

**VANCOUVER ISLAND NORTH WOODLANDS ADVISORY GROUP
(VINWAG)
Western Forest Products Inc.
Community Advisory Group
Minutes of Meeting November 8th, 2012**

Attendance:

Jeff Houle, Small Contractors	Tom Doak-Dunelly, General Public
Jon Flintoft, WFP	Patrick Donaghy, Local Government
Dave Trebett, Tourism and Recreation	Mike Pitre, WFP
Ray Harper, Labour	Fred Robertson, Youth and Education Alternate
Steve Lacasse, Environment	

Presenter: Rod Negrave, MOFLNRO**Regrets:** Dale Dorward, Small Business, Janet Dorward, Local Government, Paula Galloway, Aquaculture, Paul Barolet, Observer, MOFLNRO, Mac Willing, Fish and Wildlife, Chrissy Chen, Observer**Observers:** Keiko Arakawa, WFP, Clint Cadwallader, WFP (Manager, Holberg Forest Operation), Jim McDowell, WFP (Operations Engineer, Port McNeill Forest Operation), Ralph Wallas, Observer**Chairperson and Facilitator:** Annemarie Koch**Minutes taken by:** Jon Flintoft and Annemarie Koch**1.0 SAFETY AND INTRODUCTIONS**

Annemarie welcomed everyone to the meeting, stressed the importance of safety in WFP's operations, and reviewed the procedures to follow in the event of an emergency. Annemarie reviewed the objectives of the meeting, namely to review the minutes and action items from the previous meeting, hear a presentation by Rod Negrave (including mandatory Criterion Three discussion item, long term nutrient levels, shallow soils and best management practices for soil protection), confirm the 2013 meeting schedule, hear a review of the October 2012 internal audit results and an invitation to the next external audit, receive and respond to the participant satisfaction survey, discuss recent harvesting at Devil's Bath, hear a review of the September 14th field trip and all PAG workshop and field trip in Powell River and confirm the date of the next meeting. She noted that VINWAG's member representing the general public had asked that a discussion of recent harvesting at Devil's Bath be placed on the agenda, and that Jon had asked for time for Clint Cadwallader to give a brief overview of WFP's logging fundamentals training program as an addition to the agenda.

Annemarie invited everyone to introduce themselves for the benefit of the additional WFP representatives who were attending the meeting. Jon noted that Keiko Arakawa was a term student who is very interested in the certification process, Clint Cadwallader was attending to listen generally to input from public advisory group members and to address any questions regarding the logger training program, and Jim McDowell was present to participate in the discussions regarding recent logging at Devil's Bath.

Annemarie noted that Mac Willing had emailed Jon to let him know he would be stepping down from VINWAG, now that his retirement plans were taking him away from the area more and more. She suggested that a note of thanks be sent to Mac and that the solicitation of a new fish and wildlife representative for VINWAG be made an action item.

2.0 REVIEW OF LAST MEETING MINUTES AND ACTION ITEMS

Minutes of last meeting were reviewed.

Annemarie reviewed outstanding action items 44-129 with members and the results of the discussion are summarized in the table below, along with the addition of 4 new action items developed during the course of this meeting. Action items that were completed or changed or generally ongoing were dropped from the list.

