



FIA Forest Investment Account
Forest Science Program

FNFC ~ FSP DIALOGUE SESSION

FEBRUARY 27 2007
North Vancouver BC

First Nations Forestry Council and the Forest Science
Program Dialogue Session **SUMMARY REPORT**



TABLE OF CONTENTS

INTRODUCTION	3
EXECUTIVE SUMMARY	4
DIALOGUE SESSION FORMAT AND OBJECTIVES	5
OVERVIEW OF PRESENTATIONS	6
<i>BC First Nations Leadership Council ~ Mr. Dave Porter</i>	6
<i>BC First Nations Forestry Council ~ Chief Lynda Price</i>	7
<i>FIA/FSB Perspective ~ Dr. Bill Bourgeois</i>	8
<i>First Nations Knowledge Keepers ~ Mr. John Jules</i>	9
<i>Indigenous Academics & Community Based Research ~ Dr. Charles Menzies</i>	10
<i>First Nations Elders ~Lucheum (Arvid) Charlie & Edward Tatoose</i>	11
SUMMARY OF BREAKOUT SESSIONS	12
<i>Values/Principles</i>	12
<i>Land/Resource Interests</i>	13
<i>What is Traditional Knowledge?</i>	14
<i>Traditional Knowledge/Western Science</i>	15
NEXT STEPS	16
APPENDIX 1 - List of Speakers, Facilitators & Participants	18
APPENDIX 2 – Verbatim Break-Out Session Comments	19

INTRODUCTION

The BC **First Nations Forestry Council** (FNFC) and the provincial **Forest Investment Account – Forest Sciences Program** (FIA-FSP) invited respected members of the forestry profession to a dialogue session as a next step in a process to build relationships and reciprocal learning related to forest based research and extension.

Invitations were extended to Aboriginal and non-Aboriginal professionals working in the field of forest-based research and/or forest management to participate in a dialogue session that allowed for honest and open discussions about issues facing forest research and extension.

The overall objective was to share philosophies, knowledge and experiences related to forest-based research.

This report is written intentionally in plain language that is meant to capture the truest spirit of those who contributed to it.

The session began on the evening of February 26 and continued throughout the day on February 27, 2007 in North Vancouver, BC at the Squamish Elders Centre.



EXECUTIVE Summary

Forest science research provides critical information to one of British Columbia's largest economic generator; forestry.

Indeed, forest science research greatly influences the future of the forest industry and is therefore understandable that First Nations people of British Columbia are seeking inclusion in the research selection process at all levels. Moreover, First Nations are involved in the forest sector through rights and title issues, several forest industry companies are held and/or managed by First Nations organizations and individuals as well.

First Nations are asking for decision making capacity as to which research projects are funded, to be considered fairly when submitting proposals for research grants that include the concept of traditional knowledge and to be involved in the process that will contribute to policy changes that impact the forest industry and First Nations alike.

The Forest Investment Account – Forest Science Program, FIA-FSP, is striving to improve relations with the First People of British Columbia and in cooperation with the First Nations Forestry Council have hosted this dialogue session to gain a better understanding of how to meaningfully engage First Nations in forest science research.

The findings of the dialogue session will be used in future FIA-FSP development.

DIALOGUE Session Objectives

The FIA-FSP is committed to both promoting positive relationships with First Nations communities and is seeking a better understanding of how to further develop such a relationship in a meaningful way.

The format of the session was designed to encourage an honest dialogue between Aboriginal and non-Aboriginal professionals.

The intention of the session was to share research philosophies, values, visions and principles, as well as to promote a greater understanding of the purpose and processes associated with forest based research employed by various groups (e.g. First Nations communities, academics, government departments, consultants).

The results of this dialogue will help the FSP Board and the FNFC move forward on research planning processes for 2007/08 and beyond.

As the FNFC and the FSP explore opportunities for collaboration on forest science research initiatives, meaningful engagement with First Nation communities and organizations has become an important tenet of the process.

