aboriginal Mapping Network, the First Nations Technology Council, and GeoConnections.

forestry expertise, fills this role. In the latter case, respondents explained that their response to referrals has been sporadic as a result.

Table 6. Profile of band/Nation staff with forestry or related expertise as noted by First Nations respondents

Description of human resources/staff	No. of First Nations respondents that noted having these staff (of 6)
Full-time referrals staff	3
Field staff (e.g., fish and wildlife surveys, field archaeology, etc.)	3
GIS staff	2
Staff with registered professional forester certification	1
Staff with post-secondary forestry or resource management training	1
Staff with post-secondary training in research skills	1

Only one First Nation respondent had staff with post-secondary training in forestry or other resource management disciplines (one of which was a registered professional forester) and several reported that their training was primarily informal and most of their knowledge was acquired “on the job.” One respondent noted that although a few band members had forestry training, they were employed elsewhere.

Three respondents had field staff responsible for various activities including fish and wildlife surveys, CHR inventory and assessment, and field archaeology; however, the remaining three did not have any staff dedicated to field work. One respondent had a staff member with post-secondary training whose time was primarily devoted to treaty-related issues; the remaining respondents indicated that they relied heavily on contractors for technical support and research expertise. Two respondents indicated that band members had participated in past research projects within the community, which had resulted in the development of basic research and data collection skills; however, these individuals were currently unemployed, were employed elsewhere, or were no longer living in the local community.

Only two respondents had trained GIS staff, and a third respondent was actively attempting to develop these technical skills among several staff members. The remaining three respondents relied on contractors for all spatial data analysis and land use planning.

Proponent Perspectives

Among the proponents surveyed, none had staff with specializations in archaeology, anthropology, ethnobotany, or other disciplines related to cultural resource management.

Companies and BCTS offices have varying levels of emphasis on training staff in issues related to First Nations or cultural awareness. One proponent routinely relied on contractors (hired daily), while other proponents hired archaeologists or other experts only occasionally or upon request by a First Nation. Two proponents had standing contracts with First Nations and regularly hired their field crews to complete field inventory or survey work. One respondent acknowledged the importance of hiring archaeologists chosen by local First Nations. This ensures that the professional has the local expertise necessary to do a high-quality job and that the work is performed in a culturally appropriate manner. This approach has received support in the literature. Several authors and First Nations also strongly advocate building archaeological and cultural heritage management expertise so that this work can be done by First Nation community members (e.g., Mason and Bain 2003; Budwha 2005; Nicholas 2006; Klassen 2008).

One proponent had fully integrated cultural issues and awareness into daily business and all staff are regularly required to complete “cultural heritage resource management” training on an annual basis. Another proponent indicated that all staff had completed a cultural awareness workshop at some point in the past, but training was not offered regularly. In two other offices, planning and operational staff were encouraged to regularly attend workshops on relevant topics (e.g., treaty implications, current case law and [or] “Working Effectively with Aboriginal People”¹⁸). Two proponents had field personnel who completed some training in archaeology or culturally modified tree (CMT) identification.

Overall, training on First Nations issues and (or) CHR management appears to be offered on an ad-hoc basis in these pilot cases. With the exception of one proponent (a BCTS office) who attempted to fully integrate cultural issues and awareness into their daily business, building this expertise did not appear to be a priority for most of

18 Course information can be reviewed online at: <http://www.wewap.ca/>

the proponents interviewed. Given the current economic conditions, it is probable this trend could continue.

Ministry of Forests and Range Perspectives

Although all three MFR district offices had First Nations liaison staff, or tenures staff with similar responsibilities, none had staff with formal training in archaeology, anthropology, ethnobotany, or other cultural resource management specializations. In the absence of government-wide data, it is unclear whether these demographics reflect the situation within government natural resource management agencies as a whole.

All district staff respondents had received cultural awareness training of some kind that, similar to proponents, was primarily offered through occasional workshops and seminars as opposed to more formally established or regular training opportunities.

One district office had two First Nations employees who were described as instrumental in raising the profile of First Nations issues and cultural awareness in these offices.

Infrastructure (Element 3.2)

Other than the human resource gaps identified above, First Nations and district respondents in this study generally did not view infrastructure gaps as a major factor limiting First Nations capacity and (or) efficacy in natural resource management. Yet, a number of common gaps were identified (Table 7).

Table 7. Infrastructure gaps noted by First Nation respondents

Infrastructure gap	No. of First Nations respondents that reported this gap (of 6)
Lack of transportation (i.e., vehicles)	3
Lack of technology (i.e., internet and GIS capability)	3
Limited office space	2

In the absence of vehicles owned and maintained by First Nations organizations, three respondents reported routine use of personal vehicles to complete field work (e.g., fish and wildlife surveys, archaeological work, ground-truthing, etc.) for their band or Nation. Lack of

high-speed internet access and a lack of GIS capability were also noted by several respondents. Finally, two respondents indicated that limited office space created challenges.

Although not strictly an infrastructure issue, MFR respondents unanimously viewed the lack of technical staff in many band/Nations as the single most important “infrastructure” issue facing First Nations. Proponents were not asked for comment on this issue.

Knowledge and Information Resources (Element 3.3)

The previous section highlighted the importance of effective data management; however, an even more fundamental issue is whether CHR knowledge is available in the first place, and what this knowledge entails.

First Nations peoples have passed down knowledge orally through the generations, a tradition described as a “cherished and deeply respected way of communicating complex information about culture, politics, the environment” (Tobias 2000:vi). Following European contact, negotiations over **Aboriginal rights and title** did not initially consider oral history as a sufficient proof of land and resource use and occupancy. This perception has since been challenged in the courts¹⁹ and as a result, oral evidence is now to be given the same weight as written or documented evidence.

Yet, because oral evidence was historically devalued, First Nations people began conducting and recording interviews with Elders and other traditional knowledge keepers, and subsequently documenting and mapping cultural knowledge to provide more concrete “evidence” of historical land use and occupancy. As Tobias (2000:vi) observes, these studies are referred to by many names.²⁰ The recording of cultural information is an ongoing and increasingly urgent process as Elders and other traditional knowledge keepers pass away, and contemporary cultural use practices evolve.

Land-based, Indigenous science or knowledge paradigms seek to comprehend the world through an understanding of the connections between physical, ecological, and spiritual processes. In other words, many First Nations view the entire landscape as having cultural value.

19 *Haida Nation v. British Columbia (Minister of Forests)*, 2004 SCC 73, [2004] 3 SCR 511

20 For example, land use and occupancy; land occupancy and use; traditional use; traditional land use and occupancy; current use; and mapping culturally sensitive areas.

From the perspective of Western science, it may be possible to delineate sites or areas on a map, perhaps even prioritize places requiring conservation or protection, particularly where physical evidence of use exists. However, this approach does not consider that the connections between these sites or the surrounding area(s) may also have cultural, spiritual, or sacred significance, values that can be extremely difficult to delineate on a map and that can hold deep meaning for First Nations individuals and communities (for more discussion, see: Berkes 1999; Karjala et al. 2002; Mabee and Hoburg 2004; Michel and Gayton 2002; Moller *et al.* 2004; Charnley et al. 2007; Adam and Kneeshaw 2008).

From the late 1990s to 2002, the British Columbia government funded a major effort to document traditional knowledge and information through Traditional Use Studies (TUSs). These TUSs were completed either by individual bands or Nations, or by organizations representing several bands. Many First Nations hold some or all of the TUS information collected through these projects and because of the concerns raised above, have differing perspectives on making this information accessible to government and industry. Many TUSs were only partially completed. In 2007, an internal review of existing TUSs revealed considerable discrepancies in the scope, quality, and accuracy of the information collected; it was also uncertain whether interview information had been transferred onto a map and (or) whether field verification of identified site locations had been completed.

As noted by two First Nations respondents in this study, many First Nations fear that information collected for use in contemporary resource management may be misinterpreted or that resource managers and decision makers will take documented site-level information at face value without recognizing that it may be incomplete or connected to other values that have not yet been recorded.

“I’m hesitant to put lines on a map delineating a spiritual area. Once we do, everyone will know about it, and then people will come here to find out what all the fuss is about, take photographs, take things that should not be touched. And if we put a line around that area, what about all of our other spiritual sites? We’ve got more than one.”

**— Member of Chehalis First Nation
(Mackenzie 2008)**

Traditional land use and occupancy studies face a number of challenges. Of critical importance is confidentiality. Fear of loss or damage to sites should their location become known or made public and loss of intellectual property rights are ongoing concerns. Some fear that the very power of the knowledge itself will be lost if it is shared with anyone (e.g., the medicinal properties of a particular plant will be diminished if the knowledge goes beyond the knowledge holder themselves; C.A. Robinson, Tseshaht First Nation, pers. comm., 2008).

The availability and quantity of CHR information varied substantially across First Nations surveyed for this study. Some described results of numerous research projects, planning processes, and CHR inventory protocols, and others had very limited information at their disposal. All respondents participated in the TUS program, yet only half of these studies were considered complete by the First Nations. Only one First Nation had updated their TUS since the original study was completed almost a decade ago.

One or more First Nations respondents mentioned several other projects, studies, or assessments that had been completed or were currently used to record CHR information. First Nations completed some of these independently, and completed others in collaboration with proponents or government agencies. Examples include:

- Land use and occupancy study
- Traditional ecological knowledge research projects
- Traditional use assessment²¹
- Cultural plant surveys and predictive modelling (e.g., pine mushroom study)
- CMT surveys
- Archaeological studies (archaeological impact assessments, **archaeological overview assessments**, archaeological impact studies)
- Pre-harvest CHR assessments
- Strength of claim assessments (completed by the provincial government only)

Some respondents indicated that their First Nation had taken steps to develop management plans, recommendations, or protocols based on available CHR knowledge and information. One First Nation had completed a land use plan, and another was in the process

²¹ More detailed than a TUS, the traditional use assessment as described by the respondent involves field surveys at a watershed or small landscape scale, often in response to a specific development proposal.

of doing so. The former had also completed a detailed **cedar management plan**, which included analysis of the community’s cultural cedar requirements as well as models of current and future cedar supply within the territory. Two Nations developed draft management protocols for CHR values including buffer requirements in areas of high archaeological potential and cultural trail management.

