

Wild Salmon Policy Workshop

DFO Headquarters, Vancouver, BC

May 9, 2007

Present: Karl Wilson, DFO; Jen Fagan, DFO; Matt Mortimer, DFO; Misty MacDuffee, Raincoast Conservation Society; Ray Lauzier, DFO/PBS; Ted Walkus, Salmon King Lodge; Mark Saunders, DFO WSP Coordinator; Sandie MacLaurin, DFO OHEB Community Advisor; Dave Peacock, DFO; Peter Johnson, Wuikinuxv Nation; Bruce Burrows, Wuikinuxv Nation; David Stevenson, RSSEPS Coordinator; Vern Sampson, Living Oceans Society; Dean Stroup, Goose Bay; Bob Bocking, LGL; Gottfried Pestel, [??]; Ronnie Wahl, IRES-UBC (note taker)

1) Introductions and Review of Agenda – no changes suggested for agenda

2) Overview of Rivers and Smith Activities – David Stevenson

David S gave an overview of the activities of the Rivers and Smith Salmon Ecosystems Planning Society (RSSEPS) for those less familiar with this group. This overview highlighted two projects: the Rivers Echo Sounding project and Smith Inlet Chinook mark recapture projects. It also touched on the work being done by Rick Routledge to measure ecosystem parameters to determine benchmarks from an ecosystem perspective; this work is funded by the Tula Foundation. David S concluded that the group is also working out what the Wild Salmon policy means for RSSEPS, which are to be the discussions for the day's workshop.

RSSEPS was started in 2000 and was registered as a non-profit organization in 2003. It has a management committee of three people, and technical committee that consists of interested scientists and biologists. The Society is open to anyone who has an interest in helping improve salmon populations in Rivers and Smith, and has representatives from a wide variety of stakeholder groups.

Discussions

Bruce B asked about the status of using Rivers/smith as a WSP pilot project, and Dave P responded that this would be part of the day's discussions. David S reminded him that they already have on-the-ground work from over the last 3-4 years, which has been supported by the work of Rick R and Sandie M. They also have a great deal of information and mapped data on sensitive salmon habitat available on the RSSEPS website.

3) Overview of Wild Salmon Policy (WSP) – Mark Saunders

Mark S gave an overview of the WSP and its current status (he passed out copies of his presentation slides). He noted that the policy will go to the scientific review committee on June 13. They would also like to discuss opportunities in Rivers/Smith, including having Wuikinuxv as a pilot project. Mark S outlined the WSP's objectives, strategies and guiding principles. He stressed the importance of honouring commitments to First Nations peoples, and incorporating social and economic as well as ecological values into the process, though community feedback shows that the aim cannot be to balance these three components, as this is seen to lead only to

consideration for short-term economic gains. Instead, the goal is to find net benefits in all three areas, with conservation principles put first.

Mark S noted that work currently being done in Rivers/Smith often has commonalities with work being done in other regions – this allows for opportunities to coordinate and share information. For example, the Fraser Salmon Watershed Project is doing similar work on monitoring to the work being done by Rick R in Rivers and Smith Inlets.

Mark S also explained the need to have improved communications between the people in the field ‘the boot people’ and the policy makers, or ‘shoe people’, as well as having consideration for the ecosystems, the fish and the communities involved. This requires a common understanding of the status of the fish, habitat and ecosystems.

Discussions: were undertaken during Mark S’s presentation. His responses to people’s questions are incorporated in the notes above.

Action Item: *Mark S will forward reports he cited in his presentation to RSSEPS (e.g. the Pacific [Fisheries Resource] Conservation Council report on ecosystem parameters).

4a) Conservation Unit (CU) Method Presentation and Review of Rivers and Smith CUs – Ray Lauzier

Ray L noted they have a preliminary list of CUs that will go for peer review after the June 13th meeting – the original list has been amended due to feedback from this consultation process, and the group is also being asked here for its feedback on the Rivers and Smith CUs. He also passed out copies of his presentation Slides.

Ray L explained that the CUs were based on salmon population attributes of: taxonomic groups, isolation of populations (by geography and life history), fish migration patterns, use of marine and freshwater adaptive zones, and genetic diversity. The classifications are meant to be consistent and to delineate between zones, and not eco-sections; this requires a judgement call on the part of the professionals developing the list. The lists however, are not static and may be changed with information received by the scientists during their review, and from local people with knowledge of the salmon in their areas.