The purpose of the dialogue session was three-fold in nature:

- ❖ Build a Relationship ~ between FIA-FSP Board and FNFC
- ❖ Reciprocal Learning ~ striking a balance between *Traditional Ecological Knowledge* and *Western Science*
- ❖ Define the “Box” ~ how the Forest Science Programs should be delivered to First Nations Communities

OVERVIEW of Presentations

BC First Nations Leadership Council

Mr. Dave Porter

“...we need new ways of doing business for our new relationship...”



As an Executive member of the BC First Nations Leadership Council, and the First Nations Summit, Mr. Porter spoke of the need for incremental and measurable change.

Mr. Porter spoke specifically about the changing political climate of British Columbia with regard to how its government is prepared to deal with First Nations of this province in light of the New Relationship. The New Relationship is an agreement that was reached by the First Nations Leadership Council and British Columbia that firmly sets the framework for a lasting and positive relationship.

Opening the Dialogue Session with a historical overview of the legal issues regarding First Nations titles and rights in the province of BC, he explained the reasons and impact of precedent setting rulings that have been addressed within this province and how each relates to the resources of this land.

Key Messages from Mr. Dave Porter

- ❖ New Relationship Agreement sets the agenda for change
- ❖ Decision making responsibilities will fall to a co-jurisdictional/management system
- ❖ New processes and systems are being created to support change
- ❖ New First Nations institutions and governing bodies are gaining strength
- ❖ This session should strive for finding commonalities in the ways of doing business, points in our research agenda and the crossroads along the path of achieving sustainable and healthy communities.

*BC First Nations Forestry Council
Chief Lynda Price, Vice President*

“...we need shared decision-making capacity...”

Chief Price is a FNFC Board member as well as one of the founding members of the **First Nations Mountain Pine Beetle Working Group**.



Based on direction received from Chiefs attending a mountain pine beetle forum held in Prince George in September 2005, the **First Nations Forestry Council** was created to replace the **FN Mountain Pine Beetle Group** in June 2006 to provide longer term stability to forestry issues facing First Nations.

It was in fact the FN Mountain Pine Beetle Working Group that took the opportunity to search for acceptable First Nations candidates for the FSB after an agreement was reached with the Deputy Minister of Forest and Range.

Key Messages from Chief Lynda Price

- ❖ Research that contemplates *First Nations Traditional Ecological Knowledge* remains a priority for the First Nations Forestry Council.
- ❖ This workshop is the beginning of trying to work together in a new relationship in this province as it relates to forest research.
- ❖ There is a need for shared decision making processes with respect to the lands and resources at the operational level.
- ❖ First Nations need to work with others on the issue of climate change and understand that we cannot do things on our own. If we work together we can do a better job and get things done quicker.
- ❖ We need to look beyond the MPB epidemic.
- ❖ Require institutional arrangements for joint decision making.
- ❖ Funding remains an ongoing issue for the Chiefs of BC.
- ❖ There is a will to join in partnership for the exploration and development of Non-Timber Forest Resources (NTFR) and is the responsibility of First Nations leaders to protect those critical to the culture of First Nations people.
- ❖ First Nations people face differing capacity challenges within each community.

FIA-FSB Perspective

Dr. Bill Bourgeois, Chair of FSB

“...striving to become a world leader in providing credible and relevant scientific knowledge...”

As Chair of the **Forest Science Board**, Dr. Bourgeois explained the reporting relationship of the Board to the Forest and Range Deputy Minister’s office.



He went on to explain that the budget for the **Forest Investment Account -Forest Science Program** is approximately 45% of the total provincial allocation for land based forest research and development to further illustrate the need for a positive relationship with First Nations.

First Nations values are being considered by the **Forest Science Board** and in fact are accommodated with the best knowledge it has currently.

This dialogue session is to better understand the differences and commonalities between the interests and values within the existing **FIA-FSP** research and extension community and the values and interests imperative to cultivating a mutually beneficial relationship with the First People of British Columbia.

Key Messages from Dr. Bourgeois

- Two First Nations members are on the FIA-FSP Board.
- A First Nations Technical Advisory Group was established in the 2006/2007 fiscal year as a transition step to including First Nations priorities into the FIA-FSP.
- The 2007/08 “Call for Proposals” was modified to reflect First Nations values.
- First Nations are included in the review of all LOI’s and full proposals.
- Next steps include devising an action plan that considers even further the interests of First Nations and then communicate that plan to the First Nations, research, extension and user communities.

