

RSSEPS
Meeting
June 6, 2006
Pacific Salmon Foundation Offices
Vancouver

Attendance: David Stevenson – Coordinator
Sandie McLaurin, Frank Johnson, Misty MacDuffee, Wayne Jacob, Paddy Walkus,
Dough McCorquodale, Bruce Burrows, Bob Bocking, Stan McLennan, Rick Routledge,
Dave Peacock, Alan Kenney, Karl Wilson by phone
Ronnie Wahl – minutes

9:40am – Review of Agenda
The agenda was accepted as presented

Overview of RSSEPS

David welcomed everyone and gave an overview of the history of the society. He explained that the RSSEPS was formed in 1999 as a coming together of fisherman, the Wuikinuxu people, DFO and other stakeholders to address concerns about the collapse of the salmon stocks in the 1990s in Rivers and Smiths inlets. In 2003 the RSSEPS was registered as a legal society, reflecting its current form as a consensus-based organization with open-ended membership for all stakeholders concerned about salmon in the region. A management team was appointed and the Technical Advisory Committee (TAC) formed. The TAC is composed of DFO staff, biologists, and technical support people who set priorities and determine projects, which are sent to the group for agreement.

In 2004, a recovery plan was written, and money received from the Pacific Enhancement Foundation (PEF) through the Pacific Salmon Foundation (PSF) to implement the plan in 2004 and 2005. Due to a change in the PEF's funding priorities, the initial budget has been reduced over the years, until currently there is only funding to pay the group coordinator. Allen said that the PSF is independent and would still provide capacity funding and fundraising support wherever it could.

David said that part of the day's discussions would focus on reviewing and revitalizing the society, and providing focus for the group. Discussions will also be on getting consensus for projects and goals that are best for the salmon and best serve the interests of local communities. Once such priorities are set, David can move forward and seek funding for them.

Review of Rivers Echo Sounding Project

David explained this project was funded by the Pacific Salmon Commission Northern Boundary and by Wuikinuxv Treaty Related Measures funding. The sounding program was well-proven over many years, until the 1980s, when it was discontinued due to lack of funds. The current fieldwork is planned to start July 5. The group has the money and contract, but the budget has changed due to changes in the program.

Bob passed around copies of the new proposed budget and schedule, which he had prepared in response to discussions at past meetings. He noted that the program had not fundamentally changed, but that there were extra costs for training a second technician and for adding a week to the schedule, which also increases the analysis time required. Some budget expenses had been reduced through receiving in-kind support and funding from DFO, the Wuikinuxv TRM funds the PFC funds. Two issues were unresolved: species composition and having one week of analysis for each week of fieldwork. Bob concluded that how the project moves forward depends on where the Wuikinuxv would like to go with it.

Specific details of the budget, cost allocations, and in-kind support were discussed. Ideas were raised about where possible savings might be made. Some ideas, like using lower tech methods, and putting a contract for the project, rather than hiring someone by the day, were taken under consideration for future projects.

Reducing the number of days, and how this would affect the confidence of the data and the budget was a focus of much of the discussions. Bob explained that the training or analysis days could be reduced, but the mentoring was a goal of the project, and it would mean collecting data but not analyzing it.

Frank talked about his concerns on how climate change was affecting the runs. Last year, the first run of smaller fish went through early without them noticing, the water had not changed colour yet. The fish habits are being affected, and it is becoming more noticeable, with the water being late to change from clear to glacial. He added that they had also been catching chum at odd times, and asked if consideration was being made for these concerns.

Dave Peacock raised the importance of the issue of species composition. Bruce thought this information would provide very valuable ground proofing for the sounding, but asked if it would be feasible – the area is too big and there are too many fish. Wayne said that depending on what else was happening, there could be TRM money for doing a mark and recapture program, which could be done using the same boat. Frank asked about the deliverables of the TRM and if there was an agreement in place for its use. Wayne explained that the deliverables had been developed through feedback from this group and were fairly open: i) (last fiscal year) to develop fish stock assessment methodologies, and ii) (this fiscal year) to test-drive them. The idea of ‘piggy backing’ on the sounding project had been part of the discussions from the onset of the project, but PCF money would free up some TRM money to do the mark-recapture. TRM was meant for stock assessment and making recommendations to the treaty table, this would allow one more method to be used.