ACTION ITEMS					
#	Item	Responsibility	Initiation Date	Target Date	Completion Date
69	Ask MOFLNRO appraisal staff to provide a presentation or information on how stumpage and royalties are calculated	Jon Flintoft	October 14, 2010	Approach District Manager, based on recommendation from Paul, for sometime early in 2013	
84	Provide an update on the status of carbon trading and carbon credits (M. de Bellefeuille)	Jon Flintoft	December 2, 2010	Sometime in 2013	
106	Carry over old Indicator 38, number of new hires as a locally developed indicator and make the target a reporting out initially	Jon Flintoft	September 22, 2011	Next SFMP Update	
119	Recommend possible energy sector representatives and a speaker for VINWAG	Dale Dorward Annemarie Koch	April 26 th , 2012	Sometime in 2013	
124	Draft new target for volume of wood sold locally, for Indicator 6.3.1 that connects requests with volume	Jon Flintoft	June 14, 2012	February 28, 2013	
127	Discuss effects of BCTS blocks in DFA during internal audit	Jon Flintoft	September 13, 2012	February 28, 2013	
129	Continue to make arrangements for VINWAG speakers, as per discussions at Sept. 13 meeting	Annemarie Koch	September 13, 2012	Throughout 2013	
130	Send note of thanks to Mac Willing and seek a new representative for fish and wildlife interests	Jon Flintoft and Annemarie Koch	November 8, 2012	Note of thanks by November 15 & recommendation for new member by February 28, 2013	
131	Revise indicators as per recent internal audit recommendations and bring revisions back to VINWAG	Jon Flintoft	November 8, 2012	February 28, 2013	
132	Summarize results of 2012 participant satisfaction survey	Annemarie Koch	November 8, 2012	February 28, 2013	
133	Review results of summary report on recent harvesting at Devil's Bath at next VINWAG meeting and discuss ways VINWAG might become part of WFP's development and implementation of best management practices on harvesting sites such as Devil's Bath	Jon Flintoft and Brian Smith	November 8, 2012	February 28, 2013	

The September 13th, 2012 minutes were accepted as circulated.

Jon noted that AAC of TFL 39 Blk 4 was currently combined with Blk 3 but would have its own AAC in future.

Further to Dale's request at the last meeting, Annemarie noted that Jon had contacted WFP's director of procurement and discussed Dale's concerns related to the local purchasing indicator, and extended an invitation to attend a future VINWAG meeting.

Annemarie noted that the request for a MOFLNRO speaker to address the setting of stumpage and royalty fees had been on the table for quite some time and explained that Jon had discussed this request with Paul Barolet who pointed out that Darren Rowsell is no longer responsible for this area of MOFLNRO operations. She noted that Paul had recommended that we approach the District Manager to determine how best to address this topic at VINWAG and it was agreed to do this by early 2013.

She added that she would be removing action items that were generally ongoing in order to speed up the process of reviewing these matters and allow more time for presentations and discussions. She then introduced Rod Negrave.

3.0 LONG TERM NUTRIENT LEVELS, SHALLOW SOILS AND BEST MANAGEMENT PRACTICES FOR SOIL PROTECTION: ROD NEGRAVE, MOFLNRO

Rod noted he would be reviewing soils in relation to silviculture and productivity. He noted this discussion would include a look at how soils form and gain fertility through biological activity and weathering.

Rod defined what soil is, and referred to two types of soil: transported and in situ soils.

Rod reviewed some of the variables that affect soils, such as parent material, climate, topography, biotic agents (plants) and time. Rod stressed how important topography is to soil development and how plants interact with soil. He gave some examples of how climate affects soil and how soils develop over time.

Rod reviewed processes of soil development, noting soils develop from the top down. He noted the area at the top tends to be the area of maximum exchange of materials such as fecal material and material brought by precipitation. He noted this area of soil is the area that managers generally want to manage the most. He reviewed the various horizons that are part of the make-up of the soil.

Rod reviewed various types of soils in different parts of Canada, including sedge meadows in Alberta. He noted that, while these soils are very rich, the climate is very extreme and therefore productivity can be limited. He contrasted this with some Pacific Rim soils that are not very rich but the climate is much milder, and productivity tends to be limited. Rod reviewed some marine clay soils on Malcolm Island, noting the gleyed horizon and deep soil that can form on these sites. He pointed to some contrasting dry sites with lots of gravel on parts of Vancouver Island that don't support tree growth very well.

Rod discussed how soil profiles relate to soil productivity and hence forest productivity. Rod distinguished soil quality from site productivity, noting the latter is the sum effect of soil quality plus management inputs.

Rod reviewed some of the factors affecting soil and site productivity, including parent material, soil depth, water table, soil moisture, soil aeration, soil nutrients and disruptive events.

