

**DEPARTMENT OF FISHERIES AND OCEANS
WILD SALMON POLICY FORUM
MARCH 27 - 28, 2008
RICHMOND**

DAY 1

This community dialogue session was held March 27 - 28, 2008, in Richmond, B.C. It was an integrated session bringing First Nations and multi-interest participants together. The draft agenda for the Richmond session is provided in Appendix I.

This report presents the input from participants as it was provided and as it was synthesized on-site by the facilitator. It does not analyze material.

PROCESS OVERVIEW

The Department of Fisheries and Oceans Canada (DFO), Pacific Region, organized the Wild Salmon Policy (WSP) Forum to provide an opportunity for First Nations, stakeholders and the public to come together, obtain information on progress of key strategies put in place for the WSP, and to provide feedback on ways to collaborate on the next phase of WSP.

Chris Corrigan provided facilitation services for both days of the forum. Day 1 began with an Opening Prayer and a welcome from Jewel Thomas, Elder of the Musqueam First Nation on whose traditional territory the dialogue was taking place. Paul Sprout, Regional Director General of DFO Pacific Region, provided some opening remarks to the forum. After an overview of the agenda, there was an overview presentation on Wild Salmon Policy Development and Work Plan for Implementation. The day proceeded with presentations on Strategy One: Standardized Monitoring of Wild Salmon Status, Strategy Two: Assessment of Habitat Status, and Strategy 3, Inclusion of Eco System Values and Monitoring. Presentations were followed by question and answer periods and break-out sessions which gave participants an opportunity to respond to questions related to each strategy.

After a recap of the previous day's proceedings, Day 2 began with a presentation by the David Suzuki Foundation on Integrated Planning and WSP. DFO then provided an update on Strategy Four: Strategic Integrated Planning, which was then followed by an opportunity for questions and answers.

DAY 1

--- MEETING COMMENCED at 9:00 a.m.

OPENING COMMENTS BY PAUL SPROUT

I want to welcome you here to the workshop. I want to acknowledge that we are holding this meeting on the claimed territory of the Musquem, and I very much appreciate the opening prayer, thank you, for that start.

Over the next two days we are going to talk about our progress on the implementation of the Wild Salmon Policy and talk about the development of the work plan for work that is yet to be done and needs to be accomplished to fully implement the policy.

In reflecting on this, though, I can't help but be struck by a little bit of history on this policy. This policy is roughly 3-years old. So, in 2005, we adopted the policy. It has been a long journey, or it was a long journey in actually developing and putting the policy in place in 2005. There were a number of starts and probably more importantly stops. But ultimately, we did create and draft a new policy and it did get put in place in 2005.

Since 2005, this department, along with the support of many others, many of whom are in this room today, have been involved in the implementation of the key strategies that we are going to talk about over the course of the next day and a half or two days.

I want to acknowledge this work, because work has been accomplished on all four key strategies: the identification of conservation units, habitat indicators, discussions on integrated planning processes. I want to acknowledge the work of the department staff, particularly the Science Branch, our habitat and fishery managers, our policy individuals, but more particularly I also want to speak to the support that we have had from a number of different groups and organizations – environmental organizations, recreational groups, commercial groups, and First Nations.

Everybody cares about Pacific salmon and everybody has been interested in trying to advance the implementation of this policy.

Now in thinking about this workshop over the next day and a half, there is one thing that I want to emphasize. Yes, we have made progress, and yes, we have work yet to be done and we will be discussing both of these aspects over the next day and a half. But one of the things that we want to emphasize over the next day and a half is the spirit of how we arrived at this policy in the first place.

This policy was developed through a process of engagement that involves First Nations and other interests over a long period of time. It is based on the collaborative approach, and there are a number of exchanges and interactions

that produced the policy and there will be a number of exchanges and interactions that will allow us to continue its implementation.

This collaboration is a crucial feature of the follow-up on the policy.

And so I want to conclude with this observation: I know in a room like this I can be sure of two things. There will be a wide variety of opinions and goals of individuals and they will often diverge. There will be one common value that will be shared by everybody in this room: we all care about Pacific wild salmon, and that is the basis of why we are here today, and that is what we must concentrate on over the next day and a half as we think about our progress on the implementation of this policy and the work that needs to be done still.

With that, thank you very much for your attendance. I look forward to your input over the next day and a half as we reflect on the further steps of implementing this policy. Thank you.

PRESENTATION

REVIEW OF WILD SALMON POLICY DEVELOPMENT AND WORK PLAN FOR IMPLEMENTATION:

Mark Saunders, Special Advisor for the Wild Salmon Policy, noted the key messages heard at the last forum in 2005. He laid out the objectives of his presentation as noted below:

- Receive information on current status of Wild Salmon Policy implementation;
- Provide input on implementation;
- Contribute to identifying key next steps and areas of collaboration.

Key areas discussed in the presentation are as follows:

- Next stages will involve partners;
- Communication/consultation has improved;
- Habitat monitoring;
- Continuing the dialogue;
- Implementation of strategies;
- Progress;
- Moving forward;
- Salmon conservation units;
- Governance and strategy;
- Linkages to PICFI;
- Next Steps.

A couple of questions were raised during the question and answer period. Some key themes resulting from this session are noted below:

- What is DFO's definition of wild salmon?
- Given that wild salmon is "native born" in oceans of B.C., is native salmon the same as wild salmon?

PRESENTATION

REVIEW OF STRATEGY 1 – STANDARDIZED MONITORING OF WILD SALMON STATUS

Dr. Brian Riddell, Science Branch, DFO, introduced the various components included in Strategy One. In terms of conservation, he sought confirmation from communities whether it reflected community understanding of what people are trying to conserve in local areas. To this end, he indicated feedback is always welcome.

His overview highlighted the following topics:

- Differences of opinion - does this impact salmon?
- Communication is a major task;
- Development of benchmarks; related challenges;
- Policy - precautionary approaches;
- Technical process; development of common tools/guidelines to define benchmarks;
- Consistency - stock assessment program;
- Flexibility in approach to manage different conservation units (CUs);
- Next steps - develop assessment framework, monitoring program, decision making and planning;
- Data centre;
- Governance of strategies 1, 2, and 3. More progress on strategy 4.

CONSERVATION UNITS

Dr. Blair Holtby, Science Branch, DFO stated that the Wild Salmon Policy must address actions taken under the policy and noted that conserving diversity is the goal. The actions taken must preserve pattern and process.

The power point presentation encapsulated the many aspects considered which relate to conservation units including the following key topics:

- Various aspects of natural recolonization; timeframes;
- Adaptive zones; marine adaptive zones; joint adaptive zones;
- Joint adaptive zones are areas where salmon adapt in a similar fashion; these help define CUs;
- Method to steps - ecoecotypology;
- Two-step method; results;
- Cline - a gradual variation over space and time; related issues;
- Temporal diversity;
- Integrating transplants;
- Description of different types of specie conservation units;
- River type sockeye/Lake type sockeye.

ASSESSING STATUS OF CONSERVATION UNITS

Dr. Carrie Holt, from DFO Science, presented on developing benchmarks to assess the status of conservation units. The presentation touched upon the indicators of status such as spawner abundance, the importance of distribution of spawners, and described five challenges in implementation and the respective approaches to same.

A discussion paper included in the participants' packages on identifying multiple indicators of status was also referenced.

In conclusion, next steps are to identify biological benchmarks, evaluate risk tolerance, and to combine indicators in a stock assessment framework.

QUESTIONS AND ANSWERS

Participants were given an opportunity to ask questions of clarification and to have them responded to. A list of key themes resulting from this portion of the forum is noted below:

- Re smolt assessment - noted that production from escapement is missing from data presented;
- Not clear in presentation when conservation unit (CU) has major salmon run coupled with endangered runs? How do you separate the two?
- How do you separate endangered run from abundant run without conservation?
- Clarify "traffic like approach" to benchmarking CUs
- 8,100 population or spawning sites? (A: spawning sites)
- Re monitor returning salmon and smolts that are leaving is there targeted funding for that? Comment on traffic light approach: what if you look at conservation unit.
- How will priorities be set on CUs?
- Why are we doing this if we aren't funding returning salmon or smolts that are leaving?
- Where/when inclusion of TEK?
- What are characteristics of differentiation between wild and enhanced runs?

SMALL GROUP DISCUSSION

In the small group discussion the participants were asked to consider two questions:

1. *What is the best way to inform and engage people in this work on CUs?*
2. *What are the opportunities for partnership on the development of benchmarks and to them?*

WRITTEN REPORT BACKS

The participants were asked to provide their written responses to the two questions asked (noted above). Their responses are attached as Appendix 2.

PRESENTATION

REVIEW OF STRATEGY 2 - ASSESSMENT OF HABITAT STATUS

The objectives of this presentation were twofold: 1. to gain a common understanding of the progress to date; and 2. to identify tangible areas of collaboration.

The other areas of discussion are noted below:

- A brief recap of the approach taken to implementation;
- Potential indicators determined by working group; methodology;
- Examples of indicators and benchmarks presented;
- Pilot approach to Lower Thompson Coho CU;
- Watershed statistics; how to prioritize watersheds;
- Analysis of pilots;
- Next Steps;
- Progress to date;
- Framework questions;
- Policy flexibility;
- How to make program broaden out;
- Collaborative opportunities.

QUESTIONS AND ANSWERS

The participants were given an opportunity to ask questions of clarification. The questions asked are noted below:

- Has DFO reversed their policy accepting water as critical habitat?
- Pollution in streams/rivers - public input: why bother to gather information when DFO has no intention of doing anything about the findings related to pollution?
- What is DFO going to do for habitat?
- Comment on slide 15 - Need list of all parameters on all streams to be useful;
- Heiltsuk: When are you going to spend some money to find out what is going on in the coastal river system? Need to focus on coastal areas, not just Fraser and Skeena river systems.
- Heiltsuk: How are CUs being developed to make sure the coastal communities have economic opportunities?
- Want to see WSP that helps everyone;
- Namgis: hasn't seen or heard DFO returning to First Nations communities and confirming what First Nations have said; More consultation with First Nations and a more iterative process;
- Namgis: Conservation - why are First Nations not allowed to fish for food when sporties continue to fish?
- Where/what is impact of fishing derbies?
- What is the intended purpose of developing and implementing accounting of habitat in fish project registry?