First Nations Knowledge Keepers

~ Mr. John Jules

“ an open mind, an open heart”

As the **Cultural Resource Management Administrator** for the **Kamloops Indian Band**, Mr. Jules has considerable experience in working with government, industry and academia from an Indigenous perspective.



Mr. Jules explained to members of the Dialogue Session the intricate verbal system of the Secwepemc culture and how such traditions impact First Nations' relationship to the land and its resources. As a diplomaed knowledge keeper of his people, Mr. Jules expressed clearly that Traditional Ecological Knowledge is based on giftedness.

“Our people entered into this land through a spirit door and into a land of ice, snow and giants (mega fauna).”

Key Messages from Mr. Jules

- ❖ Our stories/legends need to be given equal weight as this is how we transmitted thousands of years of history.
- ❖ Any statement we make as First Nations people is a position.
- ❖ My Elders speak of the fallacy that science is the truth.
- ❖ Define a parallel process whereby we can work with one another, either by region, language group, tribal groupings, bands ... have our people at the community level manage for ourselves – do it at a level comfortable to our people – this may require interpreters/middle managers.
- ❖ Our politicians are very good at arriving at agreements – our problem is implementation.
- ❖ There are many unsung heroes who got out on the land and are concerned about forest health.

Indigenous Academics and Community Based Research

~ *Dr. Charles Menzies*

“...Traditional Ecological Knowledge does not fold into Western Science, rather Western Science learns from Traditional Ecological Knowledge.”

As a First Nations professor at the University of British Columbia, Dr. Menzies believes that often researchers think there is only one objective to their research be it educational implications, political agendas or academic based.



But those types of researchers have not asked themselves the question: “What has already been done?” and therefore so we so often find ourselves reinventing the wheel. Researchers need to follow protocols among band councils, hereditary leaders, house groups and individuals.

Dr. Menzies is an enrolled member of the Tlingit and Haida tribes of Alaska as well as a member of the Tsimshian Nation.

Key Messages from Charles Menzies

- ❖ Do not just pile up knowledge; refine it, sort it, get at it because if it piles up you may not get to the stuff at the bottom and sometimes the pile will fall over.
- ❖ Storytelling is experience based; storytelling is not a performance.
- ❖ There are two types of knowledge: active (engaged knowledge of a traditional theme) and historical (histories that tell of what happened in the past).
- ❖ Talk to people who have existing knowledge while you are doing the work.
- ❖ Ask the question: “What is the Indigenous perspective? How would they do the research?”

First Nations Elders

~Lucheum (Arvid) Charlie and Edward Tatoose

“...come and talk to us before hand, don’t just give us one minute to talk...”

An adjustment was made in the agenda to accommodate the invited Elders who felt marginalized by the limited amount of speaking time allotted to them.

The agenda was opened to allow each of the respected Elders to address the entire delegation. Both Elders shared their experiences with what is now termed *Traditional Ecological Knowledge*.

They reminded the delegation that the reason they have this knowledge to share is because it was passed down to them in the same way that they intend to pass down their information which further explained their discontent with limited information sharing time.



SUMMARY of Breakout Sessions

The following are recurring themes from each of the breakout sessions. A verbatim list of each comment recorded in each of the breakout sessions has been included in Appendix 2 for your reference.

1. What values/principles are critical to the emerging relationship between Forest Science Board and First Nations communities?

It is important to not only acknowledge the interconnectedness between land, language and culture, but to strive to understand and work within that paradigm to achieve true scientific research partnerships with First Nations people.

The values and principles discussed were not necessarily unique to any emerging relationship be it between individuals, organizations or in this instance, cultures. It was established that it is not an intention to merge the values and principles that the cultures of First Nations and their traditional concepts of science to that of western based science. There is a need and value to the aspirations of both perspectives.

However, the values of recognition, reconciliation and respect remained paramount for First Nations people. It is only when the knowledge that has been passed down for multiple generations whereby First Nations understand and accept such knowledge as truth that it is appropriate now for it to be contemplated by Western Science. The value of recognition is the start of promoting a healthier relationship between forest science research; by moving forward into an area that seeks to reconcile for poor past recognition, First Nations believe that the value of a mutual respect will grow.