On a related topic, three respondents felt that their First Nation did not have sufficient access to the range of provincial data sets required to make informed decisions about the potential impacts of forestry operations in their traditional territory (e.g., forest cover data, archaeology site data, species data, etc.). Two were confident that any needed information would be available upon request from government or proponents, with one noting that the latter often provided more up-to-date data. The final respondent did not give a clear response to this question. Notably, since conducting the interviews, the provincial government has implemented the GeoBC gateway²² to facilitate access to government data sets for First Nations and other members of the public.

Among proponents, respondents appeared to have differing philosophies on whether industry should play an active role in CHR information collection and management. The three respondents that were actively involved in collecting or managing these data described the following approaches:

- Archaeological overview assessments
- Archaeological impact assessments (usually completed on sites rated with a moderate to high potential of containing archaeological resources by archaeological predictive models)
- Cultural plant inventories and assessments
- Traditional land use and occupancy studies
- “Cultural resource inventories”
- Cultural cedar management planning
- Site inspections completed by/with First Nations

Conversely, two proponents did not complete any CHR inventory or research work. One explicitly stated that collecting CHR information is a government or First Nations responsibility, observing that it would be cost-prohibitive to do this kind of work over their entire operating area.

22 See: <http://www.ilmb.gov.bc.ca/geobc/index.html>

Proponents identified addressing the competing or cumulative interests of multiple First Nations with overlapping territories as a challenge. If multiple First Nations wished to complete independent CHR assessments at the cutblock level before logging, costs could quickly become prohibitive for proponents. Also, proponents at times must balance conflicting First Nations perspectives on managing certain sites or features (e.g., full protection of all CMTs vs. conserving a representative sample of CMTs). In one case, the proponent described reviewing separate, but overlapping, archaeological overview assessments completed by several First Nations that used different models and had conflicting results.

Three proponent respondents felt they had sufficient information to make informed decisions about the potential impacts of forestry operations on CHRs, and another two felt they didn’t. Notably, two respondents representing the same proponent had opposing views on this point. One proponent was neutral stating they were doing the best they could in the face of many barriers.

Proponents mentioned several key barriers that prevent the sharing and use of CHR information (Table 8). One respondent raised concerns about the scale of data requested and (or) shared versus what is actually needed to manage CHRs effectively. Most CHR assessments (including archaeological impact assessments) are completed at a cutblock level or for a defined development area, and few CHR data are systematically collected at a landscape level; however, First Nations are often asked to provide strategic or landscape-scale information for very large operating areas (e.g., FSP operating area), information that is simply not available to them.

Table 8: *Proponent perspectives on key barriers to the sharing and use of CHR information*

Barrier to sharing CHR information	No. of proponent respondents that identified the barrier (of 5)
Insufficient or incomplete CHR information	4
First Nations confidentiality concerns	4
Lack of First Nations response to information-sharing requests	3

Among MFR district respondents, all noted that their districts have provided funding and (or) worked collaboratively with First Nations on various CHR initiatives. One district actually completed this kind of work directly

(albeit sporadically) through strength-of-claim assessments. One district was working with four separate First Nations to complete cedar supply models that have since been used to inform the issuance of free use permits in that district. Several MFR respondents stressed that it would be inappropriate to do this kind of work independently of First Nations, and collaboration was integral.

One district completed an archaeological overview assessment²³ for the entire district in the mid-1990s, and another developed a GIS-supported archaeological predictive model in collaboration with adjacent districts that is widely used, particularly by smaller licensees with generally fewer resources to complete this work. A respondent from the latter district noted that larger licensees often complete their own overview assessments using alternative model parameters, which at times yielded different archaeological potential ratings for the same areas. Notably, the Archaeology Branch recently released provincial assessment standards that define thresholds of effectiveness and efficiency when testing model accuracy in an attempt to address this widely acknowledged issue (B.C. Ministry of Tourism, Culture and the Arts 2008).

The same district also worked with local First Nations to build a “trails database” which included trail locations and classifications, and which is accessible to all of the district’s proponents. The district is also considering the adoption of a trail management protocol proposed by a local First Nation. The trail network has been incorporated into the predictive model, and provides a more accurate assessment of areas with potentially high cultural value (i.e., along trail corridors).

One MFR respondent noted that while many First Nations believe it is not possible or appropriate to rank CHRs for relative cultural importance, others were more willing to participate in this kind of exercise, believing it may not be possible to conserve or protect all CHRs. The respondent also noted that without information about the relative importance of CHRs to the community, it can be challenging to reject a development application in order to protect or conserve a particular CHR.

When asked whether they had sufficient information to make informed decisions about potential impacts of forestry operations to CHRs, all district respondents

23 The term “archaeological overview assessment” covers a broad spectrum of studies ranging from the review of small properties to determine the need for detailed archaeological studies to district-wide mapping of archaeological potential to assist strategic and operational planning (Province of British Columbia 2009).

felt that they did not. Many barriers were described. Most respondents cited the limited amount of CHR information and concerns among First Nations about confidentiality as the most critical. Some indicated that the multiple data formats and lack of spatial representation of existing CHR data were major challenges.

One respondent noted that the district had amassed considerable local experience and knowledge about important issues and sites through informal discussions and field visits with local First Nations, but that no process existed to formally record this information. Citing high staff turnover rates, the respondent suggested this presented a considerable risk of losing this “institutional memory” as knowledgeable staff leave the district.

Understanding the Forest and Range Practices Act

Ministry of Forests and Range regional and district staff were expected to introduce and facilitate the transition from the *Forest Practices Code* to *FRPA* for First Nations and industry. Several information resources and tools were provided to assist in this task. All pilot districts sent a standard information package accompanied by an invitation to meet and discuss *FRPA* policy and procedural changes to all First Nations. Two (of 3) districts also offered training to First Nations on the topic.

“We don’t often know which [CHR]s are the most important to focus management on. It seems like when we recommend some level of protection or conservation of sites . . . we meet significant resistance [from licensees] because they want to know,” “. . . What’s important about these sites versus other ones?” “It’s hard for us to make those strong statements, because we don’t have the information to answer that question.”

— MFR district respondent

Amongst the First Nations respondents, three indicated that they attended the training sessions, one was not aware of the opportunity, and one indicated that, although interest was expressed in their office, they had no staff to attend the session at the time. A couple of respondents indicated that FREP workshops had provided useful information about *FRPA* as well.

Several First Nations respondents noted that offering only one training opportunity may have limited value, given

the frequent turnover in First Nations staff because of the typical 2-year band council election cycle and the funding constraints discussed above. Further, many band staff do not have a long history of working in forestry, with two First Nations respondents suggesting that a 1-day workshop may not be sufficient. Two district respondents noted that formal presentations were made to First Nations; however, the informal discussions, which occurred afterwards during regular consultation or other meetings with band members, were sometimes more effective given the breadth and complexity of the issues.

Stable and Long-term Funding (Element 3.4)

Although respondents were not directly asked to comment on issues related to funding, fiscal challenges were raised on multiple occasions. First Nations require revenue to support capacity building, permanent staff, the creation of high-quality data and information management systems, and communication of CHR information through consultation or information sharing with government and industry. Many capacity-building resources and funding opportunities already exist for First Nations peoples, but these funds are largely project-based, limited in scope and duration, and obtained through a competitive, proposal-driven process. Stable and long-term funding for First Nations is currently limited, and communities increasingly seek community economic development opportunities to fill this gap (Stevenson and Perreault 2008).

Government does not provide funding directly for consultation activities; however, the introduction of Forest and Range Agreements²⁴ in 2003 provides an opportunity for First Nations to enter into interim revenue- and tenure-sharing agreements that provide secure funding for the duration of the agreement (typically 5 years). This funding could be used to support consultation activities (see “Recent Developments,” Section 4.2 for more discussion).

Currently, government funding to support CHR field inventory work is also limited. As of 2009, TUS projects

²⁴ Through Forest and Range Agreements, government seeks to provide First Nations with a direct award forest tenure and a share of forestry revenues. In return, the First Nation acknowledges that they have been accommodated for the economic component of administrative and operational decisions made during the term of the agreement. The First Nation also agrees not support unlawful interference with forestry operations or engage in litigation regarding the adequacy of accommodation (as set out in the agreement).

were funded under the Forest Investment Account; however, First Nations must be forest tenure holders to be considered as eligible recipients of direct funding. Alternatively, the First Nation must collaborate with a proponent to complete this field inventory work. As well, to complete various types of pre-harvest CHR assessments (i.e., CMT surveys, Preliminary Field Reconnaissance), First Nations are increasingly engaging in fee-for-service arrangements or other business agreements with proponents, although these agreements typically support work on specific roads or cutblocks as opposed to work completed over larger areas, such as a traditional territory or watershed. Funding for strategic land use planning is currently very limited.

3.4 Incorporation of Cultural Heritage Resource Values in Management Plans (Indicator 4)

Indicator 4

Strategic, operational, and site-level management plans meaningfully incorporate the conservation or protection of First Nations cultural heritage values and resources.

Element 4.1: Specific cultural heritage resource values of concern identified by First Nations are directly addressed in management plans at multiple scales.

Element 4.2: Level of confidence among First Nations that management plans meaningfully address First Nations cultural interests.

3.4.1 Intent of the Indicator

When CHR concerns have been identified by First Nations and subsequently communicated to government or industry forest managers through information sharing, consultation, or other means, the incorporation of these concerns into planning documents at multiple scales can provide increased transparency and certainty that they have been understood and addressed.

In addition to acting as a measure of how known CHR concerns are incorporated into planning documents, Indicator 4 was designed to examine whether First Nations, government, and industry forest managers are aware of, understand, and have confidence in the CHR management approaches contained in these plans.

3.4.2 Discussion of Results Pertaining to Indicator 4

Several strategic planning processes are used to address resource management over various landscape scales (regional, sub-regional, and watershed or landscape unit). Table 9 summarizes the range of resulting plans identified by respondents in this study.

Table 9: Strategic resource management plans identified by respondents at multiple landscape scales

Led by provincial government (often multi-agency)	<ul style="list-style-type: none"> • Land and resource management plans (LRMP) • Sustainable resource management plans (SRMP) • Ecosystem-based management plans • Land use orders • Government Actions Regulation orders (GAR orders) • Cedar management plans • Landscape unit plans
Led by industry	<ul style="list-style-type: none"> • Sustainable forest management plans (SFMP) • Forest stewardship plans • Cedar management plans
Led by First Nations	<ul style="list-style-type: none"> • First Nations land use plans • Watershed plans

Strategic planning differs from operational planning, which tends to be focussed on single resources at the site level (e.g., cutblock or road). Respondents were asked to comment on their familiarity with, and confidence in, various types of strategic plans and their CHR-related content. Respondents were specifically asked to comment on FSPs and supporting documentation, and the First Nations land use plans.