- Is there any correlation between CUs and traditional boundaries of First Nations?
- Why isn't there a pilot project for Broughton? Need to consider aquaculture impacts on conservation
- What is the definition of "sentinel" stream?
- Need to assess past habitat restoration work first before moving ahead with this work
- Do they study impacts to habitat from man made reservoirs such as Nechako?
- DFO doesn't provide reports to Prince George;
- Do you consider headwaters for Nass, Skeena, and Finlay?

SMALL GROUP DISCUSSION

In the small group discussion the participants were asked to consider two questions:

- 1. How should we select the sentinel streams for monitoring habitat indicators in a conservation unit?*
- 2. How should we best be guided by local knowledge/expert opinion in selection of watershed specific indicators*

WRITTEN REPORT BACKS

The participants were invited to provide their written responses to the two questions asked (noted above) and their responses are attached as Appendix 3.

PARTICIPANT FEEDBACK

Key points conveyed during the participant feedback session are highlighted below:

- Re selecting sentinel stream: Select streams that can be fixed. Get out of Skeena and Fraser. Ask local experts not scientists. Spend less money on white biologists and more on First Nations. Look at historical data: where is work in areas like Smith inlet? Need better feedback to collectors of data, DFO should do better job of crafting information, and find out where information is being used;
- Scientists get paid for their expertise; First Nations get a thank you;
- Caution about putting money into habitat restoration. Rationale is that in the past a lot more harm than good was done. Look at historical cases and see if fish are being produced;

--- LUNCH BREAK (12:44)

PRESENTATION

REVIEW OF STRATEGY 3 - INCLUSION OF ECOSYSTEM VALUES AND MONITORING

Dr. Kim Hyatt, Science Branch, Department of Fisheries and Oceans presented on ecosystem based management including indicators and end points as an initial starting point with which to develop an ecosystem based monitoring framework. This segment of the strategy was incorporated at the insistence of First Nations and other stakeholders in 2005. The objective is to identify: the origin and intent of eco-based management elements of the WSP, priorities for development of an ecosystem based management monitoring framework, and next steps. Reporting out to stakeholders and First Nations was also addressed.

In conclusion, Dr. Hyatt noted the importance of redefining things that don't work and to define new elements. In the end, Dr. Hyatt noted a white paper will be written on ecosystem based management options for wild salmon which will be submitted for peer review. Consultation outputs with sectors and public will form part of that paper.

Questions offered for consideration:

- Are we on the right track with respect to the process and content adopted to develop an EBM framework for salmon?
- How should DFO prioritize development of a framework associated with alternate areas of interest and managed activities? Should we do all of the sectoral development in parallel? Should we tackle one first?
- Do protected species areas and processes all warrant equal attention?
- Should we develop EBM objectives for specific sectors and sequence in parallel;
- To what extent should we consider salmon and ecosystem impacts of global regional climate change?

QUESTIONS/COMMENTS

The participants were given an opportunity to ask questions of clarification. The questions asked are as follows:

- Habitat did lots of work in Fraser on Coho which was forgotten about. Pilot that might wake up DFO and world is to look at lower mainland and look at impacts of d
- No mention of DFO work being done on eco system science in Strait of Georgia have you omitted because you think it's irrelevant or for other reasons?
- Snuneymuxw - concern that smolts being released from Nanaimo hatchery are larger than natural stock of Nanaimo River which introduces predator into river system before minnows get to sea. Have not seen any increase in salmon despite the millions of smolts being released by hatchery.

- Namgis - clarification sought about what a white paper is; concern expressed that animals are more protected than First Nation in that First Nation had to go without sockeye this past year; concern that DFO is not listening and is not hearing what First Nations are saying; concern only Skeena and Fraser rivers are being looked at by DFO.
- Heiltsuk - DFO has shameful history of managing wild salmon as evidenced by loss of huge runs that used to go to Bella Coola, Rivers Inlet, and Smith Inlet, now problem in Broughten Archipelago, this past summer 250 tonnes of salmon died. Salmon farms threaten wild salmon so how can DFO enforce WSP when they promote fish farms?

--- MEETING RECESSED at 2:46 p.m.

--- MEETING RESUMED at 3:15 p.m.

DISCUSSION QUESTIONS:

1. *Do we appear to be on the "right track" with respect to the process and content that we are taking to develop an ecosystems-based management (EBM) framework for wild salmon? What do you like about process? What else is needed for this process?*
2. *Who should our partners be towards the development of an EBM framework? What resources should DFO and its partners bring to this enterprise?*

PLENARY DISCUSSION ON QUESTIONS

Key themes from the responses to the above-noted questions are as follows:

Question 1:

- On the right track, if salmon go will bears and trees go too? Don't get carried away with EBM; should be people-based process
- One has to be careful not to get stuck in process; don't need to understand everything about a car to change tire;
- Understand managing;
- Need to focus more on whole eco system;
- Need to include climate change in EBM;
- May be shifting base line syndrome; situation may be different than in the past - need to be precautionary in approach;

Question 2:

- Partner with preservationists; wildlife groups, etc.
- Some animals in EBM process need culling or enhancement; people eliminated;
- Use existing colorations bring in other partners such as municipalities;
- Partners should be First Nations, stream keepers, forest companies;
- DFO should bring money and scientific knowledge;
- Province, Forestry, Regional representative not in room; could be clearer if they were here re partners

The participants were invited to provide their written responses to the two questions asked (noted above) and their responses to the Questions are attached as Appendix 4.

CLOSING COMMENTS

Mark Saunders thanked the diverse audience for their patience and input throughout the day. He recapped the concern he heard that people throughout the entire province and the Yukon must be engaged in these discussions and confirmed there is much to deal with in moving forward. He also heard that while details are being worked on Rome is burning.

On Day Two they will discuss what is being heard back.

(CLOSING PRAYER)

DAY 2

--- MEETING COMMENCED at 9:04 a.m.

The facilitator began with a brief recap of topics and discussions from Day 1 and noted that all presentations are available on the DFO website. The synthesis provided the following key points:

- Day 1 focussed on Strategies 1, 2 and 3
- ✓ All materials available on DFO Consultations website
- ✓ Lots of summaries from participants;
- ✓ More innovation and attention to detail;
- ✓ Lots of people want to work with DFO;
- ✓ More relationship building to come;
- ✓ Work aimed at specific objective
- Things will be looked at differently in terms of implementation
- Range of opportunities on collaboration;
- Looking for ways to engage people beyond one or two years.

INTEGRATED PLANNING AND WSP

Jeffrey Young of the David Suzuki Foundation presented a power point on their report, "Integrated Planning and WSP," which was developed from the view point of the salmon. The report focussed on the Central Coast due to its salmon diversity and examined the current state of WSP implementation and identified five areas for consideration and made recommendations for the same.

Note that the David Suzuki Foundation's report is available at: www.davidsuzuki.org.

QUESTIONS/COMMENTS

The participants were given an opportunity to ask questions for clarification and same are noted below:

- What is the reality of implementing recommendations given that DFO laid off 85 people specific to enforce habitat? What about directive from Ottawa not to prosecute for pollution?
- There is not a lot of trust between stakeholders and DFO. How can we close the gap on trust?
- Is there opportunity to recommend some of the \$5 million go toward the department working with municipalities and the province?
- What is difference between integrated planning and disintegrated planning?
- Concern about dwindling funds of DFO as it pertains to leadership - DFO should coordinate with more groups to achieve common objective;
- Concern about leadership: think it's a bit of an error for one department to provide leadership - believe it should also be community based;
- What will it take to get Strategy 4 off the ground?

PRESENTATION

REVIEW OF STRATEGY 4 - INTEGRATED STRATEGIC PLANNING

Paul Ryall, Fisheries & Aquaculture Management, DFO, provided an update on Integrated Strategic Planning which encapsulated what is currently being done, work that is going to be done, and explored how to get people move involved.

Key areas discussed are noted below:

- 2002/2003: The 5-step planning process for the WSP which led to the development of the model and impacts of same were reviewed;
- Tool development;
- Guiding principles;
- Wild Salmon Policy pilot on Barkley Sound/Alberni Inlet;
- Next Steps.

Two questions were posed to the participants for their consideration during the break out session:

1. *How can DFO build partnerships in order to develop and fully implement integrated planning under the Wild Salmon Policy?*
2. *What does sustainable fishery look like to you?*

QUESTIONS/COMMENTS

Questions and comments focussed on issues such as:

- Snuneymuxw - Comment: Not just DFO responsible for habitat restoration but all of government especially forest companies due to all the damage they

- have caused; get forest companies to the table and get them to restore the banks of rivers;
- Harvest management and Cultus Lake Sockeye - internal team looking at it but they're not allowed to talk about critical habitat. Why go after other pilots when some DFO work is unfinished? Fifty percent chance Cultus will disappear if not remedied. Are we going to save Cultus?
 - Integration - salmon are not only dependant on fresh water but on what they eat and who eats them. Encourage greater integration between two parts of WSP;
 - Partnerships exist but are not effective. Issues between harvesters must be addressed. People must have equal interest/equal value.
 - Trust - DFO must be more candid with data and solutions;
 - Heiltsuk: Partnerships - Aboriginal people are tired of these kinds of forums. Every plan DFO develops pushes someone out of the picture while DFO tries to fit First Nation into the picture. High unemployment rate for aboriginal fishers. Would like to see 200-year plan that will address the future welfare of aboriginal people; DFO created dependency on Fraser and Skeena by ignoring everything else; look at all streams on the coast;
 - Proposed First Nation Indicators: cultural; spiritual: weirs, ceremonies, dip net fishery; what does DFO mean by social indicators?
 - Structured Decision-Making: trade off analysis is you need to make choices - not easy for First Nations when culture is at stake;
 - Habitat enforcement monitoring/capacity re AAROM - need to collaborate on how new money will deal with issue;
 - Sunshine Coast Salmon Enhancement Society - How do hatchery fish fit into WSP? Would like to see consultation on hatchery fish;
 - Namgis: No chum come back to Nimpkish; sporties increased tenfold since buyback-DFO turns a blind eye; Harvest - let's all pay and make it go;
 - Tseshah: Optimistic about policy but do we have governance structure to make it work?
 - Not all sectors are using conservation in their approach to fish in B.C. How many eggs are sporties killing? Catch and release rules must be reconsidered; need to look at all factors to move forward;
 - First Nation get food, social, and ceremonial fish first, after that the rest should be divided via total allowable catch in this way there would be accountability and a desire to make process work;
 - Provincial representative: DFO is prepared to be accountable and expects you to be accountable; DFO consultation is unmatched; ownership - clearly define roles, responsibilities, accountability;
 - Marine Conservation Caucus - gravel and blacktop companies still damaging watersheds - developed partnership for Skeena watershed; one more chance to save salmon by working together.