The ‘next steps’ in this process is DFO staff in the Yukon working with the Nature Conservancy to construct models describing that area to get information to describe the adaptive zones, and to continue to get feedback and local knowledge that may be incorporated to improve the models.

Ray L passed out binders with the lists for the Rivers and Smith CUs, and time was given for people to review the data and compare their knowledge with the listings and the maps posted for discussion.

4b) Discussions and Feedback from Rivers/Smith CU review

The Consultation Process

Bruce B raised the concern that suggestions that RSSEPS had made at a meeting in Vancouver last fall had not been incorporated. They had suggested Lower-Lake Wannock sockeye, Long Lake Coho and Wannock Chinook should be CUs, but this is not found on the lists. It is discouraging to spend resources attending meeting in Vancouver when their input is not reflected in the process. Ray L explained he was also concerned, because although he keeps the lists, suggestions that are made unfortunately don't always get back to him, which means he can't then evaluate them for the lists. The group had some discussions on who receives information, and how it gets passed to Ray L, it was generally agreed that 'tweaking' is needed, and that people should ensure that their suggestions go to Ray L. Dave P suggested that discussions about changes also be reflected in the records of the meetings.

Process to Amend CUs

Ray L explained that if a group gives a suggestion, they should also provide a name and contact information so that he can discuss it with them. Sometimes he then goes to the local area office to see if they are able to confirm the input, or will seek out other sources to get collaboration. Ray L noted however that suggestions are not rejected just because he is unable to get collaborating evidence. Finally, some suggestions are not incorporated because while they may show a separate population, they might not delineate a separate CU.

CU Monitoring and Assessment

The best methods to monitor and assess CUs were discussed – the group was concerned that while every population cannot be monitored, if only some CUs are assessed, then healthier populations might skew the data to make a CU look healthy, even when populations in other areas are declining.

Ray L explained that the habitat template would include not just numbers but the distribution of fish. Dave P added that it would also depend on whether the population comprises a separate CU, and that they know that some populations, like the Wannock salmon, need to be monitored, even if they are not a separate CU. Bruce B emphasized that if management decisions are based on the status of the CUs, then the Wannock Chinook be monitored as a separate stock – Dave P said that this should be included in the record (see action item below).

Ray noted that during the consultations there was disagreement on the definitions of the CUs by stakeholder group, where some wanted the CUs defined more finely, but others preferred fewer CUs to be defined.

Karl W was concerned about how to make monitoring decisions especially if populations exist that they don't know about, and about how to account for how many populations were in the red zone. Mark S said that using the indicators they would need to come up with a plan on how intensely the streams would be

monitored. Dave P and Karl W suggested doing rotational monitoring through the stocks – this would mean less frequent monitoring in each area, but would cover more populations. Dave P noted that not much critical information is lost if there is not monitoring every year, but asked how frequently monitoring must be done otherwise – certainly current protocols on some stocks were not enough. Dave P concluded that there needs to be an effective assessment strategy that explains the timing and meets the available funding.

CUs vs. Management Decisions

Mark S and Ray L explained that the CUs are not intended to act as management units. They do give some emphasis, but do not preclude putting emphasis on populations within CUs. The CUs are meant mainly to act as an assessment tool and to provide a template to help show if there are healthy populations in the CU.

Sandie asked about benchmarks and what would trigger which actions. She also asked about the smaller populations, and how we would know if the benchmarks had been hit. She cited the example for Wannock Chum and asked even if something had been in place what action would they have taken. Mark S suggested deferring this discussion as Gottfried is currently working on these issues.

Changes in Monitoring Protocols and Monitoring Resources

David S raised the concern that there is a lot of talk about the importance of monitoring, but no funding available for it – he asked if the changes in the DFO policy was to further reduce their stock assessment capability. Mark S responded that there was currently no rationale linking costs to reducing the stock assessments being done. Cuts in stock assessment have been ongoing and continuous – the CUs actually provide cohesive framework and logic behind the recovery strategies that help people better understand the salmon populations concerns, and so might then bring more support from senior management. Ray L added that the policy changes the way that things are done at a higher level, but do not result in a reduction of effort. Ted W cautioned that people who had been doing monitoring have to change careers because there is not enough funding for it. DFO then also loses the knowledge that they have – the information is too valuable, and they can't afford to lose these people anymore.

