

**VANCOUVER ISLAND NORTH WOODLANDS ADVISORY GROUP
(VINWAG)**

***Western Forest Products Inc.*
Community Advisory Group
Minutes of Meeting February 20th, 2014**

Attendance:

Jon Flintoft, WFP
 Dave Trebett, Tourism and Recreation
 Patrick Donaghy, Local Government
 Wayne Gurney, Fish and Wildlife Alternate
 Joli White, Tourism and Recreation Alternate
 Fred Robertson, Education
 Ione Brown, NICFLP
 Lisa Lenarduzzi, Small Contractors

Presenter: David Melville, Island Geoscience

Regrets: Gaby Wickstrom, Port McNeill and District Chamber of Commerce, Ray Harper, Labour, Tom Doak-Dunelly, General Public, Ben Trerise, Fish and Wildlife, Steve Lacasse, Environment, Jeff Houle, Small Contractors, Dave Steele, WFP

Observers: Clint Cadwallader, WFP, Andrew Mitchell, NISS Field Studies Class, Ralph Wallas

Advisors: Paul Barolet, Stewardship Officer, MOFLNRO

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 David Melville on northern Vancouver Island terrain and its implications for forest management (general information for Criterion 3, Soil and Water), have a preliminary discussion on the 2013 annual report and continue discussions regarding revisions to SFMP targets and indicators, hear updates on a survey of public perceptions of viewsapes associated with windfarm development and a request to have WFP's chief forester address the company's plans for the future and for succession internally, review the results of the annual participant satisfaction survey, review membership contact information and confirm the date of the next meeting.

Annemarie invited everyone to introduce themselves for the benefit of the presenter, and new observers who were attending the meeting.

2.0 REVIEW OF LAST MEETING MINUTES AND ACTION ITEMS

Annemarie asked if there were any comments on the minutes of the November 28th meeting and reviewed action items requiring updates or immediate attention with members, and the results of the discussion are summarized in the table below, along with the addition of three new action items developed during the course of this meeting. For the benefit of new members, Annemarie noted that she would be assuming all members had read their minutes and would not be taking additional time to go through them at the meeting, other than to deal with questions, changes and action items. Action items that were completed were dropped from the list and revised action items were retained as modified.

ACTION ITEMS

#	Item	Responsibility	Initiation Date	Target Date	Completion Date
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 Annual Report	
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	Next Annual Report	
137	Continue to develop an appropriate target for Indicator 5.2.3, level of employment	Jon Flintoft	April 11,2013	Next Annual Report	
138	Find a way to footnote ongoing changes to the Terms of Reference	Annemarie Koch	April 11,2013	Next update to Terms of Reference	
140	Follow up on engaging youth in SFMP	Fred Robertson/Jon Flintoft/A. Koch	June 27,2013	Ongoing, in 2014	
148	Look into presenters on climate change	Steve Lacasse	October 24,2013	Sometime in 2014	
152	Invite a MOFLNRO representative to further discuss the role and purpose of stumpage	Annemarie Koch	November 28,2013	Sometime in 2015	
153	Confirm Pat English and Andrew Ashford as speakers	Patrick Donaghy, Paul Barolet, A. Koch	November 28,2013	April 24,2014	
154	Invite David Melville to participate in September 12 th VINWAG field trip	Jon Flintoft	February 20,2014	September 12,2014	
155	Bring draft Indicators 5.2.3, 5.2.6 and 6.3.1 to April 24 th meeting	Jon Flintoft/ Annemarie Koch	February 20,2014	April 24,2014	
156	Send out October 23 rd meeting notice as a meeting request through Outlook	Annemarie Koch	February 20,2014	With the February 20 th meeting minutes	

Annemarie noted that action items 106, 124,137 and 149 would be addressed during the meeting and that draft indicators and targets had been distributed with the meeting reminder. She referenced the wall map Jon had posted for review during dinner asked if anyone wanted to comment on or ask questions about WFP's proposed harvesting plans in the DFA.

