

EBMWG Workshop on Adaptive Management (AM02)
Partner Implementation Workshop Notes
July 19, 2007
SFU Harbour Centre

1. Introduction

- 1.1. The facilitator, Lee Failing, provided an overview of the workshop agenda and discussed the intent of the workshop. The purpose of the workshop is twofold: (1) to provide participants with information about adaptive management frameworks (AMF); and (2) to seek input and feedback from participants regarding the design of the adaptive management framework for the plan areas. The EBMWG will hold an AM technical workshop (in Fall 2007) that will address AM design issues, and key questions identified in this partner implementation workshop.
- 1.2. Short term interests versus longer term interests are another important consideration, and we need to think longer term with our objectives.
- 1.3. Lee's Flip chart notes recorded expectations for the workshop – this is a summary of the expectations:
 - Learn more about what AM is and how it can be applied;
 - Learn how to incorporate AM into the implementation of SLUPAs and First Nation agreements;
 - Hear input on AM from implementation partners;
 - Learn how AM fits in with the larger focus for EBM;
 - Learn how AM allows for creative solutions;
 - Learn how to make AM a reality, including the costs of implementing AM and how indicators can help;
 - Learn how AM fits in with social, cultural and economic elements;
 - Learn how to incorporate human well-being (HWB) into AM;
 - Learn reasons why AM has failed in other instances and apply the lessons learned to the Coast;
 - Learn how the concept of flexibility fits in with AM.

2. Participants

Participant	Affiliation
John Bolton	EBMWG, Heiltsuk First Nation
Bill Beese	SC ¹ , Western Forest Products
Kelly Brown	DSPs ² , Heiltsuk First Nation
Tavis McDonald	NCPIMC ³ , BC Timber Sales (BCTS)
Alex Grzybowski	EBMWG Director
Audrey Roburn	SC, Rainforest Solutions Project (RSP)

¹ AM02 Steering Committee

² Detailed Strategic Planning

³ North Coast Plan Implementation Monitoring Committee

Disclaimer

This report was commissioned by the Ecosystem-Based Management Working Group (EBM WG) to provide information to support full implementation of EBM. The conclusions and recommendations in this report are exclusively the authors', and may not reflect the values and opinions of EBM WG members.

Participant	Affiliation
Gord McGee	DSPs, Integrated Land Management Bureau (ILMB)
Amy Beetham	SC, Ministry of Forests and Range (MFR)
Ralph Matthews	EBMWG, Professor of Sociology, UBC
Steve Gordon	SC, Ministry of Environment (MOE)
Ray Pillman	CCPIMC ⁴
Lloyd Juhala	CCPIMC Chair
Darol Smith	NCPIMC Chair
Clifford White	NCPIMC, Chief Counsellor, Kitkatla First Nation
Dan Cardinall	LRF, NC First Nations communities
Hans Granander	CCPIMC
Neil Philcox	SC, Workshop coordinator, RSP
Dorthe Jakobsen	EBMWG, ILMB
Wally Eamer	LRF, Nanwakolas Council
Glen Dunsworth	EBMWG, CFCI consultant
Lee Failing	Workshop facilitator
Keeva Kehler	Planning Officer, ILMB
Cameron Brown	DSPs, Heiltsuk First Nation

3. Adaptive Management Framework (AMF) – see Lee’s presentation

3.1. Why do we need AM?

- If the emphasis is solely on management and there is low uncertainty, you can focus on conventional management. If the emphasis is on learning you can focus on research.
- AM comes in where uncertainty is high and there is a high emphasis on continuous learning.
- Issues of scale are important. There is a need to understand the application of AM at different scales.
- The importance of learning from past mistakes was noted. A positive aspect of AM is that the science is not frozen in time, but adapts to changing conditions.
- Possible alternatives to AM that were noted include:
 - the option of doing nothing;
 - the option of letting politicians make decisions for the plan area;
 - the option of using the precautionary approach.