Bruce B thought more resources need to be put into assessing Wannock salmon. In particular Wannock Chinook are very valuable fish, which are highly exploited. But Dave P thought that there is a pretty good index on this population now, and lots of money had already been put into it. There were some discussions about how good the data were for these fish, especially from the sport fisheries. Dave P and Vern argued that they were getting good data, as they know the populations and the fishing people. Sandie M argued that because the lodges depend maintaining the populations, they know that better records allow them to maintain their livelihoods. Ted W added that he had worked at both lodges on inlet and had never seen a time when the lodges went beyond limits – very few guests even go home with limits they are allowed.

Action items: *people will forward suggestions for changes to the CUs to [Ray L.]
*DFO will ensure that the Wannock salmon populations are monitored in the CU assessment process

5) WSP Habitat and Ecosystem Monitoring – Mark Saunders and Ray Lauzier

Mark S said he is interested in seeing RSSEPS map work, for information and in support of other efforts in other areas. He would like to pull together the different approaches used by different groups. Although not everything would work in every area there needs to be a standardized way of classifying habitat in the province – DFO does not have a requirement to do this but it is an issue. They are aiming for a brief habitat overview for each CU.

Discussions

Indicators and benchmarks

In response to questions from the table, Mark S clarified that indicators like percent forest cover would be considered pressure indicators. He also explained that offshore indicators are not in strategy 2 – the information not strong enough here, but they are working to get data from the Earth & Ocean Sciences state of ocean report. At this time however, there is a terrestrial focus.

Karl W noted that many measurements could be without going into field, for example e.g. forest cover can be determined with aerial photos. He asked if there is a plan to get all of this higher level data together in one place – right now it is in all different hands. He added that there is also little data available from people actually going into field. Mark S said that there is a plan to get the pressure indicators in place so they know where to prioritize field work – some of this will be based on funding. Some of the assessments for pressure indicators are being done by the province with analyses based on satellite imagery. The scale of the imagery is also based on cost and there are hundreds of parameters to choose from. They would also like to take a fish-sensitive approach to hold industry to a higher standard in sensitive watersheds.

David S asked about indicators around settlements and populations. In the discussions it was noted that there were indicators for things like impervious surfaces, and conversion to different land uses, like forestry and urban, but not specific indicator for density of population in the watershed. Mark S noted that he wasn't sure how this would work in an area like Lower Mainland, which is highly urbanized.

Implement Monitoring, What next?

Mark S explained that the data issue is a large one. They are working on data sharing and making information widely available to those concerned as well as getting data from people in the U.S. who want to share using their web portal, but all of the data then must be presented in a common way.

Ray L Said a white paper is being created on ecosystem monitoring from work done at UBC in March – they are still discussing how it will work in local areas. Mark S also noted that there seems to be a great deal of overlap between what DFO is doing and what is being done in forestry, and that there has been support from UBC Fisheries, so it makes sense to get people together on the science side to discuss these issues – they need to come together and plan around a common landscape to do integrated planning, and have a common understanding of the land. David S pointed out that the ecosystem handbook produced by the LRMP seemed to be similar to what Mark S is talking about – it is a very valuable handbook.

There were some discussions on whether communications were better between forestry and fisheries in the U.S. than they are here. It was thought that the U.S. has a different context for these issues – while they have support from umbrella groups, and large budgets to do the work, they also have a ‘litigation environment’, and so many permits are required for even simple projects. The endangered species legislation in the U.S. was also seen as a driver. Mark S did point out however, that things are becoming more integrated here now too.

Action Items: *Bruce B will follow-up with Vern S and Mark S re. contacts for nitrogen loading presentation

6) After Lunch Discussions on Strategy 4 – Strategic Planning

Mark S explained that it would be some time before they have a governance model – DFO is working on it. At this time they are in the process of identifying priority CUs – which are in the red zone – so that they can establish response teams and identify resource management actions.

Mark S noted that the five-step planning process used in the Fraser Basin planning process seemed to work well, as it helped people to focus on identifying priorities and what the sockeye mean to each group. It helped often conflicting groups to compromise and learn about each other’s interests. The group chose social and economic indicators that mattered to people at the table. They were then able to compare management options and how each would impact on various group interests at the table. This allows for an acceptance of a range of indicators for different sectors and for the fish. Consultants gave advice and modelling support for the process. Unfortunately with no governance model the process ‘ran aground’ – people at the table represented their groups but didn’t have capacity to make decision on behalf of their groups. Gottfried P added that the process also needs time for people to become familiar with the model and to build up to level where people are willing to consider trade offs.