Patrick asked about high manganese content in North Island soil. Rod said he was not sure if this was related to the parent material in this area or other factors related to the weathering process.

Rod noted that much of the landscape on the coast here is made up of granite knobs, where plants have deposited organic materials which are starting to build up, sitting right on top of granitic rock, with a layer

of saprolite. He noted these sites tend not to be very productive. He noted that landslides on these sites can create more productive growing sites, where organics and other soils ingredients pile up together.

Rod pointed to the importance of soil aeration, to sustain the soil fauna. He noted that this is a challenge in this part of the country, where there is a lot of moisture and vitreous layers form that retard water and air and root movement.

Rod noted that soil nutrient regimes can be disrupted by various activities, and that the effects of this disruption can be prevented, limited and managed. He pointed to the impacts of disruptive events such as floods, frosts and elk.

Rod reviewed some of the management methods that could come into play to address disruptive events, such as stand density choices, species, stock and genetics selection, limitation of non-crop competition, treatment of insects and disease, provision of supplementary nutrition and site modification. He noted that, globally, phosphorous has probably had the widest effect as a nutrient supplement and added that hemlock probably responds best to this form of supplementary nutrient treatment.

Rod reviewed the subject of nutrient availability, including macronutrients such as Nitrogen, Phosphorus, Potassium and Sulphur (N, P, K and S) and micronutrients such as Ca, Mg and Fe.

Rod noted that availability of K is related to types of clay in the soil. Rod noted that sulphur is found in a lot of minerals but its cycling is associated primarily with biological activity.

Rod noted that micronutrients are related to the mineral profile. He noted that micronutrients are not generally managed in our part of the world but are a part of the management regime in places like Brazil.

Rod noted that nutrient availability tends to change with seral development.

Rod reviewed nutrient cycling patterns in time and space, including the impact of weathering from parent materials, depositions, losses from soil and plant removal and seepage export, and transformations caused by biota and mineral element interactions.

Rod noted that in some other jurisdictions, total removal of plants has resulted in long term nutrient deficits. He cautioned that total removal of tree parts and foliage following harvesting was probably not a good idea in the long run.

Rod noted that nutrients can be naturally tied up in soil fauna and not available for plant growth, as in old growth forests. He noted this was one reason that prescribed burning was so popular a few years ago until it was realized that many of the nutrients released were being lost before they could be taken up by trees.

Rod pointed to how well moss competes for nutrients and added that fertilization at establishment phase is one of the best silviculture treatments to help trees get a head start over competing vegetation.

Rod noted phosphorous is cycled tightly on site, but nitrogen is being lost on a continuous basis from a site. He added that, for nitrogen enrichment, more supplementary fertilization should be considered, eg. the use of green manure crops such as alder.

Rod referred to a variety of effects of harvesting on soil productivity, such as compaction and soil displacement. He noted that it was important to reduce the level of compaction on a site in order to maintain productivity. He noted that soil displacement could create shear surfaces and redistribute nutrients and expose unfavourable substrates.

Rod reviewed some mechanical site preparation approaches to attempt to improve productivity on very poor soils.

Rod reviewed some other potential productivity losses from harvesting, including erosion caused by water, wind and mass wasting; and nutrient depletion resulting from removal of stem wood, and fine

foliage and branches. He noted that stem wood doesn't have the amount of micronutrients that are found in branches and fine foliage.

Rod described other possible effects of harvesting on soil productivity, such as microclimate changes and slope hydrology changes, eg, changing water movement patterns.

Rod reviewed some general strategies to reduce productivity losses, including:

- assessing sites for risk variables that relate to compaction and erosion and nutrient loss,
- confining traffic to a specified area,
- minimizing forest floor removal and mineral soil exposure,
- avoiding ground based operations during hazardous periods,
- revegetating exposed mineral soil as soon as possible,
- leaving fine materials from tree crowns, and:
- planning for changes in site hydrology.