3.2. When to apply it?

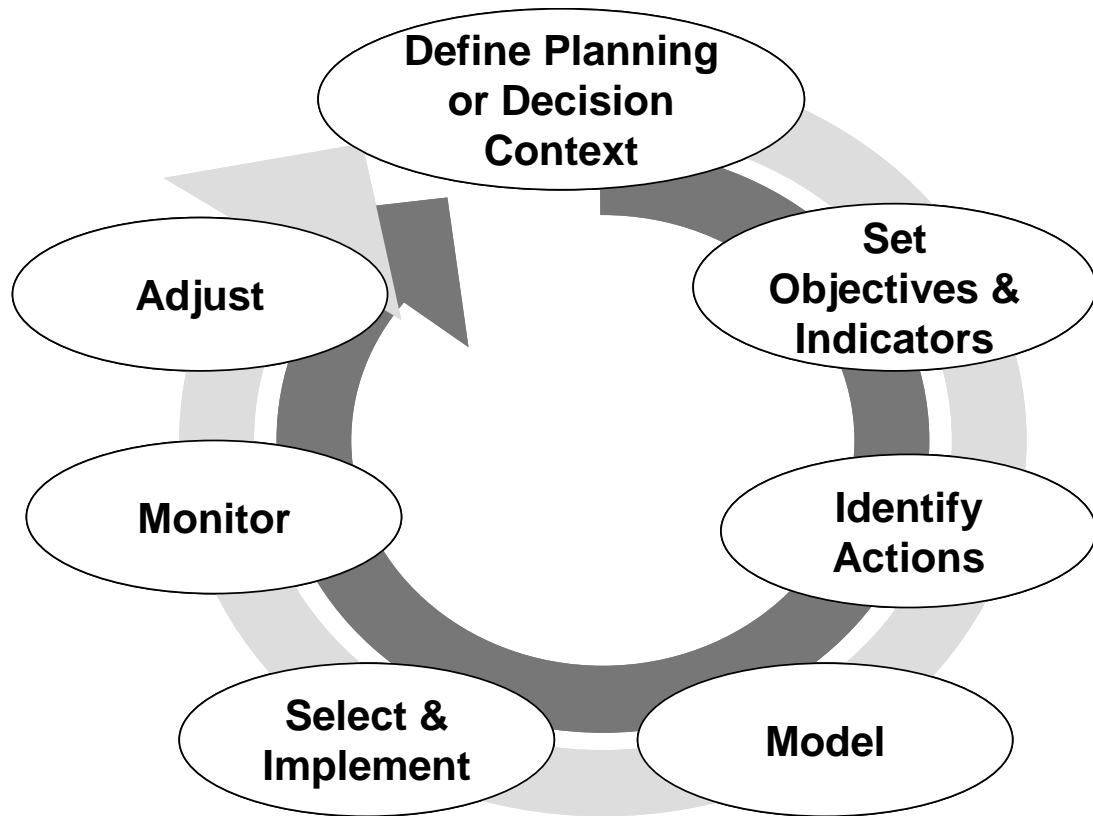
- It only makes sense to use AM when something will change as a result of a decision. Monitoring is important to reduce uncertainty over time. There must be institutional mechanisms to review decisions based on the results of monitoring.
- The importance of using people and studies from BC rather than outside BC and incorporating more local knowledge was discussed. It was acknowledged that there is room for both academics and local people to contribute knowledge. First Nations (FN) local traditional knowledge is key, and needs to be applied to an AMF.

⁴ Central Coast Plan Implementation Monitoring Committee

3.3. Adaptive Management:

Discussion:

- AM Definitions: Specific components of AM were discussed (see Lee's presentation):



- It was noted that structured learning occurs in AM. Learning is a means to an end. The end result is coming up with better management actions and implementing those on the ground. The importance of linking back to actions on the ground was highlighted.
- It was discussed that there are two types of AM: Passive and active AM. AM does not have to include experiments and when we are considering HWB, it is not possible, ethical or desirable to do experiments.
- It was suggested that people think about changing strategies rather than changing objectives.
- People should consider how effective an action was in affecting the objective. Was it the right objective to meet your targets? The distinction was made between implementation versus effectiveness monitoring.
- The broad goals entering into the AMF are to maintain ecological integrity (EI) and maintain/enhance HWB. These goals will likely not change but specific objectives may change over time.
- It was discussed that appropriate timelines in an AMF will vary based on scale, and specific objectives being monitored.