Forest Stewardship Plans

Although default practice requirements exist for several values under *FRPA*, none are provided for the CHR value.²⁵ Proponents must therefore develop unique CHR management results or strategies for inclusion in FSPs or WLPs, and consequently proponents use a considerable range of approaches across the province. Previous research

shows that the plans of some proponents have addressed very specific CHRs (e.g., cedar management in coastal areas, cultural plants), others have focussed on defining information-sharing strategies or CHR/archaeological assessment processes, and a small number have addressed topical issues such as access management or pesticide application in culturally sensitive areas (B.C. Ministry of Forests and Range 2008).

One First Nation respondent was aware of an FSP that addressed specific CHRs in their territory. Another described commitments made by a proponent in the FSP-supporting document (not a legally binding document) to consider the Nation's land use plan during planning and honour an existing agreement with the Nation regarding cultural heritage surveys. The remaining respondents could not comment on this level of detail.

Two proponents indicated that they addressed specific CHRs in their FSP. The first incorporated cultural concerns into stocking standards for western redcedar (*Thuja plicata*) and yellow-cedar (*Chamaecyparis nootkatensis*), and later included similar strategies for Douglas-fir (*Pseudotsuga menziesii*) based on input from local First Nations. As well, the proponent addressed cultural harvesting of elk in the wildlife section of the FSP. The second proponent included a birch (*Salix spp.*) management strategy in an effort to be consistent with a higher level regional plan already in place.

Several proponent respondents commented that including strategies for specific CHRs could be challenging, particularly without input from local First Nations. Two said they required more professional guidance from government to determine acceptable standards and strategies for CHR management. Some proponents have developed information-sharing strategies in lieu of addressing specific CHRs, with the view that this approach provides greater flexibility to address diverse First Nations preferences on an ongoing basis. Across the province, approximately half of FSPs contain information-sharing strategies with variable levels of detail (B.C. Ministry of Forests and Range 2008).

One district respondent described an approach used by five proponents who jointly completed a large, detailed inventory of all known CHR information in their proposed operating areas and included this information in the FSP-supporting documents. First Nations support for this approach reportedly varied with some concerns expressed regarding confidentiality and use of the information.

²⁵ FPPR, Part 4, Sections 35–70. See: <http://www.for.gov.bc.ca/tasb/legsregs/>

A number of individuals from different respondent groups felt that an FSP was not the most appropriate place to address CHR concerns. One proponent suggested that strategic land use plans (i.e., LRMPs) addressed First Nations concerns most effectively, so there was no need to go into more detail in the FSP. Yet, few respondents in this study were aware of if or how existing government-approved land use plans addressed CHR concerns in their area.

Two First Nations respondents felt that FSPs affecting their territory may not reflect their concerns, but that their strong working relationships with proponents and the MFR district were resulting in positive outcomes at an operational level. Two proponent respondents, whose interview responses frequently recognized the importance of investing in strong working relationships with First Nations, mirrored this view.

Strategic Land and Resource Management Plans

All respondents were asked to comment on their familiarity with strategic planning documents other than FSPs (i.e., government approved and otherwise) that address CHR concerns. Examples provided by individuals from all respondent groups included a now-defunct MFR district CMT policy, ecosystem-based management plans on the Coast, the newly adopted South Central and North Coast Land Use Orders, an LRMP, and landscape unit plans.

Strategic land and resource planning has evolved considerably since its inception in the early 1990s. First Nations involvement increased over time with more funding opportunities and a growing familiarity with the process and its value. The current phase²⁶ of strategic land use planning in British Columbia explicitly emphasizes First Nations collaboration, and yet many existing plans have minimal initial First Nations input and CHR interests were often perceived as poorly represented.

Despite the many documented societal benefits of government-approved multi-party strategic planning, few existing plans have been updated and no new plans will be completed in the immediate future, due to a combination of high costs and limited available resources. Therefore, few opportunities have existed for First Nations whose cultural interests are poorly addressed in existing plans to contribute to their improvement.

26 For a history of land use planning in British Columbia, see: <http://www.ilmb.gov.bc.ca/slrp/history.html>

Further, many existing plans²⁷ remain in draft form and have never been finalized or approved. A proponent respondent commented that plans left in draft form led to considerable uncertainty regarding what is (or is not required) on the land base and stressed the importance of approving these plans. In draft form, any operator may modify the plan (e.g., change the location of an old growth management area), and because changes to draft plans are not tracked by government, operators may be working with outdated versions of the plan.

Proponents increasingly seek **third-party sustainable forest certification**, with many choosing to seek certification under the Canadian Standards Association. This certification process requires considerable public involvement in the planning process through public advisory groups, and many of the resulting SFMPs contain objectives and strategies related to the interests of First Nations.

One MFR respondent noted a successful SFMP in the district that had been developed through a collaborative pilot project between the local First Nation and a local forestry company, and which contained considerable information about how cultural and archaeological resources would be addressed. Another district respondent commented on the potential redundancy of developing an FSP for those companies that have previously directed considerable resources towards third-party certification. This type of integration is not currently occurring in a formal way, but may occur on a case-by-case basis.

The South Central and North Coast Land Use Orders contain management objectives for First Nations traditional forest resources, traditional heritage features, CMTs, monumental cedar, and stand-level retention of western redcedar and yellow-cedar (B.C. Ministry of Agriculture and Lands 2007). All new and existing FSPs need to be consistent with these objectives, and many existing FSPs required amendments as a result. Respondents were not directly familiar with these plans, although several were aware of them, commenting that similar legally binding high-level objectives were not in place in the Interior.

First Nations Land Use Plans

A growing number of First Nations in British Columbia are developing their own land use plans (LUPs), particularly where they were not actively involved in previous government-led planning processes. Plans vary in content,

27 There are currently 143 government-approved LUPs in the province, including both LRMPs and SRMPs.

scale, and detail, but all contain some combination of management goals, objectives, and strategies for a particular First Nation’s asserted traditional territory (e.g., see First Nations Forestry Council 2007). The Ecosystem Stewardship Planning initiative²⁸ led by the First Nations Forestry Council aims to support First Nations in this type of work. First Nations plans can provide clarity for government and industry regarding what a First Nation desires on their territory, thereby streamlining future discussions about CHRs.

Among First Nations respondents, one had a completed land use plan in place, and two others had plans in progress. In the first case, industry provided both expertise and data sets upon request. These respondents felt that in contrast to government-led strategic planning processes, community-led processes had many potential benefits, including:

- Better tracking and understanding of cumulative development impacts on traditional territory
- Protection for spiritual and cultural places
- Use as an education and cultural discussion tool for youth and community members
- Reduction of internal community conflict due to traditional versus modern perceptions of governance and decision-making authority (e.g., conflicts between elected band officials and traditional decision makers)
- Reduction of conflict with other landowners (“neighbours”), government, and industry

Several proponent and district respondents were aware of First Nations LUPs in their areas, indicating that the plans were primarily used to better understand priority areas and issues of concern to local First Nations. One proponent said that information sharing went deeper in high-priority areas identified in First Nations LUPs. They had also formally committed (through a protocol agreement with the band) to consider one LUP in planning and decision making.

Many industry and district respondents highlighted that some First Nations were unwilling to share their completed LUPs with industry or government, and they were therefore unable to consider the plans in planning and decision-making processes.

Several respondents noted the unclear relationship and potential conflict between government-approved LUPs and First Nations LUPs. One proponent stated that in the event of a conflict between the two, they would attempt to find a middle ground, but ultimately the government-approved plans would take precedence. Similarly, one district respondent noted that provincial government decision makers are bound by the terms of government-approved, high level plans. Several respondents mentioned that increased clarity was needed on how First Nations LUPs should be considered in decision making and integrated with current and future government-approved plans, particularly in light of “New Relationship” commitments.

4.0 LOOKING FORWARD

Section 4.1 outlines potential opportunities for improving CHR management planning and implementation under *FRPA*. Section 4.2 considers several recent developments in case law and government policy relevant to the results presented here, and Section 4.3 discusses the lessons learned from this pilot project. Finally, Section 4.4 suggests the next steps for FREP Process Indicator Evaluations; these steps are discussed in more detail in the Action Plan accompanying this report.

4.1 Opportunities for Improvement

Many respondents provided detailed accounts of past successes as well as improvements that are needed for effective CHR management planning and information-sharing processes under *FRPA*. Table 10 summarizes the author’s interpretation of potential opportunities for improvement for all three respondent groups, particularly forestry professionals seeking to improve professional reliance. These ideas should be reviewed and improved with the help of other professionals and practitioners. Available resources and the quality of working relationships will be critical to the success of many of the opportunities described below.

Table 10: *Potential opportunities for improving CHR management planning and information-sharing processes under FRPA for consideration by Ministry of Forest and Range staff (MFR), proponents (P), and First Nations (FN)*

²⁸ For more information, see: http://www.fnforestrycouncil.ca/initiatives_ecosystem.php

Potential opportunity	Opportunity for:		
	MFR	P	FN
Training, Education, and Awareness			
Inform First Nations staff and community members about online <i>FRPA</i> training materials ^a and offer regular face-to-face training opportunities to supplement written materials.	✓		
Review examples of CHR results and strategies from FSPs across the province; may contain pertinent examples that can be discussed during information sharing or consultation. ^b	✓	✓	✓
Review First Nations land use plans (or similar strategic planning documents) relevant to the management area to better understand local First Nation CHR management priorities and (or) specific areas of concern.	✓	✓	
Require staff working with First Nations to take cultural awareness/cultural resource management training. Consider making such training mandatory for all staff.	✓	✓	
Provide regular in-house CHR management/First Nations awareness training for staff.	✓	✓	
Collaboratively initiate, develop, and deliver cross-cultural awareness seminars.	✓	✓	✓
Review existing government-led strategic plans (e.g., LRMP, SRMP) to understand if and how CHR concerns are addressed regionally.	✓	✓	✓
Communication			
When sending the initial FSP package to First Nations, include large-scale maps (at least 1:50 000) and a plain-language explanation of how FSP results and strategies for CHRs (and possibly other values) were prioritized and developed.		✓	
Invite First Nations to meet and discuss the FSP as early as possible in the planning process, preferably before the 60-day review and comment period. Consider collaborating with First Nations before drafting CHR results and strategies.		✓	
If First Nations provide input on an FSP, provide written and verbal feedback on how concerns were addressed.		✓	
Provide a description of the operational planning information that could be made available to First Nations upon request; consider proactively providing this information to First Nations. ^c This information might include: <ul style="list-style-type: none"> • Tabular information summaries (e.g., size of cutblocks, stand age, growth cycle, volume of proposed timber harvest, species composition, harvest and road tables, etc.); • Detailed, large-scale maps (1:50 000 or greater) which may include: approximate boundaries of First Nations' asserted territories (if available), local place names, map sheet numbers, forest inventory information, location of streams and riparian areas with local names, and approximate location of timber harvest and retention areas; • Digital image of the area; • Spatial data files; • Archaeological Impact Assessment (AIA) results; and • Locations and descriptions of all known CHR sites and features. 		✓	
Arrange regular meeting opportunities (e.g., annually) to review draft operational plans with First Nations and identify potential CHR concerns <i>prior to block engineering</i> .		✓	
Where significant CHR concerns have been identified, conduct field visits with First Nations to determine mutually acceptable management strategies <i>prior to block engineering</i> .	✓	✓	✓