Rod reviewed ten basic principles of erosion control:

1. Fit development to terrain,
2. Time road grading and construction to minimize soil exposure,
3. Retain existing vegetation where possible,
4. Vegetate and mulch denuded areas,
5. Divert runoff away from denuded areas,
6. Keep runoff velocities low,
7. Design drainage structures and outlets to handle increased or concentrated flow,
8. Trap sediment on site wherever possible,
9. Minimize length and steepness of slopes, and,
10. Inspect and maintain control measures

Patrick asked whether a long term deficit in phosphorous would have a significant impact on forestry in future. Rod noted that the guano supply, which has historically been a primary source of phosphorous, was largely depleted and that the other major source, apatite, is becoming increasingly expensive. He noted that the price of phosphorous was going up because its availability was low and declining. Rod pointed to ways that phosphorous is cycled on site, such as the use of green manure, and maintaining small branches and foliage on site.

Rod stressed the importance of conserving organic material on site.

Fred asked whether the shift from hand falling to mechanized falling would affect soil productivity in the long run. Rod noted that, generally speaking, foot traffic tends to create less impact to a site than machine traffic. He noted that compaction was the biggest issue for mechanical harvesting and that there are management methods to address this, eg. use of tramways, minimizing the number of passes machines make on trails.

There was a discussion of the use of rippers to lighten up soil. Rod noted this practice tends to work better in lighter than in heavier soils.

Ray asked about the ongoing current practice of machine operators breaking up compacted soil. Rod noted this probably was a good thing to mix up organics. It was noted that areas that have been broken up in this way tend to be more productive.

4.0 CONFIRMATION OF 2013 MEETING SCHEDULE: ANNEMARIE KOCH AND JON FLINTOFT

Annemarie noted that a draft schedule of meeting dates had been distributed to all VINWAG members by email on September 15th with a September 30th deadline for any requested changes. She noted that no one had expressed concerns about the proposed dates, so the final schedule of meetings was being confirmed at this time. She noted that, while the meeting dates were solid, the agenda topics and presentations might change somewhat, subject to need and availability. She invited members to continue to provide input on possible speakers, eg. someone from the alternative energy sector.

5.0 REVIEW OF OCTOBER, 2012 INTERNAL AUDIT RESULTS AND INVITATION TO NEXT EXTERNAL AUDIT: JON FLINTOFT & MIKE PITRE, WFP

Jon noted that he would focus on the internal audit findings and recommendations that were associated with the SFMP and CSA process. Jon noted that the audit recommended that some adjustments be made to a number of the indicators to further clarify and refine them.

Jon reviewed some of the suggested changes to indicators, including provision of results and base case information for Indicator 5.1.2.

Jon noted that some effort was already being made to address some of the recommendations, including work done for the target for volume of wood sold locally.

It was agreed that, rather than review all of the internal audit recommendations at the meeting, Jon would revise the indicators to address the internal audit recommendations and bring these revised indicators back to VINWAG for review at their February 28th 2013 meeting.

Jon noted the external audit was coming up on April 22-24th, 2013 for Port McNeill and Jeune Landing and Forest Operations, and he invited members to consider participating in the audit, eg. by telephone interview or in person.

6.0 DISTRIBUTION OF PARTICIPANT SATISFACTION SURVEY

Annemarie noted that the survey had been distributed twice previously in digital format to members, and thanked those who had completed and submitted the survey. She encouraged others to either fill in and send the completed surveys digitally or print them out and turn them in to either her or Jon by November 15. She stressed that surveys could be turned in anonymously or directly, at the discretion of the VINWAG member. She noted that survey results would be summarized and made available to VINWAG members at the next meeting.

Jon pointed to where recommendations from last year's survey had been taken into account and incorporated in this year's survey.

7.0 DISCUSSION OF RECENT HARVESTING AT DEVIL'S BATH: COMUNITY MEMBER TOM DOAK-DUNELLY AND JON FLINTOFT, WFP

Tom noted that he appreciated Jon agreeing to place this topic on the agenda. He explained the background on his request noting that the day after the September 14th field trip it was suggested to him that he check out some recent harvesting activity in the vicinity of Devil's Bath. He noted that after reviewing the harvesting in the area, a number of questions came to his mind when he noted the harvesting boundaries were very close to the karst feature.