- Participants discussed whether there will be a triggering mechanism in the AMF. For example, with the issue of no net job losses, there needs to be something that triggers things right away so that people don't go out of business. Some items are more immediate and short term whereas others will be more long term.
- Participants acknowledged the importance of specifying the appropriate trigger and what exactly will happen when the trigger is pulled.
- It was pointed out that there are different terms and usages of AM.

3.4. Key Design issues:

Decisions and decision-making:

- It was noted that there are specific challenges to implement AM in an EBM context. It is a relatively new concept to incorporate human well-being. We are also dealing with a situation where some decisions are already made and there are some decisions yet to come.
- It is important to remain conscious of the multiple decision makers and the multiple scales at which AM will be implemented. The importance of using triggers properly so that information gets through those levels to the decision makers was stressed.
- It was noted that there is a difference between decision making and the generation of information.
- It was pointed out that land use decisions for the plan area are made at the G2G level.

Common language, usefulness and application of AMF:

- The intent of the workshop and the AMF project is to develop an AMF with common language, and a model that can be applied and adapted to meet different situations.
- It was noted that there are different views and perspectives between First Nation professionals and non-First Nation professionals. It was discussed that all partners in the process may think from different levels and have different perspectives. Some people are worried about losing jobs, but in some First Nation communities there are no jobs to lose. There is 75% unemployment in many communities at the moment. It was acknowledged that First Nations are approaching AM from a different viewpoint.
- Participants stated that it is important to make AM meaningful and useful for communities who will use the information.
- The participants stressed that the scale of planning is important.
- Participants discussed the importance of determining whose well-being we are talking about. Is it First Nations, non-FN, workers, non-area residents, companies, etc?

3.5. AM Framework: Straw Dog:

Discussion:

- The first step is to determine *who* will do *what* with the information you gather. This needs to be determined and specified up front. Multi-attribute objectives and indicators are important. Decision definitions are important. There will be different types of objectives; for example, legal objectives established by the Province, versus private sector objectives.
- EBMWG core track: The EBMWG is primarily responsible for looking at implementation of core agreements, and whether or not the agreement achieved specific objectives, in the context of the broader goals of maintaining EI and maintaining/enhancing HWB. Within

and AMF, implementation, effectiveness and validation monitoring are the means to track how we are doing.

- Non-core track: these include decisions made by communities, companies, etc
- It was pointed out that if someone makes decisions that undermine the effectiveness of the plan, monitoring will identify this discrepancy.
- It was acknowledged that there are insufficient resources to monitor every single element of all the plans and agreements. It was reiterated that structured learning is an important component of AM. It is important to have a good baseline. It is not possible to learn from just gathering information in isolation.
- It was mentioned that non-core track issues influence core track issues. Communities will have to adapt. Economic diversity is key to the success of many FN communities. Researchers who may be studying the area and making recommendations usually do not live in the communities and may not know what is needed to enhance HWB there. If we want FNs to buy into the recommendations it must fit with what is happening in FNs communities.
- Participants recognised that the G2G process has moved a lot of the non-core track issues into the core track. For example, HWB is specifically referenced in the agreements and now falls into the core AMF. This enhances the complexity and requires us to monitor and track HWB.
- Participants stated that they hope AM puts in place criteria that will lend themselves to AM for specific questions where there is high uncertainty and relevance. AMF does not have to be layered on everything. But AMF can have criteria around how to choose the appropriate questions to answer.