WRITTEN REPORT BACKS

The participants were invited to provide their written responses to the two questions asked (noted above) and their responses to the questions are attached as Appendix 5.

CLOSING COMMENTS

As there was not enough time for report-backs, the facilitator noted to participants that he would compile the results of the two questions asked at the end of the Strategy 4 presentation.

C. Corrigan thanked the participants and acknowledges the underlying truth that people want and need to work together. DFO will continue to refine and look at opportunities for partnerships/leadership.

--- MEETING ENDED at 12:00 p.m.

APPENDIX 1**AGENDA**
**DEPARTMENT OF FISHERIES AND OCEANS CANADA
WILD SALMON POLICY FORUM (Multi Interest)**

**BEST WESTERN RICHMOND HOTEL & CONFERENCE CENTRE
7551 WESTMINSTER HIGHWAY, RICHMOND, B.C.
MARCH 27-28, 2008**

MEETING OBJECTIVES:**To convene a facilitated dialogue that provides participants an opportunity to:**

- Receive information on the current status and progress made on implementation of the Wild Salmon Policy;
- Provide input on implementation of the Wild Salmon Policy; and
- Contribute to identifying key next steps including follow-up processes.

AGENDA**DAY ONE – Thursday, March 27, 2008**

8:30 am	Participant Arrival / Registration / Informal Coffee
9:00 am	Welcome and Opening Remarks <ul style="list-style-type: none"> ➤ Paul Sprout, Regional Director General, Fisheries and Oceans Canada Introductions and Overview of Agenda <ul style="list-style-type: none"> ➤ Chris Corrigan, Facilitator
9:10 am	Review of WSP Development and Work Plan for Implementation <ul style="list-style-type: none"> ➤ Mark Saunders, Policy Branch, Fisheries and Oceans Canada Question & Answer Period
9:30 am	Review of Strategy 1: Standardized Monitoring of Wild Salmon Status <ul style="list-style-type: none"> ➤ Overview on Monitoring: Dr Brian Riddell, Science Branch, Fisheries and Oceans Canada ➤ Conservation Units: Dr Blair Holtby, Science Branch, Fisheries and Oceans Canada ➤ Introduction to Benchmarks: Dr Carrie Holt, Science Branch, Fisheries and Oceans Canada Question & Answer Period
10:15	Group discussion on Strategy 1
10:45 am	Health Break
11:00 am	Review of Strategy 2: Assessment of Habitat Status <ul style="list-style-type: none"> ➤ Heather Stalberg, Oceans, Habitat and Enhancement Branch, Fisheries and Oceans Canada

	Question and Answer Period
11:45 am	Group discussion on Strategy 2
12:30 pm	Working lunch ➤ Web-mapping demonstration of habitat indicators
1:30 pm	Summary of morning
1:45 pm	Review of Strategy 3: Inclusion of Ecosystem Values and Monitoring ➤ Dr Kim Hyatt, Science Branch, Fisheries and Oceans Canada Question and Answer Period
2:30 pm	Health Break
2:45 pm	Group discussion on Strategy 3
3:30 pm	Closing thoughts, next steps, wrap-up of the day ➤ Chris Corrigan, Facilitator
4:00 pm	Closure
DAY TWO – Friday, March 28, 2008	
8:30 am	Participant Arrival / Registration / Informal Coffee
9:00 am	Opening Comments, Recap of Day 1, Review of Day 2 ➤ Chris Corrigan, Facilitator
9:15 am	Presentation by David Suzuki Foundation on Integrated Planning and WSP ➤ Jeffery Young, David Suzuki Foundation
9:45 am	Review of Strategy 4: Integrated Strategic Planning ➤ Paul Ryall, DFO Fisheries and Aquaculture Management Question and Answer Period
10:30 am	Health Break
10:45 am	Group discussion on integrated strategic planning
11:30 pm	Closing thoughts and next steps ➤ Chris Corrigan, Facilitator
12:00 pm	Closure

APPENDIX 2

SUMMARY SHEET STRATEGY 1 – STANDARDIZED MONITORING OF WILD SALMON STATUS MARCH 27, 2008 – DAY ONE

Discussion questions:

- 1) What is the best way to inform and engage people in this work on CUs?
- 2) What are the opportunities for partnerships on the development of benchmarks and monitoring?

ANSWERS:

SKEENA, FRASER, OKANAGAN, ABORIGINAL RESOURCE MANAGEMENT AGENCIES:

- 1) Regional data input; consistent engagement -- rolling drops; fiduciary obligation to meaningfully consult with first nation; glossy illustrate information sheets.
- 2) Keep growing aboriginal resource management agencies, and the resources to keep doing the work; do not rely on Moore Foundation for the dollars; integrate TEK with benchmark data collection.

SKEENA FISHERIES COMMISSION:

- 1) In form on CUs; opportunities for benchmarking and monitoring.
- 2) Brightly coloured illustrated KISS pamphlet; keep giving aboriginal resource management agencies resources to collaborate.
- 1) For first Nations community dialogue/presentations -- smaller venues; we need and asked the nation of how the final sea use translate/affect first Nations in all areas (technical support needed) example impact on FSC, economic opportunities. We need this technical support, example, FRAF's proposal when people input on sea use, etc. it would be nice to have a ruling list of opinion/input so others can see what has been discussed and help to brainstorm.
- 2) Opportunity for partnerships to develop benchmark and monitoring -- would the FSC fund s be able to find these?
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- 1) Inform and engage; establish or utilize several regional teams -- decentralizing; keep finding first Nations organizations doing the work.
- 2) Opportunities for partnerships on development of benchmarks and monitoring; utilize establish first Nations/technical management bodies in sub regional areas; AAROM/first Nations fisheries programs.
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- 1) Regional process - duty to consult for first Nations; need to highlight subjective decision area and bring it to region; he already had feedback for regional DFO, need to talk to first Nations.

- 2) Work with first Nations and their programs on how to collaborate; work with first Nations groups or areas where info was lacking on stocks.

PAUL LEBLOND: (WSP COMMENTS)

- 1) Definition of CU's. The choices made in defining conservation units leads to a lower or finer level in the biological continuum and then either SARA, and DUs or ESA'S DPS. Much of the finer structure of the CU classification arises from the selected level of genetic biodiversity held to be relevant to the criterion of non-likelihood of recolonization within an acceptable time frame. It is assumed that small genetic differences between neighbouring populations have significant survival and adaptive value. How much empirical evidence is there to support this? Some differences may result from relative isolation and have no more survival value than hair or eye color in people. Overall, the level of selection reflects a rather pessimistic view of the adaptability of wild salmon. How much is known about the timescale of recolonization of depleted streams by neighbouring populations? Salmon populations within each equal type zone are more likely to be ecologically interchangeable than with populations in different zones... this makes sense, but how much more likely? 1%? 50%? What level of likelihood is significant? There is considerable concern over the spreading of invasive species in new areas... why is it that such invaders, clearly not genetically too noon to the surroundings, are thought to be so much more capable of colonizing and salmon? Committing to a large number of very specific CUs especially for sockeye puts a heavy burden of care in DFO and the need for information, management, rules, enforcement, actions plans, etc. One can readily imagine challenges in court to manage decisions based on a CU fine structure. Are the compelling biological arguments for a judge to agree that the proposed CU definitions are more appropriate than SARA DU definitions for conservation purposes? A clever lawyer, or consultant biologist, may well bring up such questions to challenge the CU definitions and the decisions that follow, example, it to close a fishery in some area or at some time.
- 1) DFO appointed reps to speak to regional organizations such as fishing clubs, native organized nations, BCWF links.
- 2) Again much enthusiasm associated with local conservation groups needs to be channelled.

FRED KURDS:

- 1) best way to inform and engage -- use simple easy to understand language acronyms constantly defined (MSY TDK) at public meetings/open meetings like this or that area reps can go back and explain to their local organization or bands.
- 2) Send info to local groups such as the Fraser Valley salmon society with a clear explanation as to what you are looking for (again explain what development and monitoring really means) and then get them to give you input.

BILL OBAY:

- 1) Work through local community correspondent groups, i.e., Thomson/Nicola.
- 2) Involved community in developing benchmarks in evaluating and monitoring; send information to local community conservation groups -- BCWF. Clubs, sports fishery Association board local committees, etc. and provide for a feedback through local office.