It was decided that the group wanted to do the project, but that it might be possible to trim the costs a bit. The budget was referred to a subcommittee for review and revision. David stressed that this should happen quickly.

Action: Bruce, Bob, Dave, and David will meet to review and revise the sounding budget.

Report from Gwa’sala-’Nakwaxda’xw First Nation

Chief Paddy Walkus asked to speak before he had to leave for another commitment. He raised three items for consideration:

- i) The benefits of the work of this society to the community
- ii) How much does the group's work compliment the work of individuals and communities, especially those of the First Nations?
 - The local work should be recognized and acknowledged
 - Will there be continued efforts to compliment the instream work of the First Nations?
- iii) Can a communiqué be produced explaining in lay terms to tell the communities more about the society and its programs?

He expressed appreciation to everyone for the work being done – commercial and food fisheries are both being affected.

Salmon Monitoring Update

Rick reported that he had been working on a program to monitor juvenile salmon coming out of the inlet – this is a critical stage for the salmon, which might help explain why there was the collapse. They now have four years of data plus related natural history information. One of his grad students noticed a pattern that their catches peaked at the first full moon in June. They found consistent abundance at the junction of Moses and Hardy inlets. This is taken as evidence that the fish use the food in the inlet to get large before going out into the ocean, not just for migration. The availability of food is variable, and their study shows a correlation between stream flow and survival, where high flows mean silty water, and poor food for the fish, leading to decreased survival. They are now working on a study on hydrodynamics vs. plankton.

The goals of his research are:

- i) To derive a hydrodynamic model
 - Similar work has been done by Ron Tanasichuk in Barkley Sound
 - Will help determine things like how long it takes for the inlet to flush
- ii) To develop qualitative predictors of marine survival
 - Current data is not sufficient for precise quantitative predictors
 - However, further study may bolster the validity of a qualitative predictor
- iii) To study sediment cores
 - A background paper has been accepted for publishing
 - Shows the impacts of decreasing nitrogen levels in lakes
- iv) To publish manuscripts based on the research findings
 - One will be done based on the current grad student's thesis
 - Several others are planned for the future

Bruce asked for more details about the sediment study. Rick explained that sediments had been collected from about 10 lakes to try and address how ^{15}N may act as an indicator of sockeye abundance. When there are lower levels of nitrogen, more is picked up by phytoplankton; with higher levels, relatively more ^{14}N is picked up. They did notice a decline in marine-derived nutrients after the commercial fisheries started, but it was a delayed response. The results also show there has been no major collapse since the start of the core, around 1700, refuting claims that collapses in the salmon populations are natural.

There was some discussion about the impacts of the fertilization program, for which Rick said there was no evidence for a response in the cores. Dave noted that during

that time a weir was also put in meaning that while there is good information available, it is difficult to relate it to what happened before.

Rick currently has private donor funding, a federal research grant, and university funding to support the project for a couple more years. He also has a new master's student starting this fall to do some of this research. David noted that this group had given considerable support in the past, but now did not have the money.

Rick said that it is very difficult to get solid quantitative data on juvenile salmon, but that in a qualitative way it is possible to do adult return predictors. Sandie asked about fundamental measurements, and David asked if this was a project that could be taken on by the Wuikinuxv, maybe they could collect data to make predictions over 4-5 years time, but Rick said it would be mainly a matter of knowing the river flow. Dave Peacock said that preseason work had a bad track record for forecasting, they only supported in season work – if there is a change then the preseason predictions do not work, and it is the changes which are important. Rick did note though that it is still important to try to gain a long-term understanding of influences on fish survival. With increases in global warming, there will be increased flows, and so decreased salmon abundance.

Action: Rick will send the reference information to David for the background on the lake sediment study

Review of RSSEPS Recovery Plan, Mission Statement, Goals & Objectives

Review of the Mandate of RSSEPS and Re-statement of Mission Statement, Goals and Objectives

David reviewed the functioning of RSSEPS using a handout that also referred to the Recovery Plan and the RSSEPS website. He also reviewed past and current projects, showing the budget and total value of each. Finally he reminded the group of the priorities that had been identified at the last meeting. He asked if people were satisfied with the direction the society was going in, and if they had input or concerns about anything.