Conversely, First Nations must be willing to recognize that Western Science has been and continues to be a necessary and valuable resource to modern research that leads to economic industrial growth. It is in fact this line of progression that has caused First Nations from time-to-time to refrain from sharing information viewing such action as necessary to adequately protect certain aspects of the land from commercialization.

Overall, it was agreed that there is an opportunity for the concepts of these two cultures and attitudes towards forest research to be complementary to one another rather than competitive.

Basic values of honest and sustainable communication, trust and integrity as well as the overarching value of respect must be continually forefront to move the relationship forward in a positive manner for the benefit of both the FIA-FSP and the First People of British Columbia.

2. What land and resource interests do you have?

First Nations people have survived by caring and managing the land that provided them with sustenance.

There is no division between First Nations people, their culture and their relationship with the land.

Moreover, all issues that impact the land will impact First Nations people on some level be it politically in the form of rights and title, culturally whereby traditional medicines, trap lines or hunting grounds are likely to be compromised or economically that would see foreign companies profiting off the marketable products a forest can offer.

Politically, First Nations feel that they have an inherent right to co-manage the land that they have been successfully managing for generations past. Therefore, there is no exception to what part of the land or which resource holds First Nations interest; it all does.

Culturally, there is a responsibility as First Nation people to provide education for the youth on the traditional uses of the land and to protect culturally sensitive areas so that such education can be perpetuated in the future.

Economically, First Nations people have always traded and have in fact relied on such trade to adequately support their communities. Contemporary trading mechanisms call for sophisticated corporate entities that can compete on both domestic and international markets. First Nations people are capable and deserve the opportunity to contribute and benefit from such economies.

There is a specific concern for First Nations presently that concerns non-timber forest resources understanding that much of the cultural traditions may be brought under this category in the global market. It is for this reason that First Nations are adamant to protect the natural habitats of indigenous medicines, foods and other usages that would not be considered timber commodities.

3. What is Traditional Knowledge?

First Nations have secured a comprehensive understanding of the interconnectivity among various ecosystems. It is an understanding that dates back throughout history and has been observed carefully in a practical and meaningful way that offers insights to environmental changes.

This type of knowledge is known as Traditional Knowledge and does not attempt to undermine contemporary scientific procedures, rather is seeking to be included in the current analytical models.

Several examples of Traditional Knowledge were shared including the relationship between observing bees flying low in the grass and the return of the salmon but perhaps the most compelling illustration included a fish finder.

An Elder that really enjoyed fishing received a fish finder from his children one year for his birthday. The Elder used it a few times and then retired it to the garage. His son had stopped by to visit one day and found the fish finder in the garage and asked his Dad why he was no longer using it.

His Dad replied, “The fish finder finds me fish that are under the boat, but it cannot look to where the birds are flying. For it is where the birds are low in the sky, that there is fish. You see the birds are doing some fishing of their own, and by watching the bird, I know where to find the fish.”

Traditional Knowledge is one of observation and understanding of the roles and responsibilities of each species of both flora and fauna within an ecosystem, how they relate to each other.

4. How can Traditional Knowledge and Western Science work together?

The fundamental difference between Traditional Knowledge and Western Science is that Traditional Knowledge accepts the truth as it is and Western Science wants to know why something is the way it is.

And it is this reason that there appears at first not to be competing methods for acquiring information. However, it is in fact important to examine the order of which things are considered, in that if Western Science makes a discovery and in fact answers the why question for itself then it will at times not consider the Traditional Knowledge factors that could possibly indicate contributing factors to such discovery.

Conversely, if aspects of Traditional Knowledge are contemplated and Western Science begins to research the reason behind the observation the two concepts of knowledge could complement each other very well.

The practicality of this relationship is that research needs to move into a more community based model that allows for dissenting perspectives with open and inclusive communication.

Overall, the First Nations culture is very much a part of their research methods as it is encompassing of all that they do and are. Western Science should consider a more holistic approach to research methods that incorporates many other socially subsistent variables to reach a more well-rounded understanding of the world.