- 1) Engage the community advisers that work in each area; post information on non-DFO website -- most prevalent one in area then there are no translation issues.
- 2) Lots, identify who is doing what already put a game plan together using locals and government wraps and start doing something. Inaction is not acceptable, the bureaucracy is costing us the recovery of our wild Salmon.
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- 1) first Nations have to be more informed in a gated on the doings and plans of DFO before they do anything in our territories/just learned about Internet for DFO; work together with neighbouring tribes/DFO.
- 2) We should have chances to gain opportunities to secure funding to do the work that has to be done this year and every spawning cycle here.
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- 1) first Nations -- tribal councils -- first nation organizations -- DC first Nations fisheries Council -- F.NLC AWG; face-to-face meeting; information upfront prior; dollars for high-level first nation assessment/implications to aboriginal title and rights.
- 2) FNLS -- AWG -- MAL -- MOE - interim measures - new fish farm waste regulations; NGOs with a foot in the door with foundations.
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- 1) Involve AWG establish relationship with local communities and first Nations; more information about CUs easily accessible; media.
-
- 1) Keep it simple you are talking to many laypeople, first Nations, recreation fishers, commercial, etc. Not to use acronyms or scientific terms people are familiar with. DFO staff who are key people distributed throughout province are the best persons to work with. Large geographic areas -- reduce trade by having key people distributed throughout the region/area so they are easy to access.
-
- 1) That the exercise is genuine in, i.e., engage in the debate with government about the dangers and growth and development, et cetera. What is the best way to inform and engage? -- avoid speaking in acronyms as much as possible; clarify the what's and how is as simply and clearly as possible; earn people's trust and respect.
- 2) What are the opportunities for partnership? -- do not aim for partnership directly. But the willingness and talent arrive on your doorstep by leading in significant ways or significant purposes.
-
- 1) Develop engagement strategy for each group -- first Nations, first nation communities, TC, AAROM, groups and fishers; industry, ENGOS, others, sports fishermen.
- 2) Opportunities for First Nations and others to provide input and regard local knowledge to benchmarks. Involve local level people in monitoring and gathering data.
-
- 1) Best way to inform and engage people -- utilize existing structures, example, marine use planning committees in first Nations communities to receive feedback. Integration -- the DFO paper talks a lot about the importance/potential of this.

- 2) What are opportunities for partnership for development of benchmarks and monitoring - watchman programs being established under EDM and land-use planning. Utilize existing structures, example marine use.
-
- 1) Translation, educate in relation to their interests, based on interests and system. Complex to simple.
- 2) Based on science -- educate; combination of affect and [indiscernible] on effect.
-
- 1) Develop sub regional, multi-stakeholder working groups. Make use of First Nation structures -- tribal fisheries programs, AAROM, GPS. Regional rollup forums.
- 2) Opportunities for developing benchmarks -- partnerships. First Nation fishery program; sub regional focus -- partnerships around specific geographic areas; strategies for incorporating TEK.; FSWP/FBC; Harvester groups.
-
- 1) Keep it simple - comprehension of concepts; geographically-based discussion group; setting milestones; utilize existing regional knowledge and process.
-
- 1) Regular workshops, tier 1 to three; use of existing consultation process -- BCWF., etc; more use of TEK to validate the CU example; interest-based system are of CU -- GIS.
- 2) First nation workshop specific to see you with this traditional territory -- sub watershed, watershed, sub regional, regional.
-
- 1) Paper and well based maps and user friendly discussion forum -- in person or online but facilitated -- to obtain review feedback from communities of place. Tear 1, 2, 3 discussion. Develop deeper dialogue for meaningful discussion. Use AAROM, alter community forums to good turnout.
- 2) Provide funding for partnership formation. In courage/permit DFO, NGO, first Nations personnel to formation of curable partnership regardless of funding and each other around commitment.
-
- 1) More data and accurate numbers, three meetings by numerous groups.
- 2) More representation of First Nations fisheries groups' conservation and other interest groups by a larger notification strategy.
-
- 1) You will approach: regional mechanisms -- Web/common tools and templates, etc. Use examples: area/local based: central communication point -- first nation organizations and DFO and other; what local workshops/meetings, local media.
- 2) Input to core working groups, reps from broad range of interests and throughout B.C.; monitoring process to be diverse participants using constituent method, et cetera.
-
- 1) Sit on an active board relating to all enhancement -- hatcheries -- volunteer participate.
- 2) Best way to inform CUs would be to break it mandatory to produce stock numbers in individual areas, own geographic areas.

- 1) Use web-based technology: IE, Web mapping application, ability to download text documents and databases, provide information in hard copy when necessary, have people collect data/info for Wild Salmon Policy.
- 2) Collaborate in data collection, methodologies and standards; develop systems which are inter-dispersal and can share data and information; make information management a priority.
-
- 1) regular meetings with maps; Internet; contracting T.E. K. interpreter; use fish by catch monitoring of users; multi-openings approach.
- 2) Improve coordination of federal and provincial fisheries.

PETER KATIMIC (HAIDA FISHERIES PROGRAM):

- 1) Informal meeting and local regions where people can look at maps and discuss populations within a CU. Take a map to the people.
- 2) First Nation fisheries program; volunteer watershed groups; provincial programs for other salmonid species.
-
- 1) Regionalized reporting, less onus on DFO to report information through Internet and teleconference availability to address specific users and problems within your local CU to DFO. Read generalized zone costs.
- 2) To prevent overlapping of present partnerships we need to improve federal/provincial relationships/communication on the issue.
-
- 1) Point for brochures. Brief TV ads to point to online documents.
-
- 1) Have all user groups in on a meeting and try to come to an agreement in conservation of salmon species.
- 2) Have young people trained for the benchmarks and monitoring in an effort of conserving salmon.
-
- 1) It is essential to have better communications within DFO and all recent DFO ministers have supported the WSP. It is time that all staff and DFO embrace and understand the expectations of the WSP and work fully towards its full implementation.
-
- 1) Identified/done a lot of work. Working with local knowledge. Need to add to the LEK/TEK and into the CU for it to be accepted, taken to first Nations, NLO. Many of the CUs cover unit areas defined by watershed boundaries. Many salmon conservation and stream groups are also watershed-based. By consulting each group and organization working in these watershed units, it should draw out the experts in these. Science needs to be communicated in any accessible manner for it to go from Science to Policy Management. Upcoming Skeena River as a model for other regions. This process will be opportunity developed the partnerships; would include university partnership. Driving first nation to do the outreach to groups and organizations.
-
- 1) Ongoing multiparty information sharing process at a local and a regional level, i.e., Barkley Sound formed table.
- 2) Use existing freshwater/DFO glove ration working relationship; then incorporate other area resources -- recreational, community groups to augment activities and communicate progress issues, et cetera.

-
- 1) DFO implementation folks travel to communities and most public consultation forums. Three stages for guidelines: first up, develop indicators; second step, develop benchmarks for indicators; third step, develop monitoring plans.
- 2) Guidelines could be developed by DFO Science to be distributed to regions so that they can develop benchmarks and monitoring plans specific to their CUs. DFO implementation team should first demonstrate the application of guidelines to several case studies. Possible formats: one, summary of best practices; two, dichotomia - key approach; three, show charted design stages.

DAVID LIGHTLY:

- 1) Keep convincing us that this is real. Use the existing and developing consultation process with First Nations; use existing groups of interests, example, harvest roundtables, watershed planning processes, water management planning, etc.
- 2) Monitoring on the groundwork needed; must be funded; this can be done by volunteers; provide education and strategic group who can exist.
- 1) Public workshops, small and informal in different areas of province to show local concerns; include plain language when dealing with public and local communities.
- 2) (no answer)
-
- 1) DFO visits areas to solicit feedback from local experts; use existing relationships/networks; require ongoing process, before/after season; living document -- incorporate into process.
- 2) Spatial distinction presence, absence, timing; statistically rigorous monitoring program.
-
- 1) Solicit feedback and face-to-face meetings using existing networks and relationships; require ongoing process; DFO must show that they will respond to feedback.
- 2) Existing collaboration with First Nations, volunteer stewardship groups to assess all metrics of status -- abundance and distribution; DFO can suggest a general indicator/benchmarks which will be adapted by area staff to specific CUs. Run a pilot study first.

PAUL LeBLOND:

(CUs – attached concerns)

- 1) Get local groups involved.
- 2) With First Nation groups and other fisheries.
- 1) Local multi-stakeholder consultations.
- 2) Focused workshops using recognized excerpts on the development of multifaceted benchmarks.
- 1) Inform and engage people on CU best way; attend meetings, focus on Reform area involved; produce small, plain language brochures with diagrams -- simple -- or written [indiscernible] publish and put on Web.
- 2) Lots of money is being spent by government, ENGO, etc.. Need to work towards a coordinated, integrated approach to better use of available resources.

- 1) Local multi-stakeholder consultations; attend meetings that focus on geographic area involved; mix of traditional and standard at Pfizer reprocesses; local level -- ID each first nation; involving local people.
- 2) Work towards a coordinated, integrated approach to better use of available resources; focused workshops from using recognized experts (from NGO, academia, etc.) on the development of multifaceted benchmarks; involve the existing partnerships, fishing groups, et cetera. Produce small plain language brochures with simple diagram as written up, publish and put on the web.
- 1) Inform/engage -- stay to course, i.e. ensure well-trained, good communicators remain available for public queries. Consistency in the mist/minimize or small information.
- 2) Establish criteria and performance standards that permit assessments by individuals and organizations to contribute to the mainstream effort.
- 1) Need to blend engagement effort with partnering, to avoid dilution of participation in partner activity. Need continuity of feedback so that divergent sectors, including disinterested public, realize how much participation is a recurring -- and whether our perception of imbalance may emerge.
- 2) n/a
- 1) Continue to use existing advisory process such as the CS HB, et cetera. Complement this with an increased electronic process such as online, et cetera, to encourage advanced input from first nation communities, general public.
- 2) Do we want to engage everyone? I think some public input is needed in this and we encourage to be engaged to ensure we maintain a balance.
- 1) Inform/engage people in work and CUs to local area harvest committees.
- 2) How do you set risk tolerance? There must be a balance on who partners, who has the most energy? Does that produce a standard approach to the benchmarks?
- 1) Website; breakdown into geographic/regional areas; communicate to Commercial Salmon Advisory Board, area harvest committee; and community presentations.
- 2) Feedback from hatchery personnel; feedback from commercial fisheries.
- 1) Money. More communication.
- 2) Interest would be mostly regional for monitoring. Commercial fishermen -- overall mix of CUs differ.
- 1) Trained communicators to present the concept on results; target presentation to local areas and knowledge -- need to go to the local areas; concern about fair consideration of all perspectives and final decision; commercial side -- use existing processes.
- 2) Involve local organizations, example, stream keepers, watershed councils. Could we use professional survey method to collate input on acrostic twirl topics, example, level of risk tolerance.