Potential opportunity	Opportunity for:		
	MFR	P	FN
While respecting all confidentiality concerns, ensure that existing CHR information, including sites or geographical areas with high cultural value, is readily available to other forest managers.	✓	✓	✓
If written correspondence is used, ensure that follow-up <i>verbal contact</i> is made with the appropriate band/Nation staff person to ensure that information is received and understood by the appropriate person(s).	✓	✓	
In cases where organizations or individuals have limited forest management training or experience, minimize and (or) explain technical terminology and acronyms in both written and verbal communication.	✓	✓	
Ensure that plain-language information is provided to all band/Nation staff and (or) community members before meeting with proponents or MFR staff to discuss an FSP.			✓
Establish a <i>mutually acceptable</i> information-sharing protocol outlining how parties will interact and share information. Ensure that it clearly addresses: <ul style="list-style-type: none"> • Mode of communication (e.g., written correspondence only, verbal correspondence, regular meetings, etc.) • Will there be opportunities to meet and discuss CHR concerns? How frequently? • How will the proponent provide feedback on how identified concerns have been addressed? • Will the proponent provide site-specific information (e.g., approximate location of proposed cutblocks and roads, locations of known CHR sites or features)? If so, how often? Will they provide maps, and if so, at what scale and what will be included on the map? • How will proponents ensure that confidential information is protected? 	✓ ^d	✓	✓
Establish formal, documented information-sharing agreements with interested First Nations. Use examples of existing agreements wherever possible to avoid duplication of efforts.	✓	✓	✓
Ensure that new staff are formally introduced to First Nations they will be working with by an employee who has an existing working relationship with that First Nation.	✓	✓	
Complete a thorough assessment of all known CHR information for a proposed development area and include this information summary with a referral or information-sharing request. Include maps identifying known CHR site locations. Consider grouping sites close to each other and co-ordinating with resource agencies consulting on the same land base.	✓	✓	
Choose individuals with strong interpersonal skills for consultation and information-sharing activities.	✓	✓	✓
Ensure personal contact (i.e., meet in person or phone) with a First Nation to discuss the implications of statutory decisions made in known culturally sensitive areas.	✓		
If an FSP or operational plan refers to other documents (e.g., an AIA or CHR survey), ensure that these documents are readily available to First Nations, MFR district staff, and all other operators.		✓	
Ensure that operators at all stages of forestry operations have been informed of local First Nations CHR values and concerns, including specific site locations and any proposed CHR management strategies.			✓

Potential opportunity	Opportunity for:		
	MFR	P	FN
Strategic Planning			
Proactively identify high-level CHR management priorities and (or) geographic areas requiring special conservation or protection of cultural values through a structured stewardship planning or land use planning process.			✓
Jointly develop decision-making tools to help First Nations prioritize or rank the importance of referrals within their band; may help to alleviate pressure on limited resources (e.g., a coded-letter system).	✓		✓
Seek opportunities to collaborate with other First Nations on strategic planning initiatives, the development of data management or information-sharing tools and agreements, recommendations for CHR management practices, or other initiatives.			✓
Finalize drafts of provincial government-led strategic land and resource management plans (SLRPs) to provide increased certainty for forest managers.	✓		
Direct resources towards the update of existing SLRPs and the creation of new opportunities for First Nations to engage in processes affecting their territory. If resources are limited, focus on areas where conditions on the landscape have changed considerably since plan development (e.g., in heavily affected MPB areas) or where significant new information has been collected/developed.	✓		
Work with First Nations to integrate their LUPs with strategic plans and processes approved by the provincial government.	✓		✓
Ensure that First Nations LUPs are communicated and shared internally across government ministries and between MFR districts.	✓		
Collaboratively establish district-level management protocols or thresholds for specific CHRs, where practicable (e.g., CMT policy, cultural trail management protocol, etc.).	✓		✓
Where specific CHR concerns have been identified (e.g., cedar, cultural plants, cultural trails, etc.), consider developing FSP results and strategies (or supporting documents) to address them directly.		✓	
CHR Information Management			
Document existing CHR site information, respecting all confidentiality concerns of knowledge holders. This should ideally include “ground-truthing” or documenting the exact location (geographic co-ordinates) of known CHR sites and features on the ground and entering this information in a searchable, spatial database. If exact locations are unknown, create a general marker to flag that a concern exists for future information sharing.	✓	✓	✓
Establish standards for the creation and use of searchable and spatially explicit district or regional databases for cataloguing all CHR information held in MFR district and regional offices. Strive for a balance of consistency (to facilitate use of information across administrative boundaries) and design flexibility (to meet local needs).	✓		
Formalize the transfer of CHR knowledge about local First Nations CHR priorities and known cultural use areas when staff changes occur.	✓	✓	✓
Ensure that community members are aware of all opportunities to communicate CHR concerns to decision-makers in the band or Nation. If no formal process is in place, establish a process or mechanism to gather community input on forestry-related decisions (e.g., a community review process or protocol).			✓

Potential opportunity	Opportunity for:		
	MFR	P	FN
Collaborate on the development of mutually acceptable processes for pre-harvest CHR assessments and ensure that these are completed by properly trained individuals prior to block engineering where CHR information is lacking. If resources are limited, focus on areas known to be sensitive or have high potential for cultural resources.	✓	✓	✓
Select archaeologists for field work that are known to, and respected by, local First Nations.	✓	✓	

- a See: <http://www.for.gov.bc.ca/code/training/frpa/>
- b See B.C. Ministry of Forests and Range (2008) for examples and discussion.
- c Note that this is not legally required content for FSPs or WLPs.
- d Several MFR districts have established post-FSP information-sharing protocols to provide formal guidance for proponents.

4.2 Recent Developments

Since data was collected for this study in February 2008, several several new policy and program developments have changed the nature of consultation and land and resource planning with First Nations.

In December 2009, two pivotal Reconciliation Protocols were signed between the Crown and First Nations on the Coast—the Coast Reconciliation Protocol and the Kunst’aa Guu–Kunst’aayah Reconciliation Protocol.²⁹ These protocols commit to establishing processes for shared decision making, increasing economic and legal certainty for resource and land use, and creating opportunities for First Nations participation in the green economy. In addition, two Strategic Engagement Agreements were signed with the Nanwakolas First Nation and with the Tsilqotin National Government with similar provisions and goals to streamline government-to-government consultation with First Nations. Together with the South Central and North Coast Land Use Orders, which contain management objectives for various CHRs (B.C. Ministry of Agriculture and Lands 2007), and approved EBM plans in these areas, considerable potential exists for innovative developments in CHR management on the Coast. In the northeastern corner of British Columbia, similar progress is being made with a recent set of agreements signed between the provincial government and Treaty 8 First Nations regarding governance of land and resources.³⁰ Similar negotiations are under way elsewhere.

As well, the total number of Forest and Range Agreements (FRAs) and FROs, which typically include revenue sharing and forest tenure opportunities, increased from 115 in February 2008 to 132 in August 2009. The number of direct award agreements, which award forest licences directly to First Nations, increased from 71 in February 2008 to 89 in August 2009.³¹ Although these agreements may have little direct impact on CHR management, the potential for improved working relationships and greater capacity among First Nations to engage with the provincial government on resource management issues will likely result in indirect benefits to CHR management.

Within government, valuable new data management tools have recently been released including the new First Nations Quick Queries (FNQ2) system and the Provincial Archaeological Report Library. The FNQ2 is a portal for users to access several existing databases with information about First Nations demographics, current agreements with the Crown, and natural resource development information. At this time, CHR site data (including archaeological data) are not accessible through this system. The Remote Access to Archaeological Data tool continues to provide restricted access to archaeological and heritage sites documented in the Provincial Heritage Register; however, the Archaeological Report Library provides dramatically improved access to permitted archaeological reports.

When conducting interviews for this study, a few district respondents described the Microsoft® Outlook-based FNCT system as an extremely useful tool that led to major improvements in tracking communications between the

29 For the full text of these agreements, see: http://www.newrelationship.gov.bc.ca/agreements_and_leg_reconciliation.html

30 For more information, see: <http://www.gov.bc.ca/arr/treaty/key/default.html>

31 See: http://www.for.gov.bc.ca/haa/FN_Agreements.htm

MFR and First Nations. At the time, the system was in the pilot stages but has since been fully implemented across the MFR. As well, BCTS has adapted the tool to create a referrals tracking system, and while uptake has varied across agencies and administrative units, other agencies are also utilizing components of the tool.

Recognizing the need for increased co-ordination among government agencies during consultation with First Nations, the provincial government has committed considerable resources to this effort through the Resource Management Co-ordination Project. Sub-regional consultation teams have been established and are working on several progressive initiatives aimed at improving the efficiency and effectiveness of consultation with First Nations, including the development of new information-sharing tools and protocols.

Outside of government, provincial professional forestry associations historically did not require training and (or) competency in working with First Nations, Aboriginal governance, traditional ecological knowledge, or CHR management. Recognizing this gap, the Association of BC Professional Foresters is now offering an online version of the “Working Effectively With Aboriginal People” course.³² In addition, certified forestry professionals are required to complete a self-assessment of their professional competency in working with First Nations before embarking on such work.