NEXT Steps

This Dialogue Session proved that there is still much to learn by both the FNFC and the FIA-FSB. However, it was never envisioned that one Dialogue Session would exchange all the information between the different perspectives. It has been suggested that the key to moving toward a mutually beneficial relationship is to reach for ideas outside of the “box” and promote the courage necessary to try new things.

Understanding that there will be no quick fixes, rather understand that striving for improved relations with the First People of British Columbia, while needed, is still slow by nature.

From time-to-time there will be slippage and risk when attempting new ideas or concepts and that it should be expected but not discouraging. It is important to learn from what has happened in the past in order to accept responsibility and move forward with new methods of understanding.

This is also an evolving process that will continue to grow and develop into new plans for improved relations; however, past experience dictates strongly that externally driven approaches are not successful and the top down process is ineffective. Collaboration is critical to success.

So long as the values of *respect*, *recognition* and *reconciliation* remain at the crux of a growing understanding, the principles of *trust*, *honesty* and *sustainability* that were brought forth in this session will be attainable.

Based on the concepts brought forth from the breakout sessions, the following are suggestions to guide the emerging relationship between the FIA-FSP, the First Nations Forestry Council and the First Nations communities of British Columbia:

- 1. A strong commitment to capacity building among First Nations communities that uses the culture among Traditional Knowledge keepers and Western Scientists as a framework and extends to protocols that protect cultural traditions, human resources, infrastructure, capital and research.*
- 2. The improvement of systemic experiences that promotes a common language that values cultural integrity as an important first step to improved relations among First Nations communities and the Forest Sciences Program.*
- 3. The Forest Science Program should consider redefining the ‘box’ that restricts the thinking of existing research models and expand to*

- consider a more holistic approach to learning about British Columbia's cultural resources.*
- 4. Improved communication between the First Nations Forestry Council, the First Nations Leadership Council and the Forest Investment Account-Forest Science Board by accepting a "closer to home approach" that seeks to engage at the community level would improve lines of accountability.*
 - 5. The promotion of innovative research that would see shared benefits to all stakeholders is a viable and measurable next step for both the Forest Science Program and the First Nations Forestry Council.*
 - 6. Finally, a clear understanding of what values best foster an environment for measurement whereby both parties could agree on what is working and what requires adjustment.*

Moving forward with an open mind and an open heart for the benefit of future generations.



APPENDIX 1: LIST of Speakers, Facilitators & Participants

SPEAKERS

Dave Porter, *First Nations Leadership Council*
Chief Lynda Price, *First Nations Forestry Council*
Dr. Bill Bourgeois, *Chairman of the Forest Science Board*
John Jules, *Kamloops Indian Band*
Dr. Charles Menzies, *University of British Columbia*
Lucheum (Arvid) Charlie, *Cowichan First Nation*

FACILITATORS

Dan George, *Four Directions Management Services Inc.*
Leo Hebert, *Four Directions Management Services Inc.*
Laurie Vaughn, *Four Directions Management Services Inc.*
Christie Stewart, *Jefferson Communications INT*

PARTICIPANTS

Aljam, Brenda	Mann, John
Armstrong, Michael	McNay, Scott
Atkinson, Andrea	Medves, Diane
Bain, Don	Nyce, Deanna
Banister, Kelly	O'Brian, Dan
Beaumont, Rod	Perreault, Pamela
Bellis, Tyler	Prescott, Cindy
Berch, Shannon	Sanchez, Jaime
Bird, Beverly	Simon, Linda
Boyd, Jeremy	Still, Gerry
Charlie, Lucheum (Arvid)	Sterms-Smith, Steve
Crampton, David	Stevenson, Marc
Collier, Russell	Tallio, Ivan
Hadley, Melissa	Tavitz, Art
Hogan, Gary	Teegee, Terry
Hunt, Gary	Trosper, Ronald
Innes, John	Ward, John
Locke, Monty	Wilhelm, Lana
Lorimer, Steve	Wolters, Katherine
Mackie, Jennifer	

APPENDIX 2: VERBATIM Break-Out Session Comments

Dialogue Session participants were randomly numbered off and grouped into one of three break-out groups. Each group was allotted the same amount of time to address each of the above four questions. Once the timeline had expired, each group shared with the plenary the findings of their discussions.