- 1) Best way to inform engage people and CUs: this workshop is a start; public meetings in local areas; engage groups involved in salmon stewardship individually, example, first Nations, commercial fishermen's, stream keepers, et cetera.
- 2) Work with first nation fisheries programs -- AFS and AAROM -- set priorities; seed funding for partnerships.
- 1) workshop, regional meetings, web-based survey forms, in form -- ponder -- come back in feedback; working group in areas because not only issue with feedback; technical and non-technical records to explain how each is CU is defined and web-based application.
- 2) First Nations, stream keepers, bring these groups together in regions; strategic finding and buy in DFO staff to explain, disseminate guide working groups.
- 1) Common area for dialogue/sharing, projects/program.
- 2) Synchronized programs.
- 1) Easy access to information about: what the current CUs are; what was used to define at CU, re was it just the jazz or was it LH each info. This will help inform what we don't know. Annual and biannual review for CU adjustments.
- 2) Means to incorporate information provided by other groups. Standard procedure. Same for status monitoring.
- 1) Stream keepers -- stream keepers Federation to spread the word and ask for input; need website for feedback.
- 2) See you should be communicated to all resource users and government departments -- provincial, federal and municipal -- that impact salmon.
- 1) Forum for sharing info used to demonstrate each CU, i.e., GIS linked sites; easy process for feeding information into the CU process; annual review of CUs and trends; need to bring other resource sectors to the table, example, forest industry, Environment Canada.
- 2) dissemination of information from central source out to regional experts; need to address possible changes to FSP and implications; see you working groups -- regionally based, i.e., may cover several CUs - first Nations, stream keepers, DFO, province, academia, ENGO's. Funding for this process -- DFO link to central ordination of DFO.
- 1) Information overload! If we (DFO) really wishes to get feedback need more time for discussion and comments.
- 1) Meetings of various stakeholders but involve local communities; better coordinate among various meetings; go to lots of meetings and get different information and DFO needs to give consistent messages; what are the various comments by stakeholder groups? Need more opportunities for interaction.
- 2) don't focus only on large systems, example, Skeena and Fraser; need knowledgeable core of people that go to meeting; need to expand capacity of DFO to interact with first nation and stakeholders; need more info on fish farms, sea lice -- better communication; need more provincial involvement; need more monitoring and the sport fisheries, i.e., log books.

APPENDIX 3**SUMMARY SHEET STRATEGY 2 - ASSESSMENT OF
HABITAT STATUS
MARCH 27, 2008 – DAY ONE****DISCUSSION QUESTIONS:**

- 1) How should we select the sentinel streams for monitoring habitat indicators in a CU?
- 2) How should we best be guided by local knowledge/expert opinion in selection of watershed specific indicators?

ANSWERS:

3) Jim Culp, Terrace Salmon Enhancement Society, 250-635-2540,
culpoutdoors@telus.net

1) Selecting Sentinel streams

- Aim for good distribution across use habitat stressors
- Sentinel Stream approach needs to be customized according to stressors, our capacity to access
- need to monitor also areas that are healthy to get baselines.
- use local knowledge where possible to identify key stressors.
- Quality of data that exists needs to be evaluated.
- Sentinel bracket indicator brackets streams should be selected by: one bracket habitat stressors, examples: logging, Hydro, road construction, urban development, agriculture, two or three or all of the above, et cetera.
- Use existing database and know a habitat problem issues streams, water quality impacts to help select Sentinel/index streams.

2) How should we best be guided by local knowledge last expert opinion in selection of watershed specific indicators?

- Incorporation of traditional ecological knowledge.
- We need a combination of local knowledge, stewardship groups, streamkeepers, first Nations, et cetera, along with the technical team. As well local governments/regional districts etc. in addition to various government agencies, local resource management planning processes, etc.. Must also be topped (no stone should be left unturned).

4) Bob Chamberlain, Kwicksutaineuk Ah-kwa-nish First Nation, (250) 8282,
mogul@shaw.ca, Broughton Archipelago.

BOB CHAMBERLAIN:

- We should pick a Sentinel Stream on the importance of species in a system and a system that has been impacted and what has the most promise for recovery.
 - Analysis of water flow regimes, analysis of the extent of the threat posed by sea lice associated with fish farms, analysis of the effects of pollution on juvenile salmon.
 - Sentinel streams should not be the ones which have enhancement efforts such as spawning channels, et cetera. Choose a river which is closest to a natural state in terms of enhancement efforts and encroachment.
- 1) How should we best be guided by local knowledge/expert opinion in selection of watershed specific indicators?
- Have a look at first nation projects in the past on the stream restoration and assessments on some annoyance and shellfish, bottom fish in traditional territories.
 - Engage this stewardship community in the process of data collection
 - First Nations can provide all local knowledge needed, this must be brought in in a meaningful way, not business as usual – Haida/Taku/Tlingit.

3) Peter Katimic, Haida Fisheries, (250) 659-8945, peter.katimic@haidanation.net, Queen Charlotte Islands.

Chris Wilson, Haisla (Kitimaat Village), (250) 639-9361, extension 212, marineuse@haisla.ca, Kitimaat Village.

- 1) use local knowledge where no Salmon abstracted, example: dams in Nechako. James Cooper:
-
- 1) Broad question. What is one looking for? Solution criteria -- geography -- old-growth habitat couples with second growth for cross comparison. Underdeveloped and developed watersheds. Sentinel streams, access streams, capacity with Salmon runs. Watershed activity with respect to activity, i.e., industry..
- 2) History precedes science. Local knowledge from respective parties (industry, recreation, cultural -- first nation). Collaboration of historical context and science. Unfortunately the ultimate indicator of any stream is extinction. Too little, too late!
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- 1) Identify the healthy streams and weak ones and monitor week once.
- 2) Get information from local people to come up with a plan.
-
- 1) Couple developed and undeveloped watersheds, also exploited versus non-exploited populations.
-
- 3) John Hughes, Powell River salmon society, (604) 487-9376, VegaEnterprises@Shaw.ca, Powell River.
- 3) Ryan McEachern, area D., AHC, (604) 219-0014, RyanMcEachern@Shaw.ca, B.C. coast.

- 1) CU - overall assessment gathered and individual indicator. Indicator, indicator may be not representative. Ask group this: overview perspective, not single indicators.
-
- 1) How to select Sentinel streams -- presuming criteria and standards exist, factor in additional influence such as costs, community support, long-term stability of the ecosystem -- i.e., no plans to pave it over.
- 2) How to be guided by local knowledge and selecting watershed indicators -- equipped, trained, and power community advisers to help community identify indicators capacity to the local watersheds.
-
- 1) Sentinel streams selectors -- need public review of selections and periodic reassessment of selections in context of combined local and ex-Byrd knowledge.
- 2) LEK vs., expert opinion -- need iterative rounds of collaboration, i.e., experts need to consult locals and accommodate LEK.
-
- 1) Sentinel streams for habitat must be accessible and as average as possible in their makeup. We should avoid streams that have recently undergone dramatic events or positive or negative because they will be in an artificial state of flux. Sentinel streams should be rotated periodically to represent a realistic view.
- 2) Local knowledge should be heavily weighed when compiling indicators. Where science and opinion on line -- that should be considered a strong point. If science and opinion differ -- careful consideration must be taken before we go again to local knowledge.
-
- 1) DFO should do the initial selection and antinational results through local interest groups. Whittle Creek in Powell River, poor choice for indicator/Sentinel indicator of stream for WGS Coho CU.
- 2) Local knowledge -- like in best approach is regional presentations to groups on what stream was chosen initially -- listen to support or a deuce on whether good choice or better vocation to be represented for CU.
-
- 1) First nation in territory, and they should decide which streams to do, local people, elders, also logging companies should have input.
- 2) Lake should be the basis on which stream should be picked, not guided but use this expert knowledge,
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- 1) Sentinel streams -- on basis of historical relevance to regional salmon populations.
- 2) Local knowledge/expert opinion -- provide link to historical relevance, ensure participation of first nation and local fishing community.
-
- 1) Selection of Sentinel streams -- how: 1) high value; 2) high impacts.
- 2) Equally.
- 1) Sentinel streams -- use local knowledge in consultation with local groups for most representative examples. Use TEK.
- 2) Acknowledge opinions and use interactive feedback.
-
- 1) High impacts streams on basis of historical relevance to regional salmon population; first nation in territory should decide.