Ted W noted that the needs of the Wuikinuxv are very different than those of the Fraser, and asked if there was consideration on basin or sub-basin scale, and was there consideration for everything within that geographic scale. Mark S responded that they had been looking at scale in north and south in Fraser, and how to account for both, and whether or not to bring them together, or deal with them separately. It

is an idea that would probably work on the technical side, but is unsure on the political side.

There were some discussions about the large geographic scales of some CUs versus the respective planning bodies. Mark S added that there were also discussions at the Fraser planning table on which species to consider – different fish are valuable to different groups, but it is too complex to deal with them all at once.

Bob B pointed out that if management was done by CU then there would need to be some type of overarching decision-making body for some fish, for example the Central Coast Chum – he asked if they would still manage on a smaller scale then instead. Mark S said the aim is for ‘robust boundaries’ having CUs within them. Several salmon populations were discussed that might pose this type of problem. Dave P thought that the IHPC was the only body in place that might be able to do it, but there were some concerns that it doesn’t properly respect the First Nations interests.

Mark S concluded the discussions by noting that First Nations linguistic boundaries line up fairly well with Adaptive Zones, which he expected would probably also match-up with other ecosystem-based models – e.g. forestry boundaries. This is something that the First Nations people had pointed out already before. Mark S concluded that the current boundaries are also partly management artefacts based on things like the ability to get people to the sites etc.

7) Progress in Stock Assessment Frameworks and Benchmarks – Gottfried Pestel

Gottfried P outlined the computer modelling he has been developing for CU prioritization and assessment. He explained that there are challenges in getting information on some populations, and that people have differing views on how to prioritize populations. People also had different expectations from the model, where some wanted ‘hard and fast’ rules about things like monitoring protocols, but the goal of the model is to illustrate the major indicators, and to allow people to decide on what to focus on in their own areas.

Gottfried touched on major policies that affect management decisions – the WSP, looking at the biological factors, the Pacific Fisheries Reform, dealing with social issues, and the Pacific Salmon Treaty, that handles management issues. Different people could weight factors in the model differently depending on their priorities, and the policy issues they are working on. Funding bodies can also look at the inventory of threats and information gaps. Gottfried noted that DFO receives hundreds of proposals – this type of modelling could help support regional-level decision-making and set priorities for different populations of fish.

Gottfried demonstrated the modelling program and showed the group his work; he has begun creating a more user-friendly interface that would be posted for people to use in their management decisions. The demonstration showed how users could

choose different priorities for a salmon population and then see the likely results of management decisions based on these priorities. This model is not meant to be static, but to act as a tool to help evaluate risk factors, priorities, and areas of concern. The modelling team is also looking at ways of sharing information between groups.

Discussions

Technical Aspects of the Model

Mark S explained that in the model the stress status of a CU is not based just on abundance; many other factors are also involved. Gottfried P agreed – things like distribution of the population are also important. If the population is ok at one site but not at others, then the status would still be low. They also look at the current abundance of populations relative to the average abundance, to the maximums the populations, and the capacity of the population of the whole life cycle – though there are some information gaps in this process. Traditional knowledge and other measures about what is possible for these systems must also be a basis for the decisions about ecosystem or ‘optimal’ capacity.

Misty M asked how target escapements are handled. Gottfried replied that target escapements are a management decision – the statuses in the model are based on abundance – they are not meant to say ‘aim for these targets.’

There were also discussions about how many generations are used to show trends in abundance - the model currently uses three. Gottfried explained there had been debate on this issue, how they compare to, and how to decide what level of decline is bad. He said no single indicator can be used. For example, a population may be in decline but near maximum capacity if it is coming down from a peak – this population would still be in bad shape even though it would have relatively high abundance. The decision on the number of generations is done on a species-by-species basis depending on the populations’ life cycles and variability between generations.

Dave P suggested focus of the terms used seemed pessimistic, for example, there were only options for ‘decline’ but not increases. Sandie M asked how a rebuilding population would show up on the model. Gottfried noted that the populations under concern would be the ones at risk, and so in a negative state – those not in decline are not likely to be at risk. He did agree to consider re-labelling the axes.

Bob B asked how a modest or a drastic action would take a population from the green zone to the red zone. Gottfried said that if a population is not showing severe status or is in decline then it would not be on the risk list.

First Nations and Traditional Ecological Knowledge (TEK)

Peter J asked about consultation with the Wuikinuxv First Nations. Gottfried responded that the current focus has been on Fraser Sockeye. Discussions there

highlighted the importance of the fisheries for First Nations fisheries, but it is difficult to capture nuances involved in these issues.