Stan asked about the budget numbers vs. the total values. David explained the budget numbers reflected what RSSEPS had put in and the total value included in-kind and other support from other groups. Frank asked that in the future the other supporters be listed to clarify the numbers and acknowledge the contribution. David noted this was provided on other documents, but agreed it could be done here.

David asked if the First Nations were happy, or if they had changes to suggest. Bruce said that because the society was nearing the end of the recovery mandate, the focus should be shifted to evolving a co-management model – when the fish become fishable the First Nations must have a –say in harvesting plans.

Misty asked about defining recovery – did it mean lake productivity, or escapement? – the numbers seemed to range a great deal. Discussions were made on this topic. Bruce said that 200 000 was the minimum for fishing, but an escapement of 600 000 was optimal. Discussions were had about the uncertainty of the data, whether these numbers were sufficient, and the context in which they were used (i.e. population decline vs. increase). Doug said that in the past they argued about limit reference points, or the minimum number of return to allow for genetic health for the stocks, now the

discussion has evolved to escapement; it is easier to agree on things to do to bring the fish back than on limiting numbers and who gets to eat the fish. Rick shared Misty's concerns – there are many things we do not know, like what the conditions of the oceans will be in the future, and data from the lakes. Sandie also reminded the group that it shouldn't become to sockeye focussed.

Frank suggested that looking back on what had been achieved might help the group decide where to go. There were some discussions on some of the group's projects.

Although people noted Mother Nature was responsible for the recovery of the fish, Bob thought that the group had done a lot of work on developing tools for in season management and the sustainability of the stocks, to look out for threats and supports to support the work of nature.

Frank was encouraged that the members of the group had moved beyond past tensions and created relationships to do the jobs that were needed.

Issues of where the group's focus should lie were raised. Frank thought more work should be done removing debris where it dammed the rivers, as their ancestors had done in the past, but David said that earlier discussions pointed the group to concentrate on marine survival instead. Rick argued that new technology might show something different in the future, and his research showed that river flow and fresh water also impacted survival, especially as related to other land uses, like clear cuts. This led to some debate about the history and impacts of forestry on the fish stocks.

Review of Wild Salmon Policy – Co-management Pilot Project

Dave Peacock thought that this group could not evolve to direct management, but he had suggested Rivers Inlet as the pilot project for DFO's Wild Salmon Policy, which is a five-step process leading to co-management in local communities. This area is ideal because it was a smaller area, with a limited number of stakeholders, and because RSSEPS was already active there. Dave passed out copies of the related part of the Wild Salmon Policy, reviewing the five steps to illustrate where the group could fit in with this program. Dave added that he did not yet have final approval, but that he felt that the group should become involved if it went through.

Although there was some talk about the finer details about the project, the main focus of the discussions was on the role of RSSEPS and whether a new group should be created, or if new stakeholders should be included in the existing RSSEPS. Bruce argued that RSSEPS could evolve to take on this role. He added that current consultation processes do not fit First Nations needs. He and Doug felt that First Nations peoples were often left out of the process, or not listened to when included. Dave responded that in this process first priority would be given to First Nations rights, before any other consultation was done, but that it was unlikely that the representatives from the recreational and commercial fishing groups would be willing or comfortable coming to this group for the co-management process. Frank reminded everyone that good relationships had been formed within this group. The process should be integrated, with everyone involved. He worried that with all the current conflicting interests, creating a new exclusive group would make it hard for the society to stay together. He did not want to see a wedge split the society apart, but will take the issue back to his band for discussion.

Break for lunch at 12:00. Meeting was reconvened at 12:50.

To bring the group back on focus, David asked Dave Peacock to clarify what the role of the society would be if it decided to join the pilot project. Dave Peacock explained that it would be to help translate the five steps in a meaningful way. This had been done partially in the Fraser Basin Council with facilitated workshops, but that model might not be useful here. The timeframe would be to start in the fall, meaning that the summer fieldwork being done here could be taken into account.

Bruce suggested that if the group were to be involved then there should be people who could truly represent the commercial and sport fishing people. He also suggested that the Native Brotherhood and UFAW be invited. Dave noted that they wanted to be inclusive of everyone but warned that some of the others might not want to be 'the lone voice' in this group.