- 2) Local eco/traditional knowledge should be basis on which stream should be picked; equally used both; acknowledge opinions and use interactive feedback. Lake/eat all blend together -- provide link to historical relevance, ensure participation of first nation and local fishing community.
-
- 1) Sentinel streams -- index for others? Or early warning indicators? What his definition? Identify which streams are already used as sentinels -- built from Nat. What is representative -- choose the streams in a way that considers processes, complexity and diversity, not just state. What streams are threatened by water issues of flow and to.
- 2) first Nations, stream keepers, local communities, NGOs, first nation know a lot about sensitive streams
-
- 1) Water is key indicator. Adequate flow sensitivities temperature sensitive. Streams ordered the greatest threat early warning indicators, in order to understand the threats. Beyond to watch T3 – Representatives - shoes in a way that consider ecosystem process complexity and diversity. Make Sentinel. Identify which streams are Re: being used as sentinels, then build on this. Habitat complexity should feature prominently.
- 3): Craig Orr, Watershed Water, Nicola and the Coldwater.
- 3) Misty MacDuffee, Raincoast Cons. Society, misty@raincoast.org, Central Coast, small streams.
-
- 1) selection of Sentinel streams Colin base it on high correlation of indicators and salmon production; sustainable monitoring and cache it logistically feasible -- has to be in the balance of an annually funded group (AAROM/first Nations).
- 2) How best be guided by local knowledge? -- utilize established sub regional/local group knowledge; task the established groups to contribute info; establish collaborative efforts in monitoring (eliminate the silo/institutionalized monitoring programs).
-
- 1) picked a DFO funded monitoring program.
- 2) Regional process.
-
- 1) How select Sentinel streams for habitat monitoring? Use results from watershed watch study (correlate indicators); use a pristine W/S as indicator; use available resources -- first nation fishery organizations/AAROM groups to select and implement; use existing programs -- fisheries -- and build on this work that has already been conducted over many years.
- 2) Use available resources -- first nation fishery organizations/AAROM groups -- to select and implement.
-
- 1) Representative, cost efficiency, logically decide.
- 2) Conduct savvy of experts.
-
- 3) Pete Neckline, UFFCA, (250) 392-5888, indiseaeut@Shaw.ca, Williams Lake/Prince George.

JIM CHRIS:

- 2) Past historical archives in numbers of fish and what caused their decline. Can Creek be repaired, check water qualities, etc.. Do some homework.

-
- 1) How should we select? -- based on WB of access to fish; and culturally NB to first Nations.
- 2) LK/science -- specific indicators. TEK/LC needs funds to build first amongst parties, for couple of dialogs; next to understand ecosystem holistic and goods and service developed from an ecosystem.
-
- 1) selection of indicators choose for habitat -- area and existing information on key habitat attributes; link indicator stream relation to importance for salmon in the local area, i.e., potential to link habitat attributes and change to change in fish.
- 2) approaches to incorporating local knowledge -- inconsistency in demands for guide results when local knowledge is shared not willingly after long interval (year) of building trust between interactive "parties". Build trust among participants to increase flow of local knowledge.
-
- 1) How should we select the Sentinel stream for monitoring habitat indicator in a CU? Salmon bearing stream should be monitored, not now, 20 years ago!!! Do all tagging for all Coho not just certain ones.
- 2) How should we best be guided by local knowledge last spurt opinion in selection of watershed is a big indicators? -- elders knowledge; all archive all data -- set a database app for all regions; map; one on one interviews with elders local knowledge.
-
- 1) Solicit factors to consider from all stakeholders, i.e., TEK, LEK, existing information which can be used as baseline, et cetera.
- 2) Ensure these sources of information are canvassed/included to the best possible extent.
- 3) Chrissy Chen, Kwakiutl First Nation, (250) 949-012, fisherie-tech@kwakiutl.bc.ca, Port Hardy B.C.
-
- 1) Selecting Sentinel streams -- must be representative of the majority of streams within CU example, lake fed versus glacier; streams that are best producers might not be most representative; data rich streams -- would provide baseline or trend data.
- 2) Difficult -- instead of trying to communicate specific knowledge to nonscientist the scientists should try and better understand traditional, expert knowledge and how to incorporate it.
-
- 1) Sentinel streams -- which streams have the most data available for them currently? Which streams are feasible for monitoring? Which streams are representative of CU? Re: average run sizes. Not necessarily the most productive.
- 2) How should we be guided by local knowledge -- first Nations elders; regional working groups, which goes back to the comments for discussion period one (i.e. see you working groups).
-
- 1) Sentinel streams -- socio-economic need; conservation priorities; tractability of problems; logistics -- working group in place; a previous data; costs, monitoring; Representatively; diversity hotspot; first nation elders, TEK

- 2) Guidance by TEK in section of indicators -- use language that can be understood by elders, not scientific jargon; listen to stories, observations.
-
- 1) Danger of choosing a Sentinel stream that does not represent the other streams in the CU; use data rich streams -- historical long-term data, data poor streams but may be best Sentinel; need to test with climate change, it is difficult to choose Sentinel stream.
-
- 1) Picked Sentinel streams that are impacted by industry, example, fishfarms; select streams for restoring that can be effects; scientist for DFO are paid -- first Nations should also be paid; consider all streams, especially non-Fraser and non-Skeena rivers; Central Coast rivers! Yukon! If we had a healthydistn (sic) of fish, there would not be tempted to catch Fraser/Skeena salmon; look at historical data -- Rivers Inlet used to be third-largest run. Smith in that. What happened? Should be working on.
- 2) Look at AFS agreements, and there is a lot of information available; ask local experts about selections of streams. Don't just ask scientists. Spend less dollars on hiring white biologists; more resources to first Nations for monitoring; need better feedback to people that collects data. Where does the data go? Is it used? DFO should track information better and provide feedback to those who generate data. Check AFS agreements and reports and AAROM for lists of people. DFO already has this tight of information but has to organize it.
-
- 1) Choose versus stratified by land-use, example, urbanized versus pristine, landscape characteristics stream does; indicators will vary depending on land-use strata; interactive process of the feedback, DFO should show how the feedback is being used. This will increase buy-in by stakeholders.
- 2) Substantiate expert opinion with other sources of information; pass information of local experts (TEK, Fisher's knowledge) down through mentorship. There is a risk that this information will be lost.
- 2) A set of core habitat indicators that should be used for all CU's could be identified using expert opinion from scientists and a second set of CU specific indicators could be selected by regional/local experts.
-
- 1) a set of streams -- index streams -- within a CU should be selected using statistically based random sampling so that inferences can be scaled up to CU scale although it may be important to also put effort into continued monitoring streams for which there is an existing long-term data set and knowledge about. Could use stratified sampling by land-use, et cetera. Rotating panel or alternating designs for respect surveys could be used to maximize power to estimate trend in status. Sample selection for habitat streams could be concurrent with selection of abundance -- monitoring sites to maximize sampling efficiency.
-
- 1) Reflect the whole range of impacts example urban development dominates; forestry development dominates, etc.. Establish a flow and temperature baseline monitoring isolation on at least one typical streams/CU.
- 2) Identify those individuals who possess this knowledge. Encourage those who possess it to pass it on. Build a system that allows people to keep organizing this knowledge mentoring/education.
- 3) Jim Lane, NTC, (250)723-0105, jimlane@nuuchahnulth.org.

- 4) Jim Lane, NTC, (250)723-0105, jimlane@nuuchahnulth.org
- 4) David Lightly, Tseshah First Nation, (250) 731-1211, dlightly@tseshaht.com,
Port Alberni Somass system stream inlet.

APPENDIX 4**SUMMARY SHEET STRATEGY 3 – INCLUSION OF
ECOSYSTEM VALUES AND MONITORING
MARCH 27, 2008 – DAY ONE****DISCUSSION QUESTIONS:**

- 1) Do we appear to be on the “right track” with respect to the process and content that we are talking to develop an ecosystems-based management (EBM) framework for wild salmon? What do you like about this process? What else is needed for this process?
- 2) Who should our partners be towards the development of an EBM framework? What resources should DFO and its partners bring to this enterprise?

ANSWERS:

- 1) We need to increase the overall value (economic & societal) of salmon as a keystone species on the Pacific Coastal ecosystem.
 - 2) First Nation government, province of BC, EnviroCan, all levels of government INAC.
-
- 1) Yes, DFO appears to be on the right track with its policy of integration. To improve the process, DFO needs to present its information in a more accessible language, or its meaning will get lost in all the information you’re asking people to retain.
-
- 1) In general, yes, DFO is on the right track. The details could be clearer, but the general direction is positive. Also, it is feasible that WSP could potentially be integrated and existing policies, eg., land.
 - 2) The word “partners” should be clarified, as it could mean “everyone”. In terms of potential partners, our group thought representation from the following was missing: Provincial Government; politicians; aquaculture; regional representation; forestry representation.
-
- - 1) Doctrine of priorities. Need to worry about people before bears and other animals. Conservation needs are important but people are more important. (Forum on human reports and watershed effects). May need to enhance some of the depleted stocks.
 - 2) Lots of First Nation already have an EBM. Need to talk to First Nation to see what they know.
-
- 1) Some what on the way, but the doctrine of priorities should be included and enforced. The people should be worried about well before the orcas and bears

re ever worried about. POP conservation FSC commercial then sport sector. Also form fish has to be added and dealt with.

- 2) First Nations should be worked with on this as a lot of them are already working on an EBM – MUP.
- 1) Recognize this examines the science and not the socioeconomic. Conservation sector acknowledges that DFO has really listened to import. Yes, DFO is on the right track in capturing the complexity and diversity of salmon in fortunes and the components and processes of EBM. Need to include the Marine component, especially as to where he and near shore environments; refine habit heterogeneity overlay; be cognizant of shifting baselines syndrome; consider salmon abundance in the absence of MSY management, hire a statement targets in consideration read ocean survival.
- 2) SARON/Jack Stanford group/U of Montana - precautionary approach; B.C. government; other universities/SFU, John Reynolds; first Nations and NGOs; Skeena process.
- 1) In the content of EBM, local (first Nations, industry) a like require more input into the process. A source-based approach neglects to understand the socio-economic, socio-culture impacts. More economy for NGOs in the conservation field.
- 2) First Nations, sport fishing wraps, commercial industry a multi-dimension approach on the issue. Collaboration in effort, monitoring and conservation efforts.
- 1) I agree with an EBM approach. Expand understanding of the interactions of salmon and their prey, predators, including human, and parasites. Need to integrate multi-species approach to fisheries management. Also consider impacts of fishing down food web or first Nations, commercial, conservation groups, etc.
- 2) All stakeholders.
- 1) how do we reconcile WSP and EBM considering current quarter management framework and US vs. Canadian treaty negotiations.
- 1) Need to review papers and reports.
- 2) Limits must be put on the industry influence on the WS PE, otherwise the policy will be so watered down as to be ineffective. Partners: DFO, MOE, MOF, First Nation, NGO.
- 1) RIGHT TRACK - partly, but other ecosystem components and how they relate to wild salmon are being missed; yes, but get on with it; yes, but still seems to be stuck at a bureaucratic level; not sure, seems to be stuck with little movement; more effort needed for implementation.
- 2) partner should be first nation – TEK older locals, and definitely not industry or business; DFO needs to listen more and not just tell us; partner should be agencies that have an interest in EBM as well as first nation; partner should include academia, first nation, fish harvesters; need a more focused approach; don't need to understand everything in order to act.