Finally, new developments in case law continue to provide increased clarity regarding the meaning and implications of Aboriginal rights and title.³³

4.3 Lessons Learned

Using a participatory program development and research model resulted in notable benefits for FREP and the project team, such as building relationships between government staff and First Nations partners, increasing the sense of ownership among participants, and providing a unique cross-capacity building opportunity for all involved. Nonetheless, the time commitment involved with this participatory approach was considerable. Therefore, repeating this level of collaboration for a provincial-scale project would likely not be possible, given the amount

of resources required by First Nations and government to co-ordinate this work.

As future CHR process evaluations expand, however, FREP is committed to maintaining, within time and budget constraints, a collaborative approach to program development and implementation. Engaging in strategic dialogue with First Nations partners on how best to proceed with the project will be critical. Internally, leveraging opportunities to collaborate with the Resource Management Co-ordination Project and other initiatives will also be crucial.

The use of detailed, semi-structured interviews provided a wealth of valuable qualitative information; however, the time and resources required to analyze the resultant data were substantial. To collect provincial-level data, a quantitative approach (e.g., a survey with defined responses) may be more effective, particularly as these initial interviews highlighted many specific issues requiring further research.

Some of the indicators and associated elements resist objective measurement and are therefore difficult to quantify in absolute terms (e.g., Element 4.2, which seeks to measure the “level of confidence” among First Nations). Thus, the use of qualitative indicators should not be precluded, but rather innovative approaches should be encouraged to analyze and interpret qualitative information.

Finally, the role of First Nations in natural resource management is evolving rapidly, with the emergence of new joint decision-making protocols and the shift towards co-ordinated consultation among provincial government resource management agencies. Therefore, it will be important to revisit the current process indicator framework and consider whether changes are necessary to ensure its continued relevance.

4.4 Next Steps and Recommendations

In order to communicate lessons learned and improvement opportunities for professionals and decision makers to help improve First Nations consultation:

Recommendation 1

FREP staff facilitate a workshop aimed at transferring future work on “CHR process (consultation)” project from FREP to the First Nations Consultation Branch. Target audience for the workshop is the First Nations Consultation

32 For information on course availability, see: http://www.abcfp.ca/practice_development/continuing_education/workshops.asp#ab09

33 For example: *Tsilhqot'in Nation v. British Columbia, 2007 BCSC 1700*; *Klahoose First Nation v. Sunshine Coast Forest District (District Manager), 2008 BCSC 1642*

Branch (MFR), Provincial Resource Management Co-ordination Project and First Nations Initiatives Division (ILMB).

Recommendation 2

Publish and distribute this Report and an associated Extension Note.

For future consideration by the agencies/initiatives listed in recommendation 1, whose mandate and (or) resources could support this work in the near term.

Recommendation 3

Using a collaborative approach, develop best practices for CHR management planning and implementation processes under FRPA. As reflected in this report, include guidance for all forest professionals including proponents, First Nations and government staff. Provide opportunity for review and comment of draft best practices by forest professionals including proponents, First Nations and government staff.

For the longer term when sufficient resources are available:

Recommendation #4:

Conduct provincial FREP Process Evaluations at periodic intervals. Preparation for future evaluations will require:

- A. Review and consideration of necessary changes to the process indicator framework for provincial application.
- B. Drafting a statement of proposed direction for conducting process evaluations at a broader provincial scale that considers the use of other data collection tools (e.g., survey) and (or) more quantitative measures for data collection.
- C. Distribution of pilot results, revised framework, and the statement of proposed direction to a broader audience of First Nations, industry representatives, and government staff for feedback on the potential for provincial application.

Conducting further research to evaluate the FREP CHR process indicators on a larger geographical scale, determine whether the results discussed in this report are indicative of provincial trends and identify new issues/ trends.

4.5 Concluding Remarks

This report tackles several complex issues in an attempt to illuminate different perspectives and to build understanding. In British Columbia, many factors directly and indirectly affect the management of land-based First Nations cultural resources and values, both within a forestry context and beyond. The findings presented here provide a snapshot over a limited geographical area and therefore may not fully capture variability across the province. Nevertheless, the results of this pilot project do provide a starting point for constructive dialogue among those involved in CHR management under *FRPA*, and more broadly among those working with First Nations in a natural resource management context.

APPENDIX 1 GLOSSARY OF TERMS

Glossary entries were compiled by the author from personal knowledge and from various sources. A number at end of a definition corresponds to the numbered reference list on the last page of this appendix. Those without numbers were drafted by the author.

Aboriginal rights: “Aboriginal rights refer to practices, traditions and customs which are integral to the distinctive culture of an aboriginal society and were practiced prior to European contact.” [(13):37 quote] Aboriginal rights arise from the prior use and occupation of land, but they also arise from the prior social organization and distinctive cultures of Aboriginal Peoples on that land. (1) paraphrase

Over the past 30 years, Aboriginal rights are progressively being more clearly defined through the Canadian courts. So far, Canadian law has confirmed that Aboriginal rights exist in law and may range from rights not intimately tied to a specific area of land, to site-specific rights, to Aboriginal title, which is a right to exclusive use and occupancy of land. (12) paraphrase

Aboriginal title: A sub-category of Aboriginal rights dealing with land, [(13):37 quote].

- “Aboriginal title is a collective right by an Aboriginal group to the exclusive use and occupation of land for a variety of purposes, which need not be activities that the group has traditionally carried out on the land.
- Aboriginal title is an Aboriginal right protected under section 35 of the Canadian Constitution;
- Aboriginal title lands must not be used in a way that is irreconcilable with the nature of the group’s attachment to the land; and,
- In order for the Crown to justify an infringement of Aboriginal title, it must demonstrate a compelling and substantive legislative objective, it must have consulted with the Aboriginal group prior to acting, and in some cases, compensation may be required”. (14) quote

Archaeological Impact Assessment

(AIA): Archaeological impact assessment studies are required where potential conflicts have been identified between archaeological resources and a proposed development. An AIA requires a permit issued by the Archaeology Branch of the B.C. Ministry of Tourism, Culture and the Arts. Sites are located and recorded, and site significance is evaluated to assess the nature and

extent of expected impacts. The assessment includes recommendations to manage the expected impact of property development on the site. (10) paraphrase

Archaeological Overview Assessment (AOA): “A review by professional archaeologists to map out zones of archaeological potential and distribution for an area where there may or may not be known archaeological sites”. (10) quote

BC Timber Sales (BCTS): “BC Timber Sales is a stand-alone organization within the Ministry of Forests and Range created to develop Crown timber for public auction to establish market price and cost benchmarks, and to capture the value of the timber asset for the public. By 2007, BC Timber Sales will be responsible for managing some 20 percent of the provincial Crown allowable annual cut or approximately 16 million cubic metres of timber”. (11:1) quote

cedar management plan: A strategic plan that provides direction for the management of western redcedar (*Thuja plicata*) and (or) yellow-cedar (*Chamaecyparis nootkatensis*) within a specified management area. These plans vary in content, and may include analyses of current and predicted future cedar supply, demand for cultural use, and (or) access management considerations. Plans may also specify management direction for certain geographic zones or areas in order to manage future cedar supply within these areas.

Coast Forest Region: “Covering a total of 16.5 million hectares, the MFR Coast Forest Region is bounded to the east by the Coast Mountain and Cascade Ranges, the Washington US Border to the south, Alaska US border to the north, and the islands to the west which include Queen Charlotte Islands and Vancouver Islands”. (3) quote

cutblock: A specific area of land within which timber will be or has been harvested. (16) paraphrase

ecosystem-based management: “An adaptive approach to managing human activities that seeks to ensure the coexistence of healthy, fully functioning ecosystems and human communities. The intent is to maintain those spatial and temporal characteristics of ecosystems such that component species and ecological processes can be sustained and human well-being supported and improved”. (8) quote

“fee-for-service” agreement/arrangement: An agreement detailing a flat rate or fee that will be paid for a specific service performed (e.g., a culturally modified tree assessment on a particular cutblock).

Forest Act: This Act provides the authority for the allocation and administration of forest resources, primarily timber.

Forest and Range Practices Act (FRPA): “FRPA and its regulations govern the activities of forest and range licensees in British Columbia. The statute sets the requirements for planning, road building, logging, reforestation, and grazing. FRPA and its enabling regulations took effect on January 31, 2004 and replaced the previous *Forest Practices Code*”. (4) quote

forest stewardship plan (FSP): Under the FRPA and its regulations, all major tenure holders—companies, groups or individuals with logging rights on provincial Crown land—must prepare a forest stewardship plan which must be approved by government before any operational activities begin. An FSP must address objectives set by government to preserve the integrity of the environment and to enable sustainable commercial forest and rangeland practices. Tenure holders address these objectives by crafting management results or strategies, or using specified defaults, which are required to be measurable and enforceable. (9):1 paraphrase

free use permit: “An agreement entered into under the *Forest Act* (Part 3, Division 9) that provides the right to harvest up to 50 cubic metres of timber for non-commercial purposes, or up to 250 cubic metres of timber for a traditional or cultural activity. Permit term is limited to a maximum of 1 year and the permit holder is not required to pay stumpage.” (8) quote

Geographical Information Systems (GIS): “A computerized information system that uses a spatial database to store, retrieve, map and tabulate land and resource data. GIS will provide answers to queries of a geographic nature through a variety of manipulations such as sorting, selection retrieval, calculation, spatial analysis and modeling.” (16) quote

Government Actions Regulation (GAR): “Provides the criteria and processes for the creation of localized areas that require special management of certain forest values. The regulation also provides for the creation of objectives for managing these areas”. (5) quote

harvest table: A document listing the stands to be harvested per year or period, usually showing types, intensities, and areas of harvest for each stand, as well as a timetable for regenerating currently non-productive areas within a specific operating area. A “road table” provides similar information for roads (i.e., total length and area of roads) within a given operating area. (8) paraphrase

information-sharing or consultation protocol: A documented framework outlining the specific steps for how information will be shared between two or more parties. The level of detail may vary, but must clearly define the parties to which it pertains and the types of information that the protocol covers.

joint venture: A commercial agreement creating a business partnership whereby two or more parties each take up part ownership of a commercial venture such as a forest company.

land and resource management plan (LRMP): “A strategic, multi-agency, integrated resource plan at the regional level. It is based on the principles of enhanced public involvement, consideration of all resource values, consensus-based decision making, and resource sustainability.” (8) quote

landscape unit plan: A management plan for defined planning areas established by a district manager up to 100 000 hectares in size, based on topographic or geographic features such as a watershed or series of watersheds. (16) paraphrase

land use planning: “The iterative process of inventorying and assessing the status, potential, and limitations of a particular geographic area (the land base) and its resources, with a view to planning and managing these resources to satisfy current and future human needs.” (8) quote

licensee: A person or business that holds a licence approved by government to conduct an activity, such as forestry operations, on the land base.