Below is a verbatim transcript of what was recorded in the sessions.

1. What values/principles are critical to the emerging relationship between Forestry Science Board and First Nations communities?

- ❖ industry/academia/government/ First Nations
- ❖ availability of information – preservation of information i.e.: non-timber forest products
- ❖ respect First Nations intellectual property
- ❖ First Nations include in set-up
- ❖ reforestation consideration, bio-diversity
- ❖ encompassing management
- ❖ better linkages between programs
- ❖ summer interns, First Nations (capacity development-mentoring)
- ❖ steering committee, local
- ❖ cultural community
- ❖ working together
- ❖ principle of trust
- ❖ compassion that some topics do not relate to First Nations
- ❖ traditional knowledge funding
- ❖ tenure on traditional usage, license granting First Nations
- ❖ respect of different perspectives
- ❖ fair decision-making models
- ❖ consider all aspects of culture
- ❖ continuous dialogue with Elders
- ❖ inclusion of language
- ❖ improve linkages among programs
- ❖ long term commitments
- ❖ frequent communications
- ❖ open process
- ❖ trust – must be impeccable
- ❖ earned and demonstrated through action
- ❖ connect actions to goals
- ❖ from top down, down get the message to the top
- ❖ capacity building
- ❖ intellectual property ‘belongs to our people’
- ❖ Elders knowledge
- ❖ confidentiality agreement
- ❖ copyrights
- ❖ agreed upon terminology before research
- ❖ protocols, understanding the first nation
- ❖ learning what the land management options will be
- ❖ transferable practices
- ❖ what does a research project offer to the community?
- ❖ revisit Forest Science Board 10 year strategy, ecological

- knowledge, traditional land use studies
- ❖ involve First nations in building upon strategy
 - ❖ involve first nations, forest science board defining recognizing terminology and understanding
 - ❖ solid working relationship
 - ❖ Forest Science Board should be accountable to how the relationship is progressing
 - ❖ understanding of each other's goals, vision, objectives
 - ❖ demonstrated acceptance of first nations title and rights
 - ❖ recognition of legal struggles, how will research affect first nations, provincially, regulations, negotiations and how will research affect negotiations
 - ❖ recognition of rights and title
 - ❖ acknowledgement of rights and title
 - ❖ acknowledge the traditional territory of people of the community
 - ❖ embrace change and try to move quickly
 - ❖ question are based on values
 - ❖ the projects reflect the value of the scientist
 - ❖ need to recognize that everything is connected
 - ❖ working in partnership with First Nations
 - ❖ meaningful relationship may not be achievable with existing structures
 - ❖ both parties come from very different background, need to understand what First Nations community issues, look at the whole culture
 - ❖ take the time to understand First Nations connection to the land -
- need long term vision take the time to understand
 - ❖ respect the power difference between government and First Nations - we need to come to grips on this issue – On whose terms?
 - ❖ patience with non-Native for First Nations to create a better understanding – i.e.: language may be offending is not meant
 - ❖ reconciliation of values
 - ❖ need to come to the forefront what questions need to be asked
 - ❖ be prepared to ask and answer the difficult and complex questions i.e.: a healthy land is healthy people - what type of questions should be asked?
 - ❖ be committed to a long term relationship – some projects may fail or have bumps – do not be discouraged
 - ❖ set the terms of engagement
 - ❖ this has to be negotiated if outcomes are to benefit all parties
 - ❖ science is based on research whereas First Nations are more spiritual – we must build trust
 - ❖ we need to be open in expectations for a new relationship, be bold and flirt
 - ❖ mutual recognition of the scope of the program and purposes. The driver of the program is not money only.
 - ❖ need to be clear of goals, priorities and values
 - ❖ always working on someone's agenda, we need to collaborate together for the best results