- 1) On the right track? Yes, but! Still at a bureaucratic level in the eyes of many -
- not connected with real issues yet for many people; an enormous edifice! More effort needed to get it implemented in a timely fashion.
- 2) EBM is about understanding enough of the ecosystem to manage fisheries and knowingly not manage the system. Partner should include academia, first Nations, fish harvesters. More focused approach -- no need to understand everything to act!
- 1) You are partly on the right track, but other ecosystem components and how they relate to wild salmon are being missed whether they be sealed predators, food chain disruptions (depressed local herring stocks for instance) and so on.
- 2) Partners: first Nations, ENGOs, agencies but manage eagles and grizzly bears, et cetera. Need to bring a willingness to work towards a common goal versus your own agencies, etc., good.
- 1) Yes, but get on with it; it is consultative; progress.
- 2) Those agencies that have an interest in EBM as well as first Nations; negotiated shared mandate and a commitment to deliver.
- 1) Not sure! Movement but not much. We need to deal with things we know that fish forms are harming wild salmon -- a given and also logging is also having an effect. Climate change we cannot do anything. So we need to manage what we can that is FF and logging. Partners should be all first nation, TEK holders, locals, definitely not any understanding or business not having a vested interest in wild salmon. What is needed is for DFO to listen more, not tell us what is good for us. This into all that is said and not just what DFO wants to hear.
- 1) Consider climate change.
- 2) The advantage of research finding opportunities to facilitate and champion; DFO -- use capacity to pull partners together.
- 1) Need more TEK to identify key indicators; focus more on human impacts and watershed wide effects; process much more dedicated resources to develop ecosystem-based indicators; presentations needs to be simplified to manage concepts; need to consider climate change.
- 2) province to include policy issues, i.e., groundwater; first nation local watershed to include TEK.; take advantage of research finding opportunities giving EBM is a hot topic; climate change agency's (EC & NRCAN).
- 1) Look at working with first Nations in their areas where DFO is also working, example, Central Coast; see how their laws work in the area.
- 2) Organizations that has annual funding arrangements -- province, first Nations organizations, local stewardship organizations, environment Canada; DFO: bring the capacity to pull all the partners together -- facilitate and champion and focus the partners.
- 1) Yes, on the right track; focus more on hold ecosystem, not just SARA or ecosystem parts. First Nations to help identify or test the indicators. Include climate change in EBM. Good that looking at broad ecosystem but need to get more detail. 150 species depend on wild salmon and public needs to understand this.

- 2) First Nations, stream keepers, forest companies, MOF, municipalities; DFO should bring money and scientific knowledge. Link with other EBM processes like MOF so don't reinvent the wheel.
- 1) Yes. Given that the WSP specifies ecosystem think the process should focus on preserving ecosystem process and integrity rather than looking at species. Determine whether TEK is as good an indicator as any.
- 2) Research.
- 1) Right track with right process and enter anything wrong. What is working? Process is mainly conceptual so far, need to focus more on process indicators and species at risk.
- 2) Who are partners? What resources are needed? Need linkages to other EBM processes, example, B.C. forestry. First Nations, TEK can be used to test indicators.
- 1) Hard to answer this question, because we have no list of indicators and benchmarks.
- 1) Important to recognize wild salmon as part of ecosystem.
- 2) Build on existing relationship and processes. Other stakeholders, regional, municipal, citizen groups, wildlife organizations, forests, aquaculture, politician, academia, fish harvesters.
- 1) Yes, you are on the right track. I like the recognition of the importance of wild salmon informing the ecosystem they are part of. All things are connected.
- 2) First Nations and a broad range of stewardship groups. This enterprise should build upon existing relationships and processes.
- 1) Hard to judge -- too few examples; right track with values, objectives, prescriptions -- unpacking in general; differences between endpoints and indicators aren't clear; how broad will implementation be? Will ecosystem indicators be species specific?
- 2) Existing processes in first nation, DFO collaborative agreements -- use these. Bring other stakeholders, example regional, municipalities, citizen groups, example, hiking groups, wildlife groups, forestry groups, other groups depending on characteristics of watershed.
- 1) I think they are on the right track, but more education on the subject needed. Talk and documentation is what I like about this section.
- 2) There should be a lot of partners, the more the better, i.e., first Nations, conservation groups, forestry and their ministers. They should bring a lot of their opinions.
- 1) Ecosystem principles should be endorsed that have been developed by CBD process -- 12 principles; more keystone species.
- 2) Partners -- general public with emphasis with first Nations on the framework; use to build capacity for future management capacity.
- 1) EBM needs to account for people as part of the ecosystem, including the user values -- fishing -- along with all indirect threats.

- 2) DFO needs to partner not only with other federal agencies like EC, but also provincial resource management agencies, industry associations -- forestry, etc. - along with first nation, NGOs and commercial sectors.
- 1) May be on the right track but the question should also be asked Marie EBM process; if salmon are gone will bear still be there? Will trees along banks still grow? In other words don't get carried away with EBM, people count too.
- 2) I think great care needs to be taken around the EBM approach people count too and some of us need salmon also. Some animals in need EBM process may need to be managed or called rather than enhanced. Or people need to be eliminated. DFO should be very careful with who they partner with. You will lose much cooperation if you partner with preservationist.
- 1) Right track -- process and content.
- 2) Industry that are impacting or proposing new development.
- 1) Right track? Yes and no -- EBM for watersheds containing salmon. The watershed should reflect terrestrial as well as aquatic values.
- 2) Partners -- agencies responsible for other interests using, exploiting the watershed/ecosystems; DFO/others need to commit to collaborate on data assemblage and research.
- 1) Essentially on the right track common need to incorporate regional -- collective data versus a day by day approach. Solicit input from joint adaptive zones to inform EBM standards for each component of coastlines; engage first nation" -- broader/generally; partnerships are necessary; precautionary in favor of wild salmon not only marine industry/projects for word.
- 2) province of B.C. -- MAL, MOE, MOFR; FNLC-AWG & BCFN Fisheries council.
- 1) In a sense we appear to be heading in the right track after a long time, I like to hear that first Nations will be more recognized and involved in all decisions for their territories.
- 2) Your partners should work towards the development of an EBM framework with the help and knowledge of first Nations in their territories and hatcheries spawning channels in our areas.

APPENDIX 5**SUMMARY SHEET STRATEGY 4 – INTEGRATED
STRATEGIC PLANNING
MARCH 28, 2008 – DAY TWO****DISCUSSION QUESTIONS:**

- 1) How can DFO build partnerships in order to develop and fully implement integrated planning under the Wild Salmon Policy?
- 2) What does a sustainable fishery look like to you?

ANSWERS:

- 1) In order for DFO to build on effect of partnerships and develop and fully implement integrated Salmon policy, DFO has to learn to listen to everyone's concerns on every fishery issue from forestry practices, fish forum issues and the over-fishing of sports fishermen.
- 2) A sustainable fishery has to do with everyone and not just one targeted group. We all have to work together to conserve and protect our stocks.
- 1) Workshop on partnering with SEHAB, stream keepers, Pacific Salmon Foundation, Living Rivers Strategy.
- 2) Stringent licensing and monitoring of the commercial sports fish sector; shortened season on sport and commercial fishing.
- 1) Need to develop governance structures with accountability agreements to ensure responsibilities are upheld.
- 2) Sustainable fisheries needs to account for all users, including an allocation for ecosystem drivers, example, bears, riparian, 15 N 2, et cetera.
- 1) More effective planning; do it with representatives of responsible stakeholder groups, i.e., said this, DFO, EC, etc. plus province, BCFN plus NGO; step-by-step, small meetings, everyone goes home with specific homework, report back to coordinator, discuss options.
- 2) Sustainable fishery: preserve the stock levels and biodiversity; pursue harmoniously among participants.
- 1) Build partnerships; need to have common objectives, at least some key ones need to be common. You need to nurture the partnership. Need to make it work long term. Need to give up power to that of the partnership.
- 2) Sustainable forestry. You need to bring socio-and economic needs. Meet to consider the implications of other fisheries, example, herring fishery to salmon. You need a wild Salmon policy. The salmon management is no longer working -- need to acknowledge this and look at new ways to improve outlooks.

- 1) These are complex processes that are hard to capture and discussion/meetings and address. I think we need transparent and comprehensive modeling framework that acts as focal point for building. Consensus where the modeling framework and social, economic, culture integrates see use, habitat and EBM objectives, interactive is, trade-offs, management options and their impacts and our ability to achieve these objectives, and a multi-objective optimize Asian function that guy's decisions costs and allowing a transparent assessment of costs and trade-offs. Building such a decision support framework to implement WS PE in a historic manner -- and people must commit to process; it is complex, but DFO has capacity to lead this.
- 2) Viable populations, intact habitats and ecosystems, persistent opportunities to fish for all Canadians, socially acceptable and economically feasible.
- 1) Partnerships? The will is there -- no shortage of volunteers; communicate/organize -- but without governance the efforts are lost; if there is no political will there will be no progress.
- 2) Fishing which meets the defined requirements; challenges to define the needs and force the outcome of definition; definition must include reproductive capacity, i.e., habitat.
- 1) Certainly not the way it was done this morning with Chris taking the mike over and over again to lambaste the recreation sector as if we are the ones to blame. Way too much emotion. Not facts but feelings. I also agree with Robert Morley's comment that it is great to have a FRSSI but it needs to go further in that call to his needs the same multi-604-666-3295 input. It should not be a DFO only group. You are ruining the link volunteers and in the end the results are not trusted by those who work for that being the people.
- 2) A sustainable fishery is one where we have as many and more fish returning as there were the cycle before. If this is a problem then we have a conservation concern and all sectors should be equally.
- 1) Use AP to coordinate -- give them authority to deal with community and habitat issues. As for number 1 -- if DFO support commonly on habitat than comments will respond with meaningful monitoring information.
- 2) One where there is viable harvest and adequate spawners returned to viable spawning and habitat adequate to ensure -- future viable fishery and fish production.
- 1) Define the shares and common goals so that harvesters have their share defined and if change needs to be done in transparent way with compensation; must get all the government departments involved that impact salmon; harmonized monitoring progress.
- 1) Be clearly describing the role, responsibility and accountability of the participants, including DFO up to and including the ultimate decisions.
- 2) A fishery that addresses the reasonable needs and expectations of legitimate interests in perpetuity.