memorandum of understanding (MOU): A written agreement signed by two or more parties outlining a common understanding of and commitment to specific interactions and behaviour among the signatory parties. It is often used in situations where the parties cannot or prefer not to create a legally enforceable agreement. (8) paraphrase

Northern Interior Region: The MFR Northern Interior Region encompasses the area of British Columbia from just north of Quesnel (53°20' N), north to the Yukon border, excluding an area on the north coast from just east of Prince Rupert and south of the Portland Canal. The regional headquarters is located in Prince George and there are nine Districts that administer a total of 55 million hectares (58% of British Columbia). (6) quote

Southern Interior Region: Covering a total of 25 million hectares, the Southern Interior Region is bounded to the west by the Coast Mountain and Cascade Ranges, the US Border to the south, the Alberta border and Rocky Mountains to the east, and the Northern Interior Region border just north of Quesnel (53°20' N) to the north. (7) paraphrase

species composition: “The percentage of each recognized tree species comprising the forest type based upon the gross volume, the relative number of stems per hectare or basal area.” (8) quote

stand: “A community of trees sufficiently uniform in species composition, age, arrangement, and condition to be distinguishable as a group from the forest or other growth on the adjoining area, and thus forming a silviculture or management entity.” (8) quote

stand age: The average time since a forest stand experienced a stand replacing human or natural disturbance (e.g., wildfire, avalanche, insect infestation, logging, etc.).

sustainable resource management plan (SRMP): These plans facilitate resource management decisions for small to medium size landscapes or watersheds. They focus on similar issues and values as regional plans or LRMPs (e.g. timber, biodiversity, tourism) but at a more detailed level. For example, SRMPs are used to identify Old Growth Management Areas (OGMAs), a priority component of biodiversity planning, for addressing specific economic development issues such as agriculture or tourism development, and are also useful for managing values such as spiritual and cultural resources as identified by First Nations. (2) quote

third-party sustainable forest certification: A market-based instrument aimed at promoting sustainable forest management that takes into account environmental, economic, and social issues. It involves an independent, objective assessment of an organization’s forest management practices according to internationally (or nationally) accepted standards and the tracking and monitoring of the supply of forest products to the market place (or “chain of custody”). The assessment is performed by an auditor that is independent of the party undergoing assessment (the forest manager or supplier of forest products and the party to whom the claim is made (typically the customer or members of the public). (14) paraphrase

timber supply area: “An integrated resource management unit established in accordance with Section 6 of the *Forest Act*. TSAs were originally defined by an established pattern of wood flow from management units to the primary timber-using industries. They are the primary unit for allowable annual cut (AAC) determination.” (16) quote

traditional territory: “The geographic area identified by a First Nation to be the area of land which they and/or their ancestors traditionally occupied or used.” (13):40 quote

treaty interim measures agreement: “An agreement which sets out temporary arrangements intended to afford a measure of protection to Aboriginal interests while a final agreement is in the process of being negotiated in Canadian treaty negotiations.” (16) quote

woodlot licence: A small-scale, area-based agreement entered into under the *Forest Act* (Part 3, Division 8). A woodlot licence allows for small-scale forestry to be practised in a described area (Crown and private) on a sustained or perpetual yield basis. (8) paraphrase

Sources

- 1 B.C. Ministry of Aboriginal Affairs, Treaty Mandates Branch. 1996. Glossary of treaty-related terms used by the Province of British Columbia. <http://lmtac.bc.ca/treatyproc/glossary.pdf> (Accessed January 2010).
- 2 B.C. Ministry of Agriculture and Lands. 2006. A new direction for strategic land use planning in BC: Synopsis. Integrated Land Management Bureau, Victoria, B.C. http://www.ilmb.gov.bc.ca/slrp/lrmp/policiesguidelinesandassessments/new_direction/new_direction_synopsis.pdf
- 3 B.C. Ministry of Forests and Range, Coast Forest Region website: <http://www.for.gov.bc.ca/rco/> (Accessed January 2010).
- 4 B.C. Ministry of Forests and Range, *Forest and Range Practices Act* website: <http://www.for.gov.bc.ca/code/> (Accessed January 2010).
- 5 B.C. Ministry of Forests and Range, Government Actions Regulation website: [http://www.for.gov.bc.ca/dni/gar/GAR.htm - general](http://www.for.gov.bc.ca/dni/gar/GAR.htm-general) (Accessed January 2010).
- 6 B.C. Ministry of Forests and Range, Northern Interior Region website: <http://www.for.gov.bc.ca/rNI/> (Accessed January 2010).
- 7 B.C. Ministry of Forests and Range, Southern Interior Region website: <http://www.for.gov.bc.ca/rSi/> (Accessed January 2010).
- 8 B.C. Ministry of Forests and Range. 2008. Glossary of Forestry Terms in British Columbia. <http://www.for.gov.bc.ca/hfd/library/documents/glossary/Glossary.pdf> (Accessed January 2010).
- 9 B.C. Ministry of Forests. 2004. Backgrounder: Forest stewardship plans produce enforceable results. <http://www.for.gov.bc.ca/code/backgrounders/forstew.pdf> (Accessed January 2010).
- 10 B.C. Ministry of Tourism, Culture and the Arts. Online "Archaeology Glossary of Terms". [http://www.tca.gov.bc.ca/archaeology/glossary.htm - L](http://www.tca.gov.bc.ca/archaeology/glossary.htm-L) (Accessed January 2010).
- 11 B.C. Timber Sales. Corporate Overview. <http://www.for.gov.bc.ca/bcts/about/bctscorpoverview.pdf> (Accessed January 2010).
- 12 B.C. Treaty Commission website: http://www.bctreaty.net/files/issues_rights.php (Accessed January 2010).
- 13 B.C. Treaty Commission. 2008. What's in these treaties? A plain-language guide to the Tsawwassen First Nation treaty and the Maa-Nulth First Nations treaty. http://www.bctreaty.net/files/pdf_documents/What'sInTheseTreaties2008.pdf (Accessed January 2010).
- 14 BC Market Outreach Network. 2007. Third-party forest certification in British Columbia. <http://www.llbc.leg.bc.ca/public/pubdocs/bcdocs/440502/fsa-064-e.pdf> (Accessed January 2010).
- 15 Indian and Northern Affairs Canada. Backgrounder: Aboriginal Title in Canada's Courts. <http://www.ainc-inac.gc.ca/ai/mr/is/tcc-eng.asp> (Accessed January 2010).
- 16 University of Melbourne. 2007. Agreements, settlements negotiated settlements project (ATNS) Glossary of Terms. Indigenous Studies Program. <http://www.atns.net.au/glossary.asp? - I> (Accessed January 2010).

APPENDIX 2 INTERVIEW QUESTIONS FOR MFR DISTRICT RESPONDENTS

PART I:

The first section of this interview focuses on activities occurring in MFR district or district office.

- 1) How would you define or describe a cultural heritage resource?
 - 2) (a) What cultural heritage resource projects, studies or documents have been completed by your district office? *(For example: cultural plant inventories, archaeological predictive model, major research projects, etc.)*
 - (b) In your view, have these projects improved cultural heritage resource management in your district?
 - (c) How is this cultural heritage resource information managed in your office? *(For example: paper filing, spatial GIS database, oral records, etc.)*
 - (d) How is this information passed on when there are staff changes?
 - 3) (a) Have any of the First Nations in your district completed a land use plan?

No Don't know

Yes
 - (b) Was your district involved the development of this plan?
 - (c) Does your district use the information in these land use plans?
- 4) (a) What staff does your district have with knowledge about cultural heritage resources or Aboriginal traditional knowledge and governance systems? *(e.g., anthropologist, Aboriginal liaison staff, ethnobotanist, etc.)?*
 - (b) Can you please estimate how frequently your district hires contractors with these skills?
 - (c) Does your district have a specific staff person(s) responsible for liaising with First Nations? *(please provide the individual's position as opposed to their name)*
- 5) (a) In your view, does your district have access to all of the data and information required to make informed decisions about the potential impacts of forestry operations on Aboriginal cultural heritage resources? *(For example: a clear understanding of cultural heritage resources of concern, historic resource use levels, location of cultural sites, etc.)*
 - (b) What additional information, if any, is needed?
 - (c) What barriers, if any, have you faced to accessing this information?
- 6) (a) Can you describe any steps that your district has taken to build awareness and understanding about Aboriginal traditional knowledge and governance systems, and cultural heritage resource values among staff? *(e.g., attended cultural awareness workshops, provided training on traditional ecological knowledge, etc.)*
 - (b) What staff members were involved in this training or capacity building?
- 7) Can you describe any steps that your district has taken to inform First Nations about changes to information-sharing and/or forest management planning process under the *Forest and Range Practices Act (FRPA)*? *(e.g., FRPA training sessions, letter, community meetings, etc.)*
- 8) In your view, what are the most critical infrastructure needs among First Nations in your district?

PART II:

The second section of this interview focuses on your district office's interactions with First Nations related to forest management planning and implementation and/or cultural heritage resource management in your district.

- 9) (a) Can you describe the post-FSP referrals process used by your district?
 - (b) How does your district provide feedback to First Nations on how specific concerns have been addressed?
 - (c) What process is used when information is received outside of the referrals process?