There was agreement that the parties need to all come together to discuss the issues, and in response to Bob, Dave said that DFO would be doing the project anyway, even if RSSEPS did not join, but the process would then need to be done separately with each stakeholder group. He felt that there would need to be terms of reference for the process and that the stakeholders would need to feel comfortable with it. Concerns were expressed that while it often felt like the First Nations representatives were expected to join processes in which they feel at a disadvantage, it seemed acceptable for the other stakeholders to reject an invitation to join the process with this group. People in the group argued against 'reinventing the wheel' and asked Dave to encourage the other stakeholders to join with the existing RSSEPS structure. Bob concluded that if there were a new group then it would not be on the RSSEPS list of projects anyway.

Bob also noted that if Fish Management and the other groups had not yet approved the area then the discussions could move on. Dave said that Rivers Inlet was in for the northern area, but it could be revised to include Smith Inlet. They need local management and involvement, but if Fish Management adopts and supports the project then they will get buy-in from the groups.

Actions: Dave Peacock will petition the sport fishing and commercial fishing groups to see how they would like to be represented. He will encourage them to participate in the existing group.

- **Dave Peacock will update the group through David**
- **Others, e.g. Stan and Frank, will also keep the group posted on their discussions with their people**

Co-Management Framework

David asked for discussion on how co-management should look in a more general way. What would it look like? How would it work? Who would have authority and responsibility? What is the First Nations perspective?

Doug said that at the beginning they wanted to be a 'buck stops here' group. The group is successful because it brought together different stakeholders, including DFO, which also had its own TAC. His preference was to bring a couple of representatives from all the stakeholders together, with strong terms of reference, and to be a place where decisions are made. He acknowledged this might be difficult due to regulations at the provincial and federal level and the large amount of front-end work required to set things

up. Doug reminded that in the past there were many more stakeholders at this table, but attendance had been dwindling. He'd like to see this group be the group where all salmon decisions were made. David noted that this group worked well within its limitations. Coastal co-management is a challenge and is being tried all over the world. It's a difficult process, but the group should get on with it.

Frank said that he did not want to be the one who cooperated, while someone else did the managing – there needs to be an equal partnership. Bruce added he did not want to see a situation where DFO spoke with the commercial and sport fisheries, but not the First Nations peoples, he would like to see DFO communicate better with the local people. Dave Peacock explained that the talks DFO had had with those fisheries was only to bring them the results of discussions and plans – the benchmarks, etc. from the group, which were done with cooperation from the First Nations – the other stakeholders had complained that they had not been involved in the process. Doug noted this was the reason that more people needed to be at the table.

More discussions were made about the role of RSSEPS in relation to the pilot project, and whether or not a new group should be formed for the pilot. Thoughts were given on how to get the other stakeholders to the table, including having 'sexy' or 'controversial' items on the agenda, not including allocations in the terms of reference, and having subcommittees for different issues. Bruce suggested a structure that had been tried at another co-management board: 12 members, with six First Nations and six other representatives. Decisions are made by consensus, but if a vote is needed, a double majority is required.

David asked about how the financials would be handled if the other groups bought in – in the past everyone brought money in too. There would be costs for infrastructure, meetings, etc. Doug noted this group had a unique dynamic because it did not have industry funding, but that this also mean relying on the First Nations for support. Bruce said that being a management board and concentrating on the planning would not have as many costs as taking on projects. Bruce asked if the project would fit with the AROM (Aboriginal Resources Ocean Management) objectives. Doug said that they had tried and been turned down. There was some discussion on how the project might fit with the funding objectives and rules. David said that they could always ask again.

Frank asked how the new MOE memorandum of understanding might affect things, but Wayne and Bruce thought it would not. Discussions on licensing, past and current practices followed.

Stan asked about other funding and support possibilities, including reviving the program to hire fisherman who did not qualify for UI to do DFO projects, like stream cleaning; having people on community service sentences; and a supplemental \$5/day 'salmon enhancement' fee for guests at the lodges. Dave Peacock noted that a supplemental tag for recreational licences is under discussion, and that on the Haida Gwaii the lodges had this type of contribution, which Sandie said is about \$45 000/yr up to now.

Sandie thought that moving beyond commercial interests and looking at land-based issues was important – they should not lose the watershed planning, processes and habitat aspects. There are studies on productive capacity, they could see where the links and gaps were, to see where the group's interests tie in and if there is funding for land use planning. This led to discussions about the CIII funding (funds that come from the CCLRMP process) and whether the group might be able to access some of this money.

Action: Misty will look into the rules to access CIII funding, and how/if the group could access it.