2. *What land and resources interests do you have?*

- ❖ all things communities are interested in
- ❖ prioritize according to the community
- ❖ traditional economics with regard to non timber forest products
- ❖ species list
- ❖ creeks/streams
- ❖ bio-diversity of land
- ❖ sustainability after harvest
- ❖ NTFP – non timber forest products
- ❖ research interests/priorities matching community interests
- ❖ priorities
- ❖ pruning
- ❖ working with the information
- ❖ problem solving
- ❖ time and its concept
- ❖ knowledge of home
- ❖ time with Elders using the language of any culture
- ❖ process and understand different perspectives
- ❖ timber
- ❖ non-timber consumptive and non-consumptive
- ❖ holistic, water, wildlife, socio-economic, cultural
- ❖ what can science do for us to restore our land and resources
- ❖ what defines property with regard to land/resources
- ❖ definitions of First Nations and non-First Nations
- ❖ everything must be taken care of
- ❖ healthy forest and a healthy forest sector with sustainable socio-economics, cultural people
- ❖ research, industry vs. community
- ❖ protection from other industry sectors – interests in mining, fishing, hunting and tourism
- ❖ more operational applicability
- ❖ develop template/framework that may be used
- ❖ anticipate
- ❖ research and write short and long term scenarios anticipating the impacts of MPB on traditional activities so communities can plan ahead
- ❖ water is key interest for First Nations
- ❖ how do we deal with non-timber forest product
- ❖ this topic does not fit into the existing FIA box
- ❖ how ecosystems work and fit together, so they can function
- ❖ soil is a forgotten resource and need to have a upward understanding
- ❖ to be one with the land
- ❖ to have recognition stewardship
- ❖ to have an ecological perspective – look at all relationship on the land
- ❖ what are accumulative impact of all forms of development on the land and people
- ❖ what are the most appropriate management practices and how do we know if we are successful
- ❖ what is the relationship between healthy land and people - how does it work , this question is key
- ❖ if I was to get into non-timber forest products, what do I need i.e.: methodology
- ❖ look at provincial process help or hinder this effect
- ❖ when we look at ecological system we need to look at the human role and influence; do not forget cultural relationship

- ❖ look at First Nations land use process, monitoring, implementation, training First Nations at community level, support
- ❖ resilient, how do study the ecological relationship – global impact
- ❖ US market will grow, how will this impact the forests/lands How will the global market impact us, recognition the research and development is needed
- ❖ all the land and resources are important to us – at Haida there is a need to explore new way to look at science and management
- ❖ sometimes there is a disconnect between the fieldwork and policy
- ❖ there are so many interests i.e.: medicine plants - Need ecosystem stewardship planning, what to avoid the money overruling other values. So we do not lose other values
- ❖ focus on synergies
- ❖ how do we create space and programs to address questions around ecological system, human relationships, resilience, human and environment relationships (social and culture capital)
- ❖ need the bigger broader questions asked to understand and to provide context for the more scientific reduction....information seek

3. *What is traditional knowledge?*

In order to consider this question in depth, one group decided to define what they thought Western Science was in relation to Traditional Knowledge.

Western Science

- ❖ evidence based
- ❖ quantitative
- ❖ timelines
- ❖ line of questioning
- ❖ objective based, goal orientated
- ❖ narrower scope of knowledge over a short period of time/science is incremental (viewed as expert)
- ❖ future orientated, innovative methods
- ❖ deconstruct and compartmentalize
- ❖ reactive

Traditional Knowledge

- ❖ evidence based
- ❖ experimental
- ❖ passed down
- ❖ oral stories

- ❖ based on longer collection of experience – First Nations not considered expert
- ❖ past
- ❖ more rounded
- ❖ contextual/connect to experience
- ❖ proactive
- ❖ practical
- ❖ knowledge of combining signs observation of nature to calculate and predict an event (frogs in the village)

Working Knowledge

- ❖ seek complementary/commonalities
- ❖ respect by decision making
- ❖ positive energy to merging science
- ❖ adaptive management