- 10)** In what format does your district typically receive cultural heritage resource information from First Nations? (*e.g., verbally, spatial files, hard copy maps, letter, etc.*)?
- 11)** (a) Does your district have information-sharing processes or agreements in place with any First Nations in your district? (*e.g., process outlined in an FRA/FRO, memoranda of understanding, etc.*)
- Yes**
- (b) Can you describe these agreements and how they were developed?
- (c) In general, have these agreements improved the working relationship(s) between your district and First Nations?
- 12)** What measures has your district taken to ensure that confidential or sensitive cultural heritage resource information received from First Nations will be managed appropriately?
- 13)** (a) On a scale of 1 to 10, with 1 being “very poorly”, 5 being “adequately”, and 10 being “very well”, please rate how well the current referrals process is working for you overall:
- | | | | | | | | | | |
|---------------|---|---|--------------|---|---|---|---|---|-------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| (Very poorly) | | | (Adequately) | | | | | | (Very Well) |
- (b) What, specifically, is working well?
- (c) What specific improvements could be made?
- 14)** (a) How many approved forest stewardship plans (FSPs) affect your district?
- (b) How many First Nations are affected by these FSPs in your district?
- 15)** (a) To the best of your knowledge, did any First Nations participate in the development of FSPs in your district?
- (b) What role, if any, did your district staff have in this process?
- 16)** (a) To the best of your knowledge, did any of the proponents (licensees or BCTS) operating within your district seek participation or collaboration from First Nations outside of the 60-day Review and Comment period?
- Yes**
- (b) Can you give a rough estimate of how many proponents invited First Nations to participate at each of these stages?
- _____# before the Review and Comment period and/or during the drafting of FSP results and strategies
- _____# during the Review and Comment period
- _____# after the Review and Comment period has ended, but prior to approval
- 17)** Do you have any specific suggestions on how First Nations collaboration in the development of FSPs could be improved?
- 18)** (a) Are there any proponents in your district that have developed results and strategies for specific cultural heritage resources?
- (b) Do any supporting documents associated with the FSP(s) in your district address specific cultural heritage resources?
- 19)** In addition to FSPs and associated supporting documents, are there any types of operational or strategic plans that address cultural heritage concerns at a local level in your district? (*For example: site plans, Sustainable Forest Management Plans, strategic land use plans, management plans for area-based licenses, etc.*)
- 20)** In your view, are there any natural resource values of importance to First Nations in your district that are currently being overlooked or not properly considered during the planning of forestry operations?

APPENDIX 3 INTERVIEW QUESTIONS FOR FIRST NATIONS RESPONDENTS

PART I:

The first section of this interview focuses on activities occurring in your band office or First Nation.

- 1) How would you define or describe a “cultural heritage resource”?
- 2) (a) What cultural heritage resource projects, studies or documents have been initiated and/or completed by your band or Nation? (For example: traditional use study, cultural plant inventories, research projects, etc.)
 - (b) How is this cultural heritage resource information managed? (For example: paper filing, spatial GIS database, tapes of oral accounts, etc.)
 - (c) Have these projects contributed to your ability to engage in forest management decisions affecting your territory?
 - (d) How is this information passed on when there are staff changes or Band Council elections?
- 3) (a) Has your band or Nation completed a land use plan?

Yes

 - (b₁) Was government or industry involved the development of this plan?
 - (c) How do you see this plan being used?

Yes
 - (b₂) Is there interest within your band or Nation in completing such a plan?
- 4) When an individual community member has concerns related to the management of cultural resources on the land base, how are these concerns addressed by decision-makers in your band or Nation?
- 5) How well does your current infrastructure (For example: computers, office space, internet, transportation, etc.) meet your basic information management and business operations needs associated with forest management?
- 6) (a) What staff positions does your band or Nation have to support planning and decision-making related to forest management in your territory? (For example: trained researchers, forestry staff, RPFs, etc.)?
 - (b) Is there a specific staff person responsible for processing referrals and responding to information-sharing requests?
 - (c) Can you give a rough estimate (in %) of how much of this kind of work is completed by contractors as opposed to your own staff members?
- 7) (a) Does your band/Nation have access to the data or information required to make informed decisions about the potential impacts of forestry operations on cultural heritage resources or other cultural landscape values in your traditional territory? (For example: current forest inventories, species data, cultural heritage resource information, etc.)
 - (b) What barriers have you faced, if any, to accessing this information?
- 8) (a) Can you describe any steps that your band or Nation has taken to build understanding among your staff about changes to forest management processes under the *Forest and Range Practices Act (FRPA)*? (For example: accessed on-line government resources, requested training opportunities from the MFR, attended workshops, etc.)?
- 9) What information or training, if any, have members of your band or Nation received regarding *FRPA* from the MFR district office?

PART II:

The second section of this interview focuses on your band or First Nation’s interactions with government and industry regarding forest management planning and implementation and cultural heritage resource management in your territory.

- 10) Can you describe the process that your band or Nation uses to respond to referrals and/or information sharing requests?
- 11) How often do you receive feedback from government or industry about how your band or Nation’s concerns have been addressed?
- 12) (a) Does your band or Nation have any collaboration or information-sharing processes or agreements in place with **forestry proponents** (*i.e., forest companies or BCTS*) operating within your traditional territory?
 - (b) Can you describe these agreement(s) and how they were decided?
 - (c) Have these agreements improved your working relationship(s)?
- 13) When you want to discuss referrals or cultural heritage resource concerns with forest companies or BCTS, do you know who to contact?
- 14) (a) Does your band or Nation have any collaboration or information-sharing processes or agreement in place with the local **MFR district office**?
 - Yes**
 - (b) Can you describe these agreements and how they were decided?
 - (c) Have these agreements improved your working relationship(s) with the district?
- 15) Do you know who to contact within your local MFR district office to discuss referrals or cultural heritage resource concerns?
- 16) How confident are you that confidential or sensitive information will be managed appropriately
 - (i) by proponents?
 - (ii) by government staff?

- 17) (a) On a scale of 1 to 10, with 1 being “very poorly”, 5 being “adequately”, and 10 being “very well”, please rate how well the current referrals process is working for you overall:

1	2	3	4	5	6	7	8	9	10
(Very poorly)			(Adequately)						(Very Well)

 - (b) What, specifically, is working well?
 - (c) What specific improvements could be made?
- 18) (a) How many forestry proponents (*i.e., licensees or BC Timber Sales (BCTS) staff*) have invited your band or Nation to participate or collaborate in the development of a forest stewardship plan (FSP)?
 - (b) Have any of these FSPs been approved?
 - (c) Did your band/Nation participate in these opportunities to participate or collaborate on the development of the FSP(s)?
- 19) Has your band or Nation ever initiated collaboration on the development of an FSP?
- 20) Has your band/Nation ever been invited to participate in the development of an FSP outside of the 60-day Review and Comment period? (*e.g., during the drafting of results and strategies, before or after the Review and Comment period*)?
- 21) (a) What approaches have proponents used to invite your band or Nation to participate in the development of their FSP(s)? (*e.g., sent a letter, sent an information package, offered to hold a meeting in the community, etc.*)
 - (b) What information about the FSP is typically provided to you by licensees? (*e.g., FSP only, FSP with maps, etc.*)
 - (c) What worked best for your band?
- 22) Do you have any suggestions on how First Nations collaboration in the development of FSPs could be improved?
- 23) (a) In your view, do FSPs provide the information that you need to understand and respond to proposed forestry activities in your territory?
 - (b) What information is the most useful?

24) Proponents must develop legal results and strategies for cultural heritage resource values in their FSP. Sometimes, they also submit supporting “non-legal” documents with their FSP that outline additional strategies for managing cultural heritage resources or values in their operating area(s).

- 25) (a) Are you aware of any FSP results and strategies that identify specific cultural heritage resources?
- (b) Are you aware of any supporting documents or management plans associated with FSPs that address specific cultural heritage resources?
- (c) Are there any specific FSPs or proponents (licensees/BCTS) that you have more confidence in than others?
- (d) On a scale of 1 to 10, with 1 being “very poorly”, 5 being “adequately”, and 10 being “very well”, how well do the approved FSPs affecting your traditional territory address your band or Nation’s cultural heritage resource interests overall?
- | | | | | | | | | | |
|---------------|---|---|--------------|---|---|---|---|---|-------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| (Very poorly) | | | (Adequately) | | | | | | (Very Well) |

25) Other than FSPs and the supporting documents associated with them, are there any types of operational or strategic plans that address your cultural heritage resource concerns at a local level? (For example: Sustainable Forest Management Plans, strategic land use plans, management plans for area-based licenses, etc.)

26) Are there any natural resource values of importance to your First Nation that are currently being overlooked or not properly considered during the planning of forestry operations in your local territories?

APPENDIX 4 INTERVIEW QUESTIONS FOR PROPONENT RESPONDENTS

PART I:

The first section of this interview focuses on activities occurring within your company/Timber Sales Office (TSO).

- 1) How would you define or describe a cultural heritage resource?
- 2) (a) What cultural heritage resource projects, studies or documents have been completed by your company/TSO? (For example: land use and occupancy study, cultural plant inventories, research projects, etc.)
- (b) In your view, have these projects improved cultural heritage resource management by your company/TSO/TSO?
- (c) How is this cultural heritage resource information managed in your office? (For example: paper filing, spatial GIS database, oral records, etc.)
- (d) How is this information passed on when there are staff changes?
- 3) (a) Have any of the First Nations in your operating area completed a land use plan?
 - Yes
- (b) Does your company/TSO use the information in these land use plans for understanding and managing cultural heritage resources?
- 4) (a) What staff does your company/TSO have with specialized skills or knowledge related to cultural heritage resources or Aboriginal traditional knowledge and governance systems? (e.g., anthropologist, Aboriginal liaison staff, ethnobotanist, etc.)?
- (b) Can you please estimate how frequently your company/TSO hires contractors with these skills?
- (c) Does your company/TSO have a specific staff person(s) responsible for liaising with First Nations? (Please provide the individual’s position as opposed to their name)

- 5) (a) In your view, does your company/TSO have access to all of the data and information required to make informed decisions about the potential impacts of your operations on Aboriginal cultural heritage resources and values? (e.g., *historic cultural resource use levels, clear understanding of cultural heritage resources of concern, location of cultural sites, etc.*)
- (b) What barriers, if any, have you faced to accessing this information?
- 6) (a) Would you please describe any steps that your company/TSO has taken to build awareness and understanding about Aboriginal traditional knowledge and governance systems, and cultural heritage resource values among your staff? (e.g., *attended cultural awareness workshops, provided training on traditional ecological knowledge, etc.*)
- (b) What staff members were involved in this training or capacity building?

PART II:

The second section of this interview focuses on your company/TSO’s interactions with First Nations and Ministry of Forests and Range (MFR) staff regarding forest management planning and implementation or cultural heritage resource management in your operating area.

- 7) (a) What information does your company/TSO typically provide to First Nations about proposed forestry or road building activities in your operating area? (For example: *written description, hard copy maps, spatial files, etc.*)
- (b) What, from your perspective, has been the most effective approach?
- 8) (a) How does your company/TSO respond to, and incorporate cultural heritage resource information or concerns received from First Nations in your operating area? Please describe the steps.
- (b) How do you provide feedback to First Nations on how these concerns have been addressed?