3.6. Planning Context:

- What to do at the planning stage was discussed. There is a need to consider what the decision making process is and who needs to be involved.
- It was noted that learning only has value if something is going to change. It was recommended that people be specific about what they are going to achieve with AMF.
- It was acknowledged that success is based on buy-in and what improves on the ground at the end of the day.
- Within an AMF, change statements are developed at the outset. LRMP and G2G decisions are key to the EBMWG's mandate. What range of actions should be considered? Participants considered whether to focus only land use decisions or include other non land use plan (LUP) issues related. It was recognised that HWB issues are affected by more than just LUPs.
- There are a number of products that will support the AMF, including the EBMWG's LUP summary (AM01), a decision matrix, generating change statements around who, what, when.
- EBMWG will be involved in a detailed design of the AMF over next 6 months.
- It was discussed that the steps within the AMF design should be applicable to all EBM issues, G2G agreements, and specific questions of high current concern. How rigorous the analysis done depends on the specific questions being asked. There is a need to prioritise monitoring actions and focus on some areas initially.

- Participants discussed developing a practical AMF suitable for application to a range of issues. The LRF can decide where to apply it. Two options were identified:
 - Design a tool that can be used in a number of ways or;
 - Design an AMF that intentionally addresses agreements and plans as they exist today and focuses on issues that are most amenable to AM within these agreements and plans.
- *Monitoring*: It was acknowledged that AMF plays into the wider range of monitoring. Participants stressed the importance of designing something that the LRF and FNs would find most useful?
- Some participants stated that there needs to be a rigorous generic system. Participants discussed whether it is preferable to have good results on few issues over the next few years rather than lots of watered down information that is less useful. There may well be issues that are not under the G2G agreements – potentially issues that are in the private company realm – AMF needs to address both government and non-government issues.
- *Communication*: Participants discussed the importance of effective communication and networking. The message must be clear, and the rationale is important. It is important to explain the rationale, and the reasons why these things are expected of FNs. There is a need to clearly communicate the goals to FNs. It was recommended that the EBMWG try to get more FN people working in the LUP workshops and groups.
- *Strategic approach to all sectors*: It was stated that the EBMWG meetings tend to focus on forestry. It was noted that there are many other sectors to consider. There was discussion that EBM needs to apply AM in all those sectors. A strategic approach is needed to streamline the issues that will be tracked for AM. It was stressed that the EBMWG should not lose track of the other sectors that need scientific solutions to provide certainty for communities.
- It was acknowledged that AM is an umbrella that many projects will fit into. The EBMWG's role will be to synthesize and prioritise what fits well into a rigorous AM process. The EBMWG intends to design an AMF, and a related suite of tools based on the best available information. The AMF and related tools should be available and usable by all implementation partners.
- *Decision-making*: It was clarified that the EBMWG does not make decisions, but provides information to the LRF and makes recommendations on that information when appropriate.
- The AM planning framework incorporates a number of steps that should always be done. It is desirable to take an adaptive approach to managing and making decisions rather than doing AM for some things and not for others. Strengthening the link to the decision is key.

3.7. Set Objectives and Indicators:

Discussion:

- Objectives are set by existing agreements, and the LRF. AM indicators will be recommended by the EBMWG. The intent is to develop a common language across the plan area, which will help provide information at different scales.
- Explicit objectives are key. AMF informs decision-makers but cannot make decisions and/ or solve conflicts.