Bruce B noted that the model looked like a good tool, but raised the concern of incorporating TEK. Current management approaches are based on Western reductionist science, which is good but not always right. TEK uses visual impressions, and a holistic approach, not just numbers. Bruce B cited the example of herring where TEK knew the population was in trouble, but decisions had been made on scientific data which disagreed, but was wrong. Gottfried explained that the model does allow for TEK to be incorporated. There is a module for TEK that can be weighted in the decision-making process with the range being from no consideration for TEK to the only consideration for TEK. People must then judge how much to weight this (and other indicators) in their decision-making. The model can also help compare results when different ratings are given to TEK as compared to Western science. Gottfried P thought that the tool might also help 'convert' issues raised by First Nations through TEK to a format that can be better accepted and understood by non-First Nations policy people.

Wrap-Up

Gottfried P said that there would always be debate among groups of people on the details of the tool, but it is necessary to look at how it works in the overall picture. He noted there were still challenges in finalizing the inventory of threats and gaps, and they were still getting feedback about these factors. They are also still working on how to package the tool so that non-expert users can take advantage of it. The group thanked Gottfried P for coming and expressed general appreciation and approval for the work he had done, and thought that the model would be a useful tool.

Action items: *People will forward comments and feedback on the model to Mark S (who will forward them to Gottfried P)

*Gottfried P will work with Dave P and Bob B on model testing and terminology

8) Discussion of Approach to Rivers/Smith WSP Planning and Next Steps

Mark S noted that a lot of work had been done for the decision-making process, and that concerns had been identified in the morning on classifying CUs. Mark S said the next steps would be to look at the possibility of Rivers/Smith being a pilot project, and different aspects of how this could be done. DFO management wants to see a framework of what a strategic plan would like for the CUs, and what resources would be needed. The plan should show what things would look like for things like fisheries, habitat measures, etc. for five years from now. Management is looking at this area, but also wants to continue its dialogues with other areas where work has also been started. They also need to get habitat information from Heather, and to look at the pressures and indicators. They would also need to decide on a governance model, who would be at the table for that, and how to put it together.

Discussions:

Bruce B expressed disappointment. They had hoped to get formal agreement to get pilot for Rivers/Smith. He thought the band would not put in time and energy and resources for this without formal commitment from DFO. Bruce B said he would bring the information back to the Chiefs and Council, but thought there wouldn't be full engagement without DFO commitment. Mark S explained he could commit to working with them, but not to making them a pilot project – that must go through senior management after talking with the implementation team. Mark S added that while most of the pieces are in place, his management is concerned about committing a pilot without knowing how much money and staff would be required. They also want to know what would come from the planning process.

During the ensuing discussions Mark S noted that they had made the argument that a lot of ground work has already been done, and that the group has the internal and external capacity to do the pilot project. He said the funding for this type of project is fairly modest – about \$10-30 thousand - to bring people together for the planning process. Other resources - \$10-20 thousand – would also be available for things like science and habitat. This doesn't however include estimates for staff time for analyses, meetings, etc.

Mark S further explained that the end products of a pilot would be a recovery plan and an action plan. They would need to have biological objectives for CUs, showing targets for 5-10 years from now. The planning process would need to develop a plan to show how to get a CU out of the red zone, though they could aim for either green or yellow zone improvement. The plan must also inform DFO on fisheries management, including short-term tactics, as well as habitat production strategies to restore, protect habitat, that work with forestry for best management for fish, etc. Dave P said that the plan should also show specifics on the participants, and anything that the group could reveal about funding, etc. – these are strong points that the others don't have.

Mark S concluded that the next step would be to bring the plan to management and hopefully get the go ahead to use Rivers/Smith as a pilot project. David S –asked about the next step of bringing the framework to Senior DFO management.

Dave P asked about the Living Rivers monies, which are still available. There were some discussions about whether this fund's geographic region would cover Rivers/Smith, and how to contact them. It was thought that RSSEPS could at least ask about the possibility of asking them to extend their boundaries to include Rivers/Smith.

Action Item: *David S will talk to Al Lill and Al Martin (province) re. Living Rivers funding

9) Wrap-up and Debrief

People generally expressed that they were impressed with the amount of work done so far on process and tools developed (especially Gottfried P's model). However, many emphasized the need that the process address the concerns of the Wannock Salmon, and that DFO use the information they have from the group and honour its commitments to consult in a meaningful way, especially with First Nations. Mark S concluded the discussion that there is also a take away message that there is need to get started on the actions and not just talk about them.