Project Updates

Otolith Readings

Sandy reported that the box of lost otoliths had been found and would soon be read, filling in the current data gap in the more than 1000 that had been read. Karl reviewed the proposed dead pitch project for 2006, explaining that to have a 20% error, with an escapement of 17 000 fish, then a minimum of about 3 200 otoliths were required. Bruce noted that the sampling had been included in the AFS budget, but not the readings, which are about \$8 each.

Karl explained that they had completed one year for a class for one watershed, and the first half of the 2004 returns on the second. Sandie said that after the readings they would have records for the complete 2000 brood and one brood year for 2001. Karl said that the data showed an overall result of 0.51 compared to the DFO biostandard of about 0.68, for the [Amback] the current number is 0.37, if they have a similar result again this would also be close to the biostandard for natural broods. Karl pointed out limitations in the data, including that the numbers change when measuring egg to fry vs. to adult, estimates that must be made to compare to wild stocks, and the confidence level of the data – although the confidence interval here was only 20%, it is at least that for the wild stocks.

Doug asked if the objective was to see if the hatcheries supported recovery, but Sandie and Karl explained it was only to see if it is feasible to maintain the population and genetic diversity; to prevent extirpation, not support recovery. Sandie added that this was the reason that the fry were released as early as possible to avoid cultural interference as much as possible and for maximum natural robustness to occur.

Bruce asked about lower survival rates after moult, Sandie agreed that the key stage was the first year in the lake. Misty asked about studies from the U.S. that showed that the hatcheries could actually aggravate the problem. Sandie replied this was why things were done very carefully; they did not wish to make things worse, just to see if the genetic diversity could be maintained.

The costs vs. benefits of the program were discussed. Karl was concerned about the high costs and wondered if it were worth doing. Doug pointed out that even if they got results that the hatcheries were beneficial, there was still no funding for the hatcheries. Sandie thought it was still important to do. Bruce suggested that because there was money for it, the sampling could be done now and the otoliths kept until money could be found to have them read.

The idea of using a fish counting fence on the Gensesee was raised, but Sandy explained that this had been discussed at DFO and was not feasible: there are problems with the costs vs. the utility of the project; a great deal of money (\$45 000) would be spent for a small system that might not be representative of other systems; there were staffing and other resources required beyond the funding, including having a dedicated crew for 7days/week; the project is not seen as important when looking at the big picture. It is also not possible for the Amback Creek, which is bigger and flashier with larger

energy systems. This would increase the cost of the fence and personnel, and it still might not be reflective of other systems.

Juvenile Surveys

Bruce said he would be involved with the project again this year. Dave thought this project was important, and acoustics could also be used. David asked if the Band was planning on buying its own sounder. Bruce said yes, they planned to eventually, and they could then rent it out. Dave and David suggested that they could put in a proposal to the [Northern fund] to buy the equipment –if the program is good and can be sustained, then they have a chance to get the money.

Climate Change Impacts

David asked about monitoring for climate change. Bruce said that there is some data on a website that gives automatic feedback. Sandie said they also had data loggers out since 1998-1999, but some data is better than others, as they get washed away. The loggers monitor temperature but not flow – those units are much more expensive. Bruce thought the information would also be useful for the Wuikinuxv's oolichan project.

Misty said she had been approached by someone who was undertaking a glacier-hydrology initiative, and who was looking for a project and to tie the work into larger issues. She asked if the group had interest in this. Karl thought this project would tie into Rick's work linking flow to survival, and David said Rick had previously talked about connecting glaciers with the hydrology. Dave Peacock said it would be important to bring in flow, silt, and a number of other factors – many linkages could be seen in many areas. Frank reminded that the colour of the river was changing at the wrong time of year, and thought there were glaciers for those salmon runs. David said it is important to be able to link the issues to salmon productivity.

Action: Misty will touch base with Rick on linking climate, glaciers and hydrology and do a write up of his and the group's ideas. She will report back on this to the group.

Summing Up and Adjournment

David said the next steps were to have a meeting in September. They would email about the date and location, with it maybe being in Port Hardy this time. If necessary, they could have a conference call in the summer, maybe August. People could send their travel receipts and claims for this meeting to him.

He asked if there was any other business. Seeing none, he thanked everyone for coming.

Meeting adjourned – 3pm.