- ❖ future orientated (innovative method)
- ❖ method and practice may have similar result
- ❖ western science can positively contribute to understanding traditional knowledge
- ❖ traditional knowledge very valuable at local scale, combine to deal with multi-scale
- ❖ species etc... can be useful at global levels
- ❖ equal decision making powers
- ❖ increase knowledge of forestry (FRO/FRA) , license FN FIA funding
- ❖ live off the land
- ❖ cultural resource heritage
- ❖ developing meaningful relationships
- ❖ forest stewardship plans
- ❖ traditional economies
- ❖ clear definitions
- ❖ better connections between information and resources
- ❖ information protocols that consider First Nations
- ❖ representation
- ❖ begins with intent
- ❖ communal or group knowledge
- ❖ worldview, cosmology, spiritual, resources
- ❖ passed down
- ❖ evolving/changing
- ❖ exists now
- ❖ commitment to the future – 7 generation thinking
- ❖ our actions today affect our future
- ❖ problem with term traditional/ecological knowledge
- ❖ indigenous wisdom
- ❖ practical and necessary
- ❖ method of learning
- ❖ it is a way of doing and begin that is all encompassing
- ❖ not divided into data
- ❖ embedded into the system is intellectual property
- ❖ different people have the indigenous responsibility to keep and to share this knowledge
- ❖ methodology – important
- ❖ it is more than a collection of written facts
- ❖ connected to the language and concepts, values and principles
- ❖ voices of our ancestors, values and morality
- ❖ as researchers, we need to be aware of who the keepers of the traditional knowledge are
- ❖ it is not an accreditation, through university, on-going
- ❖ learning as you are doing, experiencing
- ❖ knowledge of experience
- ❖ values/principles
- ❖ responsibility to pass onto future generations to their equal benefit
- ❖ how do we acknowledge knowledge, beyond recognizing it
- ❖ investing in practicing, implementing this knowledge
- ❖ we need to teach our own people what traditional knowledge is
- ❖ who owns traditional knowledge
- ❖ a depiction of a particular nations values and lifestyle and belief
- ❖ a way of knowing
- ❖ based on practical experience that adapts to change
- ❖ associated with rights and responsibility
- ❖ key holders , knowledge of their land and area resources
- ❖ is important to define traditional knowledge so we can recognize it as a way of learning

- ❖ it is the past, present and future – encompasses communities and individuals
- ❖ shared memory of events
emphasis on group memory
complex relationship

4. *How can Traditional Knowledge and Western Science work together?*

- ❖ do we integrate or collaborate?
- ❖ where does science fit into traditional knowledge?
- ❖ acknowledging strengths, challenges, shortcomings in the context of what is important to each component
- ❖ it is already underway
- ❖ land management plans, strategic plans
- ❖ challenges, how government evaluates
- ❖ is FSB policy driven now?
- ❖ communication on the implementation of the FSP
- ❖ consultations not being effectively done
- ❖ fund more community based research
- ❖ not to be incorporated into the existing process
- ❖ establish shared goals and objectives
- ❖ mutual commitment and support over the short and long term
- ❖ recognize the variation in the land and resources as a way of understanding how that contributes to the supply values
- ❖ recognizing First Nations traditional and water stewards values/knowledge in the development and /or outcome of research
- ❖ ‘before we lose them’
- ❖ public and community education on outcomes to research ‘publicly’
- ❖ face-to-face youth
- ❖ ensure communication is appropriate
- ❖ room for dissenting viewpoints, recognition or scientific conflict
- ❖ recognizing the first national cultural use or purpose the resources, not just tree species
- ❖ moving beyond commodity
- ❖ non-timber forest products
- ❖ non-commercial values
- ❖ respect for spiritual values and support
- ❖ recognizing many types of expertise (elders, science, practitioners, title holders, custodians)
- ❖ traditional ecological knowledge is value based like western science
- ❖ everything should be done together, a ‘co-approach’ on the land
- ❖ traditional ecological knowledge is knowledge science is a process we are comparing apples to oranges
- ❖ traditional ecological knowledge is also a process , a way to integrate is for both parties to work together and learn both ways i.e.: berry picking, harvesting, another example is catch and release
- ❖ we need teachers to understand traditional ecological knowledge for cultural awareness, put into curriculum at the university
- ❖ need to start with education

- ❖ traditional ecological knowledge is a study over a long period of time – science is short, we should combine western science emerged from observation
- ❖ given equal weight and importance in all of our dealings
- ❖ need to design an appropriate institution for these 2 knowledge streams/value systems to work together since co-management is not working
- ❖ make western science research based on Aboriginal and First Nations resources interest vs. researcher pet rock – RESPECT