- It is important that stakeholders buy into the AMF and recommended indicators. It was discussed that people need to feel that their input is listened to and is meaningful so that they buy in to the process.
- It was acknowledged that LRMP objectives are set, and in some cases indicators are too. It was clarified that the intent is not to amend these objectives at the outset.
- For new situations/decisions that will come in the future, new objectives will be set. It is important to consider who needs to be involved in setting those objectives, and who provides input into developing indicators. The steps are the same in both processes.
- LUP has all of these decisions, objectives, etc summarised.
- *Potential pilot project opportunity*: An example of where AM can be used in practice was discussed. Some FNs are looking to vary some of their Land Use Objectives (LUOs) in one particular landscape unit without impacting species. Comparing the landscape unit where changes are made to the rest of the landscape units where changes are not made fits well into an active AM project. Objectives can be made clear and you can track what is happening with the two sets of LUOs – there is a base case and test case.
- It was acknowledged that all elements of the plan can be examined through an AM lens, but detailed monitoring will only apply to some components.
- See slides 25 and 26 for concept maps for objectives and indicators from the LUP summary.
- It was stated that the end goal is to create a common understanding among diverse groups, so that we can all work together to achieve common goals. At some point all implementation groups have to decide what AMF to adopt.
- Some participants expressed that it was more important for individual groups to decide what AM means to them. No one party can dictate what AM means to someone else. It is not possible to determine a clear definition that everyone can agree to.
- It was pointed out that AM is a process for deciding on what the appropriate indicators are for measuring particular objectives. The question is who sets the objectives and indicators. Some of these are determined by G2G and SLUPAs.
- It was clarified that AM is a core component of EBM and is key to making EBM happen over the long term at multiple scales.
- See slide 27 – key design considerations
- Slide 28, 29 – actions
- Participants expressed the importance of doing due diligence before designing experiments to ensure there is no duplication of research.
- See Slide 33 – modelling stage- sometimes simple models are just as useful as more complicated ones.
- It was stated that hypotheses are more explicit for EI but less so for HWB.
- The Babine watershed monitoring project was cited as a good example of AM.
- Slide 35 – designing the model – baseline study for indicators
- Slide 36 – select and implement – AM provides information on the consequences of alternatives – uncertainty still exists. AM does not make decisions, but provides information to help decision-makers make the best possible decision
- AM is not going to tell people what to do, it will simply provide information.

- Slide 45 – key success factors. Leadership and partnerships; early and systematic stakeholder involvement; good and relevant science; explicit objectives; constructive approach to trade offs; explicit hypotheses; long term commitment.

4. Examples of AM in action

4.1. Bill Beese, Western Forest Products (WFP): Variable retention (EI) – see slide show presentation

Discussion:

- In the case of WFP, HWB is simplified into company well-being and worker well-being.
- *Costs:* Smaller operators would have difficulty doing this kind of AM project without partnerships. It is important not to reinvent the wheel and to draw on knowledge and research that others are doing. Where possible, tie in with government initiatives, FRPA monitoring, FIA, etc. Collaboration with others can reduce duplication of efforts.
- When the AM framework is built, you can reduce costs with future projects by using the same model.
- *Coordination of efforts:* Participants discussed the challenges of managing AM in a coherent way. Would the EBMWG take a coordinating lead, or would individual companies be responsible? There is some flexibility with the LUOs and the requirements are relevant to AMF.
- It was agreed that some issues will have to go G2G, and others will have to be done outside of government. There are non-regulatory company and business issues. An AM model will have to capture both elements to be useful.
- *Monitoring:* Participants discussed that some projects will be well suited to community monitoring and management – a project lead could be identified right in the community. There are economic benefits of the activity to the community. Where possible, the AM project could utilise people who are already there. This will minimise transportation costs, engage people in productive and interesting activities, build capacity in the communities, and bring local traditional knowledge to the project, while building the scientific knowledge of local participants.
- More information on this case study will be available in a book which should be published shortly. It was suggested that participants look at the UBC Biodiversity in BC Industry for the Weyerhaeuser example.

ACTION: Bill to provide a link to the information on the website

4.2. Neil Philcox, RSP: HWB example – Quality of life (QoL) Community Plan: City of Prince Rupert – see slide show presentation

Discussion:

- HWB component is a relatively new concept for AM.
- Gord Howie, City Manager of Prince Rupert is a great resource for additional information on the QoL Community Plan. Participants can also see the City's website for more details: http://www.princerupert.ca/page.php?id_page=138&id_section=4
- *Monitoring results:* Participants discussed the challenge that arises when there are differences between quantitative statistical information, and community perceptions of HWB.