Tom's questions were as follows:

- (a) Why was this harvesting considered appropriate for the Devil's Bath site,
- (b) What karst management procedures are relevant to this setting,
- (c) Is there is a formal reserve area around the Devil's Bath, and,
- (d) Are there future plans for the management of the feature and coordination of harvesting in-line with the management plans.

Tom asked, for example, whether assessments had been made regarding the karst and recreational qualities of the site. He asked whether there was a reserve area around the Bath and whether there would be management planning around the Bath in the future, in view of the recent recreational signage and focus on recreation in the area.

Jon noted that the block was designed as a combination heli-logging and conventional logging site. He noted that, in view of potential prop wash and other factors associated with working in relation to helicopters, some hazard trees were identified along the rim of the Bath, and the decision was made to fall some of these trees along the side of the road. He noted that they would not have done this the same way in future, adding that considerations had been given to safety but this may have left the blinders on with respect to the recreational values of the site.

Jim added that efforts were made to be sure there was enough room to land wood safely along the mainline. He noted that, in hindsight, those trees along the Bath probably could have been left and the site's recreational qualities maintained. He noted that, once they had taken wood on the top side of the setting, to accommodate safety concerns, they had to take the wood on the low side of the site.

Jon added that the site was still active because wood had to be landed on the eastern side and that is why safety concerns were an issue.

Jon noted that, now that the site had been logged, every effort would be made to replant and bring the site back to productivity.

Regarding Tom's second question, Jon noted that the site had been assessed by professionals familiar with karst, but no significant karst issues had been identified. Tom asked about the recreational values of the site and Jim noted that, in focussing concern on safety and karst features they had overlooked and could have been more sensitive to the recreational values.

Tom noted that 20 years ago he met with Tom Holmes about better managing features like the Bath and he noted that, based on the recent harvesting practices he had witnessed, he did not feel that as much progress had been made as he would liked to have seen. He noted that, while he appreciated the explanation WFP had given, he felt it was important to raise the issue and bring it to the forefront again.

With regard to Tom's third question, Jon noted there is no formal reserve around Devil's Bath. He noted there was a map notation around the site. Jon noted that Recreation Sites and Trails B.C. was notified and because there were safety concerns associated with the harvesting, they said they had no concerns about the harvesting plans.

Tom noted that the matter of Recreation Sites and Trails B.C.'s oversight was another issue that needed to be addressed on this matter.

Tom then asked for an answer to his fourth question regarding future plans for harvesting recreational karst sites such as Devil's Bath. Clint noted that this was a major topic at their last meeting and that they would be further developing best management practices around this, and Jon added that the matter would be taken up internally in discussions and training, and externally through discussions with Recreation Sites and Trails B.C.

Jim added that the company seeks to harvest only whatever part of the tenure that can legally be harvested, so when any feature is protected, and reserved from harvest, the company has to respect this. He added that the difficulty comes when there are grey areas around whether an area is or should be protected. Steve noted that this is exactly where VINWAG can play a role in identifying features and

values in the area that are important to local people. Jim agreed that this was a good forum in which to do this.

Patrick asked rhetorically what the implication would be on the AAC if there were full protection of all karst features. Jim countered, however, that Devil's Bath was a well-known karst and recreational feature and acknowledged that the recent harvesting should have been managed differently. He acknowledged that the social image of WFP may have been tarnished by this recent harvesting and committed to doing things differently next time.

Tom asked WFP to consider how to involve VINWAG in providing input on harvest management issues such as this. Steve suggested working on a trail or other interpretive features might help with the restoring recreational values in the short term.

Jim noted that WFP's full intention is to have several different forest professionals and terrain specialists complete a review and determine how in future they might approach the management of the site differently with respect to karst and recreational values. He noted that, once they have those results, VINWAG might wish to review them. Tom noted this would fit well with the continuous improvement approach encouraged by the certification process.