- (c) In what format does your company/TSO typically receive cultural heritage resource information from First Nations? (e.g., *verbally, spatial files, hard copy maps, letter, etc.*)?
- (d) What kind of information management system(s), does your company/TSO use to manage information received from First Nations? (For example: *paper filing, spatial GIS database, etc.*)
- 9) (a) Does your company/TSO have any information-sharing processes or agreements in place with First Nations in your operating area? (For example: *memoranda of understanding, information-sharing agreement, etc.*)
- Yes
- (b) Can you describe these agreements and how they were developed?
- (c) In general, have these agreements improved the working relationship(s) between your company/TSO and First Nations?
- 10) When contacting individual First Nations regarding your operations, your company/TSO’s management of cultural heritage resources, or other related issues, do you know who specifically to contact in all of the First Nations affected by your FSP?
- 11) Do you know who specifically to contact in the MFR district office regarding referrals or issues related to cultural heritage resource management?
- 12) What specific measures does your company/TSO take, if any, to manage confidential or sensitive cultural heritage resource received from First Nations?
- 13) (a) On a scale of 1 to 10, with 1 being “very poorly”, 5 being “adequately”, and 10 being “very well”, please rate how well the current referrals process is working overall:
- | | | | | | | | | | |
|---------------|---|---|--------------|---|---|---|---|---|-------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| (Very poorly) | | | (Adequately) | | | | | | (Very Well) |
- (b) What, specifically, is working well?
- (c) What specific improvements could be made?
- 14) How many First Nations are affected by your company/TSO’s forest stewardship plan (FSP)?
- 15) (a) Did any First Nations participate in the development of your FSP?

- (b) Did your company/TSO request First Nations' participation or collaboration in the development of your FSP outside of the 60-day Review and Comment period?

Yes

- (b) Can you give a rough estimate of how many First Nations participated at each of the following stages?

_____# before the Review and Comment period and/or during the drafting of FSP results and strategies

_____# during the Review and Comment period

_____# after the Review and Comment period has ended, but prior to approval

- 16) To the best of your knowledge, have any First Nations ever initiated collaboration with your company/TSO, prior to FSP approval?
- 17) (a) What approach did your company/TSO use to seek First Nations participation or collaboration in the development of your FSP? (*For example: did you send a letter, hold a meeting in the community, etc.*)
- (b) What information did your company/TSO provide to First Nations about your FSP?
- 18) Do you have any specific suggestions on how First Nations collaboration in the development of FSPs, prior to approval, could be improved?
- 19) Has your company/TSO designed FSP results and strategies that identify specific cultural heritage resources? (*For example: strategies for managing cultural cedar, a specific culturally significant plant species, spiritual sites, etc.*)
- 20) In addition to your FSP and supporting documentation, is your company/TSO using other operational or strategic plans to address cultural heritage resource values or concerns in your operating area? (*For example: Sustainable Resource Management Plan, strategic land use plan, etc.*)
- 21) Are you aware of any government approved strategic land use plans that address cultural heritage resource management in your operating area?

REFERENCES

- Aboriginal Capacity Working Group. 2007. Recommendations of the Aboriginal Capacity Working Group. National Aboriginal Forestry Association. Ottawa, Ont. http://www.nafaforestry.org/forest_home/documents/CWGREcommendations-final-30mar07.pdf (Accessed August 2009).
- Adam, M. C. and D. Kneeshaw. 2008. Local level criteria and indicators: A tool used to assess aboriginal forest ecosystem values. *Forest Ecology and Management* 255:2024–2035.
- British Columbia Ministry of Agriculture and Lands. 2007. Central and North Coast Land Use Order. Victoria, B.C. http://ilmbwww.gov.bc.ca/slrp/lrmp/nanaimo/cencoast/docs/LegallyestablishedOrderC_NC.pdf (Accessed August 2009).
- B.C. Ministry of Forests. 2005. Forest stewardship planning: First Nations information sharing bulletin. Aboriginal Affairs Branch, Victoria, B.C. *FRPA Administration Bulletin* No. 1. http://www.for.gov.bc.ca/hth/timten/FRPA_implementation/Bulletins/FRPA%20Admin%20No%201%20FN%20info%20sharing%20June%209%202005.pdf (Accessed August 2009).
- B.C. Ministry of Forests and Range. 2006a. Administration guide for forest stewardship plans. Version 1.06. Resource Tenures and Engineering Branch, Victoria, B.C. <http://www.for.gov.bc.ca/hth/timten/AGFSP/index.htm> (Accessed August 2009).
- . 2006b. State of the British Columbia's forests. http://www.for.gov.bc.ca/hfp/sof/#2006_Report (Accessed January 2010).
- . 2008. A review of forest stewardship plan results and strategies for the cultural heritage resource value. Forest Practices Branch, Victoria, B.C. FREP Report No. 18. http://www.for.gov.bc.ca/ftp/hfp/external!/publish/frep/reports/FREP_Report_18.pdf (Accessed August 2009).
- B.C. Ministry of Tourism, Culture and the Arts. 2007. British Columbia archaeological handbook for foresters. Archaeology Branch, Victoria, B.C. http://www.tca.gov.bc.ca/archaeology/docs/handbook_for_foresters.pdf (Accessed January 2010).

- . 2008. Archaeological overview assessments as general land use planning tools: Provincial standards and guidelines. Archaeology Branch, Victoria, B.C. http://www.tca.gov.bc.ca/archaeology/docs/FIA_AOA_Standards_2008.pdf (Accessed January 2010).
- Berkes, F. 1999. Sacred ecology: Traditional ecological knowledge and resource management. Taylor and Francis, Philadelphia, Penn.
- Budwha, R. 2005. An alternative model for First Nations involvement in resource management archaeology. *Canadian Journal of Archaeology* 29(1):20–45.
- Charnley, S., A. Paige Fisher, and E. T. Jones. 2007. Integrating traditional and local knowledge into forest biodiversity conservation in the Pacific Northwest. *Forest Ecology and Management* 246:14–28.
- First Nations Forestry Council. 2007. First Nations land use planning. ESP Working Group, West Vancouver, B.C. http://www.fnforestrycouncil.ca/initiatives_res/ESPQuickFactsforexistingFNLUP.pdf (Accessed January 2010).
- Hickey, C. and M. Nelson. 2005. Partnerships between First Nations and the forestry sector: A national survey. Sustainable Forest Management Network, Edmonton, Alta.
- Karjala, M. K., E. Sherry, and S. M. Dewhurst. 2002. Criteria and indicators for sustainable forest planning: a framework for recording Aboriginal resource and social values. *Forest Policy and Economics* 6: 95–110.
- Klassen, M. A. 2008. First Nations, the Heritage Conservation Act, and the Ethics of Heritage Stewardship. *The Midden* 40(4):1-17.
- Krishnaswamy, A., L. Joseph, E. Simmons, G. Thomas, and J. Passmore. 2009. First Nations, forestry, and natural resources information needs in British Columbia. FORREX Forum for Research and Extension in Natural Resources, Kamloops, B.C. File Report 09-01. <http://www.forrex.org/publications/other/FileReports/fr09-01.pdf> (Accessed January 2010).
- Leroux, S. J., F. K. A. Schmiegelow, and J. A. Nagy. 2007. Potential spatial overlap of heritage sites and protected areas in a boreal region of northern Canada. *Conservation Biology* 21(2):376–386.
- Mabee, H. S. and G. Hoburg. 2004. Protecting culturally significant areas through watershed planning in Clayoquot Sound. *The Forestry Chronicle* 80(2):229–240.
- Mackenzie, R. 2008. Cultural heritage resources scoping document. Aboriginal Affairs Branch, B.C. Ministry of Forests and Range. Unpublished Report.
- Mason, A. and D. Bain. 2003. The evolution of British Columbia's heritage environment: An overview and discussion of First Nations issues. Final report submitted to the Union of B.C. Indian Chiefs. Golder Associates, Burnaby B.C. http://www.ubcic.bc.ca/files/PDF/REP-0429-final_draft.pdf (Accessed January 2010).
- Michel, H. and D. Gayton (editors). 2002. Linking Indigenous peoples' knowledge and Western science in natural resource management: Conference proceedings. Southern Interior Forest Extension and Research Partnership, Kamloops, B.C. SIFERP Series No. 4. <http://www.forrex.org/publications/forrexseries/ss4.pdf> (Accessed September 2008).
- Moller, H., F. Berkes, P. O. Lyver, and M. Kislalioglu. 2004. Combining Science and Traditional Ecological Knowledge: Monitoring Populations for Co-Management. *Ecology and Society* 9(3): 2. <http://www.ecologyandsociety.org/vol9/iss3/art2/> (Accessed January 2010).
- National Aboriginal Forestry Association. 2002. First Nations governance and forest management. National Aboriginal Forestry Association, Ottawa, Ont.
- Nicholas, G. P. 2006. Decolonizing the archaeological landscape: The practice and politics of archaeology in British Columbia. *North American Indian Quarterly* 30(3/4):350–380.
- Province of British Columbia. 2009a. Perspectives from the cultural heritage resource value pilot project. B.C. Ministry of Forests and Range, Forest and Range Evaluation Program, Victoria, B.C. FREP Extension Note No. 6. http://www.for.gov.bc.ca/ftp/HFP/external!/publish/FREP/extension/CHR_Extension_Note_06.pdf (Accessed January 2010).
- . 2009b. Protocol for Cultural Heritage Resource Stewardship Monitoring. B.C. Ministry of Forests and Range and B.C. Ministry of Environment, Forest and Range Evaluation Program, Victoria, B.C. http://www.for.gov.bc.ca/ftp/hfp/external!/publish/frep/indicators/Cultural_Heritage_20090504.pdf (Accessed January 2010).

- Stevenson, M. G. and P. Perreault. 2008. Capacity for what? Capacity for whom? Aboriginal capacity and Canada's forest sector. Sustainable Forest Management Network, Edmonton, Alta.
- Tobias, T. 2000. Chief Kerry's moose: A guidebook to land use and occupancy mapping, research design and data collection. A joint publication of the Union of BC Indian Chiefs and Ecotrust Canada, Vancouver, B.C.
http://www.ecotrust.org/publications/Chief_Kerrys_Moose.pdf (Accessed January 2009).
- Wilson, J. and J. Graham. 2005. Relationships between First Nations and the forest industry: The legal and policy context. Institute on Governance, Ottawa, Ont.
- Wyatt, S. 2008. First Nations, forest lands and "aboriginal forestry" in Canada: From exclusion to comanagement and beyond. *Canadian Journal of Forest Research* 38(2):171-180.