- It was acknowledged that this is a critical area that needs attention. The importance of perception in evaluation of success/ failure was recognised. Some criteria/indicators are easier to quantify; for example, how many trails were restored? Does this enhance the perception of well-being? This is a more qualitative question and statistics might not reflect the right thing – perception may be that the new trails are substandard and not used; therefore, recreation opportunity and HWB are not necessarily improved.
- The importance of starting with the community's perceptions was reiterated. AM experts can develop all the indicators they want, but they have to be perceived as important in the community. It was recognised that it is important to ask communities what significant indicators they want monitored.
- Participants discussed the challenges of predicting what is important to a community. Academic studies might indicate one thing, but a community may vote for the opposite.
- *Links to EBM*: It was noted that elements of the QoL Community Plan have weak linkages to what existing LUP agreements can do in terms of economic and environmental objectives.
- It was acknowledged that the interrelatedness of many HWB issues, make it tough to cherry pick because there are so many linkages that affect and influence well-being; for example, you cannot eliminate health from the picture.
- Participants considered whether EBM governance bodies need to incorporate the whole big picture of HWB or only address the land use elements.
- Participants considered whether the AMF is a planning framework or a more focused model designed to answer specific questions. AM steps should be designed to integrate easily into a planning process.
- Some participants favoured a focused AMF approach that is narrow in scope and allows us to get good quality information. It was agreed that staying more focused will help in achieving some goals. There is a need to investigate how the LUP elements can help achieve the goals. It is important to prioritise where efforts are focused and see where some positive impact can be generated.

5. Feedback and input

5.1. Next steps being planned by the EBMWG:

- Technical workshop scheduled for Fall 2007
- Fall/Winter 2007 – follow-up with implementation partners
- Winter 2007/08 – review of the detailed design of framework
- Review of reports
- Participation on steering committees

5.2. Technical workshop:

- Participation at the technical workshop needs to be limited to a small group to maximize its effectiveness. Participants expressed that consideration should be given for observers and designated points for comments.
- When choosing technical participants, it was suggested that the EBMWG focus on finding BC residents, with expertise in both HWB and EI and institutional expertise and experience.

- It was acknowledged that special expertise does come into the design of a framework. Local people may be able to identify design flaws in the framework. The EBMWG is mindful of making the AMF useful to the First Nations and plan area residents. The EBMWG has reps for FN communities that sit at the table. EBMWG needs to approach the AM mandate in a way that ensures that plan area residents buy in and use the AMF.
- It is important to include FN participants with relevant cultural and traditional knowledge of the plan areas.
- It was recognised that there are different categories of expert input, such as how do you design an AMF as opposed to how to then fill in the content (i.e. FNs cultural information, etc.). More than one technical workshop may be needed.
- It was confirmed that the EBMWG expects a deliverable on the AMF to be in by December, 2007.
- *EBMWG and PIMC Roles:* Participants discussed the potential overlap between PIMC and EBMWG roles. It was suggested that the distinction be made between implementation monitoring (PIMCs), and effectiveness and validation monitoring (EBMWG).
- *Recommended AMF content:* It was suggested that the EBMWG take the existing agreements and ask experts to inform us what objectives within those are most amenable to an AM approach in terms of effectiveness, passive and active AM.
- It was recognised that opportunities for partnerships exist in building and applying tools – e.g. AM monitoring tool as a pilot with a community.
- It was reiterated that the most important stakeholders are the people who live in the plan area, the large majority of which are First Nations. It is crucial to have them involved in the design of the AMF. They know what the local issues and indicators should be. You cannot use external experts to dictate what the framework should look like. It was agreed that First Nations can be involved in many steps – designing the AMF, then filling in blanks, and prioritising monitoring projects.
- The need to build in a triggering mechanism was stressed.

ACTION: The Steering Committee will circulate the list of potential participants for the technical workshop. You are welcome to suggest additional participants to be considered for the technical workshop.

5.3. Brainstorming on AM issues:

Design Issues:

- *Governance arrangements:* There are institutional arrangements (collaborative governance arrangements) and existing initiatives to work with. It was suggested that the EBMWG build a decision matrix that identifies which decisions have a collaborative framework - e.g. LUOs are cumbersome and tough to change if something is not working. Consider efficient mechanisms for change that will allow decision-makers to react quickly to changing conditions. Consider what triggers a review of existing state.
- It was considered important to think about linkages to the other EBMWG projects and establish explicit connections to ecological and HWB baselines in the AMF design.
- The PIMCs' role and how agencies interact need to be explicit in the design to take it from a conceptual to a practical model. The AMF must be user friendly and adaptive.

Some elements should be developed from the bottom up and some may come from the top down.