Fred asked if the review would include why consideration for cultural and recreational values wasn't given. He asked if there was any way to formalize this type of consideration in terms of process and best management practices.

Steve asked how VINWAG might have been put into the process to help ensure it doesn't happen again.

Patrick suggested an extra level of consultation for map notations.

Jon noted it wasn't the sort of practice that WFP was known for. Jim agreed a review of internal checks and balances was in order.

Jon noted that known recreational sites were certainly part of the planning process and that this should have been taken into account.

Clint noted this matter was not being taken lightly and the chief forester of WFP had directed the operations people to develop best practices around this issue.

Tom noted that one of the most positive aspects of this was that a member of VINWAG could bring forward an issue such as this.

Annemarie thanked Tom for bringing the matter to VINWAG for discussion. She thanked VINWAG members as a whole for having a rational discussion about the matter and for offering to become part of the process and of the solution for improving management practices in future. Finally she thanked WFP for being so candid and open, and for bringing to VINWAG the representatives who had the responsibility and authority to answer Tom's questions and to develop and implement better management practices in future.

It was agreed that the review report on the recent harvesting at Devil's Bath be brought to VINWAG on February 28th, 2013 (if it is available) and that there be a discussion of how VINWAG might formally become part of WFP's development and implementation of best management practices on this matter.

8.0 DISCUSSION OF SEPTEMBER 14TH FIELD TRIP AND ALL-PAG WORKSHOP AND TOUR IN POWELL RIVER: JON FLINTOFT, WFP AND ANNEMARIE KOCH

Jon and Annemarie briefly reviewed the results of the September 14th field trip and the September 26th and 27th all PAG workshop and field trip in Powell River. Jon handed out printed summaries of the September 14th field trip and all PAG field trip. Annemarie noted that a written summary of the PAG workshop presentations had been circulated to members with the agenda on October 24th.

Jon reviewed the September 14th field trip in WFP's operations near Port McNeill. He showed some photos of the helicopter at work, and he reviewed work that has been done at the Clint Beek rec site. He encouraged members of VINWAG to visit the Clint Beek site.

Jon showed photos of the supersnorkel and hoe chucker at work, and a feller buncher at work in high elevation timber.

Jon reviewed some photos from the Powell River tour, including a feller processor and hoe chucker at work. He reviewed some of the silviculture and recreational management challenges and opportunities in the Stillwater Forest Operation.

Jon referenced a biomass recovery operation near Powell River.

Tom noted Jon did a superb job organizing the September 14th field trip and encouraged VINWAG members to come to next year's tour on September 13th, 2013.

9.0 LOGGERS' TRAINING PROGRAM: CLINT CADWALLADER, WFP HOLBERG OPERATIONS MANAGER

Clint summarized the loggers training program and noted the company as looking at developing career loggers. He noted that he was one of the managers who developed a program to train loggers and added that they had six trainees in a non production type atmosphere, including classroom and field experience, and basics in the field and on the tower, before going into production. He noted that the program stresses safety and provides basics in forestry, and operating principles of the company. He noted there were two graduates starting in Holberg and that there would be three more seven-week sessions next year as soon as the snow melts. He pointed out that trainees were not mandated to work for WFP, but of course he would like to see as many graduates work for WFP as possible in future. Clint noted the first program was a real success and he asked VINWAG members who knew anyone looking for work of this type to contact him. He added that the program provides a paid education with very real prospects for employment.

Dave thanked Clint for developing and following through with this much needed and very valuable program. He noted that it was great that young people were being given such an opportunity, and that it was timely as there are a number of loggers retiring from the industry.

10.0 NEXT MEETING

It was agreed that the next meeting would take place on Thursday, February 28th as per the proposed schedule of meetings confirmed by the membership. Annemarie noted that Jeff Long was presently scheduled to make a presentation on local government planning processes and private lands in the DFA, as per a previous request from local government representative Neil Smith.

Annemarie and Jon thanked everyone for coming.

When: FEBRUARY 28th, 2013
Dinner: 6:30 p.m.
Meeting: 7:00 p.m.