- 1) Partnerships must be built carefully. Acknowledgment needs to be made of past mistakes and must be ensured free fact the parties before meaningful partnerships can be maintained.
- 2) A sustainable fishery must ensure that there is a vibrant -- economically viable optimistic commercial fleets. It may be smaller. It may be one day is larger -- the size must be free to change to ensure economic viability. We have so many hurdles and checks and balances now that the state of our fleet is an excellent indicator of the state of the resource. Healthy resource equals healthy industry.
- 1) Need to define goals -- not just preserve runs (genetic diversity); need to have goals which will benefit everyone that is included (common goals); interest lessons as each group genetics are met. Preservation, conservation, FSC, sport, commercial.
- 1) Whatever conditions that have caused major drop-off in returning stocks in 2007 and potentially into the near future are going to cause escalated conflict between all user groups and within those groups. This has to be addressed first before effect of partnerships can be developed toward sustainable harvest.
- 1) Build partnerships: how? Trust, trust, trust. DFO needs to be open, candid and honest with data and conclusions and recommendations even if politically unpopular; knowing how difficult this is.
- 2) Sustainable fishery: once food social ceremonial fish accounted. All user groups of fixed shares equal percent of TAC; all user groups have equal access to harvest their assigned shares were possible; all user groups have equal responsibility of conserving stocks of concern; all user groups have responsibilities with managing their harvest and reinvestment in enhancement tied to the value they take from the resource; all user groups more involved in pro-management -- harvest -- enhancement -- data collection Bass forward planning done through representative, duly elected groups; until the various user groups are stopped from competing against each other for sector shares we cannot work together and with DFO for the good of the salmon stocks; until all sectors of adequate validation of harvest and catch/release over treaty, conservation will suffer.
- 1) Integrated planning -- harvest/habitat/policy/policy to match on the ground; common goal clearly posted on the walls at meetings; how is planning occurring now seems like a lot of processes; where does science come from? Can you trust it? Can you state it in plain English? Need certainty of plan coming to be (that will benefit the salmon long-term); solid team to stay through process, calling in others as more information needed. Water is habitat/salmon is habitat; policy is to protect water/salmon/habitat. New voices every time keeps us stalled and revisiting the past, lack of knowledge. Salmon are a Canadian resource. Surely by now we have a pretty good idea of how to bring together the right knowledge and people to make decisions. How does instruction from others' influence are planning? Province, first Nations, sports, commercial, auto walk, conservation.... Can it plan truly be made and implemented by a group with federal authority? Provincial authority?
- 1) Grassroots meetings in communities with a facilitator. DFO, stream keepers, biologists, first Nations, all stakeholders, a local government, youth, Atlanta

developers, loggers (anyone else that can be influencing watershed). Number one goal needs to be save the salmon by taking a watershed approach -- start there and move towards common themes and a provincial approach. Part of this is the ocean part of cycle and conservation measures, as well.

- 2) Sustainable fishery means looking to 50, 100, 200 years and saying how can we have clean rivers and salmon returning forever? Work backwards from this to achieve this and equality for first Nations, sports fishery and all.
- 1) Get to local level. Come talk to the small communities, villages, reservations; resource manager should be willing and able to work with first Nations people; let us sit in on all committee, workshops with some days notice; it's tough to attend meeting in Vancouver are far away from home. Neat agendas early to assess with chief counsel before hand. Need more info on processing small fisheries.
- 2) DFO should hire first Nations to sit on all committee, groups, etc.

JAN VESPER (SFU):

- 1) My concern is whether the wild salmon policy can act as a banner at a high enough level to really be what it wants to be and hopefully can be. It may be a novel document and championed by those in the room today. But is it a banner that the province, forestry, mining, municipalities, etc. can also write under in the areas of relevance. Does the public even know it exists? Do all DFO departments -- related to salmon -- even worked under its guidance?
- 1) Groups outside of DFO need to work together and common objective/goal. Industry must be part of the planning. Need representatives from all levels of the government and public. The DFO should keep pushing all groups to participate. Communicate the kind of input that would be beneficial. WS PA should be communicated to these groups and DFO needs to ensure that as many groups as possible or more of the potential of the WSP.
- 1) Framework for partnerships must include all interest sectors as well as EBM perspective regarding recovery potential including far-reaching factors like climate change in population increase, i.e., some salmon stocks may have low recovery potential. Must prevent fishing derbies as a form of high-profile denial. WSP needs much higher public profile.
- 1) Not framing the discussion is properly. Treaties have to be dealt with. Gaps in understanding a policy and perceptions. Authority and discussion making. Public know there is a policy.
- 1) Resources, money. Existing partnerships need to work -- legitimate. Clear messaging. Clearer idea partnership requirements. Strong local processes in small groups. Use principles. Consider guiding us examples of integrated processes. Let Judge/arbitrator oversee allocation. 4 H's. Equitable monitoring, example, directed sampling for commercial sector in ocean, indirect sampling -- volunteer -- for recreation fisheries -- ocean --; in River recreation has relatively good monitoring.
- 2) Clear constitutional priority needs to be affirmed -- section 35.1. Fish included. International conventions need to be respected. Terminal fisheries. Value added. Ecosystem balance -- seals, otters, orca whales. Use fisheries act

-- habitat section. Effective in season management. Managed by cycle not year/annual.

- 2) What does sustainable fishery look like to you? Equitable sharing related to a multi-species model that incorporates Crowell, steelhead, etc.. Allocation policy followed so that first Nations have first access at fish -- second to conservation. Example no recreational, no commercial in Marine before First Nations. SK not managed using aggregates. Incorporate more of a cautionary approach. In season process that includes more first Nations participation. Reduce to make stock fisheries -- more sustainable, selective in River fisheries. Test fisheries I'd thought Fraser to improve information.

CHRIS WILSON:

- 1) There should be semi-quality amongst the groups that come to the table (enforcement and monitoring). DFO should not have meetings and then say thanks for showing up, this is the plan we have (possibly for awhile).
- 2) 51% of salmon stocks allocated to first Nations. This will have the first Nations as local management and as conservators. Food, social, ceremonial will be realized, full spectrum catch monitoring can be conducted in first nation areas. First Nations can conduct all of these if the violation penalties and sport license fees and allocated to first Nations programs.

SKIDEGATE:

- 1) Inclusive collaboration between first Nations, industry, hatcheries, recreational -- lodges, independents, NGOs -- and government, whereby all partners are sharing the same information at the table. It is important to avoid differentiating between partners according to the dollar value in implementing such policy, i.e., call management arrangements.
- 2) Know your limits and stay within it. Sustainability carries the connotation that one should only catch what you can eat. Nevertheless, we -- stakeholders, interest groups, DFO, first Nations -- require a marketing strategy that would sell to the world/general public. Long-term commitment/strategies supported by core funding that guarantees growth/adaptability within the salmon industry. Increase the value of wild salmon per pond.
- 1) Build partnerships with communities that live with the resource. Integrating planning and management should depend on communities where fisheries or stock occur. Track off of including large number of stakeholders is the voice of local communities is depleted, drowned out.
- 2) A sustainable fishery has the people that depend on the resource as the integral part of decision making. At the people that play with the resource example sports fissures that fly to remote lodges and take every opportunity away from local people and food, social, ceremonial and commercial, etc.
- 1) To build partnership -- train some people from each community to be fishery officers to work together with DFO in each local area.
- 1) As a scientist the WSP is on the right track for salmon. However, DFO and WSP is lacking the leadership and policy to protect coastal communities that depend on the resource.

- 1) Just do it. Integrate province in habitat and ecosystem management components -- strategies two and 3 -- because they have a tremendous mandate to manage the ecosystem. Be careful not to get bogged down in process and semantics and be mindful that most of the useful DFO reforms have come about as a result of [indiscernible].
- 2) Recently in, diverse ecological communities are maintained. Fishery is managed adaptively, it is selective with minimal by catch mortality, and it can be managed effectively, example, not derby style openings. Accurate catch and by catch reporting and effective enforcement.
- 1) Need to build partnership with those that build fish forums -- where are they? DFO needs to build internal partnerships! DFO need better partnerships with province. AAROM creates divisions in first Nations. Some first Nations are in eligible for funding. Passing the buck between Indian Affairs and DFO. DFO in East to repeat legal decisions -- Bella Bella Herring -- and they are not.
- 2) A sustainable fishery is one that will look after aboriginal people. This is most important -- not sports fish. Food for first Nations communities. Would like to see food, social, ceremonial fisheries. That with first nation territory that they can fish for all species and there is a plan to recover each species -- need separate plans by area. To be sustainable, need to be adaptable, which means you need to be diversified. In years when stock is in trouble can't ignore that stock and concentrate on other species. Enable communities to be stewards of the resource. Don't want to lose the knowledge and infrastructure within the community. This needs resources. If there is no fishing, people leave and lose their knowledge. DFO fish management needs to challenge. We have lost to some runs.