- *Successful buy-in at community level:* Participants reiterated that trust is a big issue and the design must facilitate stakeholder buy-in to be successful. There are issues with respect to long term stability within high turnover setting in organisations (FN communities and Province). The AMF must have low barriers to its use. It must be useful for informing both government and private decisions and it must be low cost.
- References to plan objectives, legal objectives and management consideration should be made explicit in the design. Examples should come from the plan area specifically for clarity.
- Explicit reference to a process for political buy in and leadership commitment must be included in the AMF design (decision-makers need to support the AMF as a tool.)
- Design needs to be able to incorporate retrospective studies such as Clayoquot.
- AMF has to be designed to serve the end users. Creating linkage to the things that DSPs and SLUPAs are doing, actions they are doing, questions they are raising, representation in Protected Areas (PAs), regulatory reserves, retention systems, focal species/ endangered habitat protection, etc. Address the uncertainties about these and design the AMF around each of these questions.
- It was strongly recommended that the EBMWG/AMF design team sit with FN in their communities and get a list of questions they want answered. That will filter back to experts for the design. Using a bottom up process to define questions is necessary to get buy in. FNs have their own ideas on what AM will be, and it may differ from territory to territory.
- Participants want to see an AMF design that creates value for full EBM decisions that need to be made by March 09.
- Participants want the AMF to speak to the integration of geographic and temporal scales.
- When designing the AMF, it was suggested that capacity issues and funding concerns be considered. These are a barrier for effective participation and consultation.
- Funding support has to be there. Who will pay for AM?
- Who decides which items are included in the core track of AM?

5.4. Roles and responsibilities:

- Participants discussed the separation and coordination of roles for the PIMCs and the EBMWG. It was suggested that the PIMCs have a role to monitor work done by all groups. Participants discussed the distinction between the roles between implementation monitoring, which is a role of PIMCs, and effectiveness and validation monitoring, which is role of the EBMWG. The coordination role is important, and it is currently being done by the EBMWG. It was recognised that different forms of monitoring need to be coordinated.
- It was stated that the PIMCs should play a role in determining what is effective or not. The PIMCs represent people who are affected by the decisions. The PIMCs make recommendations and comment on effectiveness monitoring reports.
- Some PIMC members stated that they should be involved in providing alternatives to the LRFs where appropriate.

- Both PIMCs and EBMWG should retain their ability to report directly to the LRF. It was stated that the EBMWG should continue to report directly to the LRF (i.e. not have to vet anything through the PIMCs, as suggested).
- The participants stressed that the interrelationship between the PIMC and EBMWG is centred on trust. There was an acknowledgement that some people do not trust the EBMWG because they feel it is the same as the Coast Information Team (CIT).
- The importance of forming a collaborative relationship between the two groups, and a sense of partnership was stressed.
- It was suggested that members of the PIMCs be able to participate on steering committees where appropriate, and where invited by the EBMWG steering committee members. It was recognised that the PIMCs have expertise and capacity to help EBMWG on specific items, such as tourism, FN, recreation, local government.
- The EBMWG will generate information that goes to the LRF. The PIMCs will discuss and make recommendations to the LRF on socio-economic/environmental issues. The EBMWG does not debate social choice of implementing decisions.

5.5. Priorities:

- It was recommended that the implementation partners focus on those issues with the largest potential for impact.
- Participants stressed that it is important to identify the connection between socio-economic consequences and practice standards that are being established. There is a need to consider a range of timber values when implementing practice standards.
- Participants stated that there needs to be guidance on the flexibility standards and clear criteria set for what makes a cut block ‘uneconomic.’
- Participants expressed a desire to obtain more specific direction on LUOs and their application – policy questions will arise.
- Participants wanted to consider whether the LUOs should be changed through AM processes.

5.6. Specific Recommendations from participants for the next steps:

- Someone from the plan area should be on the expert design team
- First Nations should be involved in the AMF design
- Implementation partners should be involved in prioritising monitoring projects
- Identify priority issues for consideration
- Clarify roles and responsibilities
- Build in a triggering mechanism to the AMF

“All roads lead to the communities” – engaging communities is key for buy in, success and participation.