Annemarie stated that, further to action item 140, Andrew Mitchell of the NISS Field Studies class was in attendance and she thanked him for coming. She added that Fred had convened a meeting on February 18th to further investigate the possibility of developing a forestry training program on the North Island. Fred noted that representatives of the forestry program at Carihi in Campbell River had made a presentation at a recent meeting he had convened at the school board office and that some further consideration had been given to developing a similar program in this region. Further to action item 151, Annemarie noted that Dave Trebett had talked to Wayne Gurney and that Wayne had agreed to sit as a Fish and Wildlife alternate. She thanked Wayne for attending the meeting in Ben's absence.

She noted that Paul Barolet was checking to see if Andrew Ashford could make a presentation on climate change adaptations and biomass utilization at the June 26th meeting because he was unavailable for the November 13th meeting and that she would confirm that Pat English was available to make a presentation

on the Regional District's forest policy either on June 26th or November 13th, depending on Andrew's availability.

She noted that action items 146,154 and 155 were completed.

Annemarie added that, unless members of VINWAG wished to discuss any of these items, and unless there were any comments or changes, she would ask members to adopt the minutes of the previous meeting.

The minutes were accepted as circulated.

3.0 NVI TERRAIN: ROCKS, SOILS, LANDSLIDES AND THEIR RELATIONSHIP TO FORESTRY DEVELOPMENT: DAVID MELVILLE, P.Geo., PMP, ISLAND GEOSCIENCE

Annemarie introduced the speaker and reminded VINWAG members that the request for a presentation on Northern Vancouver Island terrain had been made during the field trip last year.

Dave noted that he would provide a general discussion of about terrain features on the North Island. He reviewed the various factors influencing rock features, including plate tectonics, rock types, and natural weathering processes and then finish his presentation with a look at common terrain challenges in forest management.

Dave reviewed the processes and resulting effects of plate tectonics, including active volcanoes and earthquakes. He referred to the development of atolls that become accreted terranes. Dave noted that coral reefs are formed around atolls and that these are the source of limestone deposits found in geological assemblages.

Dave reviewed the three rock types, igneous, sedimentary and metamorphic, including distinct intrusive plutons on NVI and extrusive NVI basaltic rocks.

Paul asked about bubbles coming up from the ocean at the mouth of the Nimpkish. It was noted that the golf-ball-sized bubbles could be coming from a gas fracture, and were probably made up of carbon dioxide or sulphurous gases.

Dave referred to the geological maps that are available for Northern Vancouver Island and noted Graham Nixon had produced much of the information for these maps.

Dave referred to fossiliferous sedimentary Parsons Bay siltstones off Brockton Main (near the Mahatta camp), and provided a photo of an ammonite fossil from the area.

Dave explained how complicated the siltstones can be on the North Island, e.g. those in the Bonanza Group.

Dave noted that a lot of the mapping information is extrapolated from information seen at the surface, e.g. following fault lines. Dave Trebett asked how old the Bonanza Groups is. Dave noted it was Triassic.

Dave reviewed limestone types on the North Island and how they have tilted over time, including the deposits near Marble River, and some karst features.

Dave referred to the Victoria Lake pluton. He noted that much of the metamorphic rock on the North Island is low grade because we haven't had the high pressure events here. He noted that shales don't tend to harden that much and tend to turn into phyllites. He noted Merry Widow Mountain was one big pluton, and pointed out that plutons tend to bring up mineral deposits. He noted, for example, that there is lots of azurite on Merry Widow. He added that Island Copper was a pluton that contained low value gold.

Dave pointed to the two major groups of volcanic rocks, the Bonanza and Karmutsen, and a smaller group called the Alert Bay volcanics, which is the rock that cutblock 4485 exhibits (cutblock 4485 was one

of the stops from the September 13th, 2013 VINWAG field trip). He noted it's a different rock because it's younger (2.5 to 23 million years old) and tends to exhibit columnar jointing.

Dave turned the focus of his talk to the significance of terrain to forestry practices, including cutbank stability and road construction and rock stability and road ballast. He reviewed the effects of weathering processes, including chemical (e.g. oxidation) and physical weathering (e.g. rock fall and gravity). He referred to glacially polished rock, intensely fractured rock, rockfall and types of rock that may not be suitable for road surfacing (e.g. siltstones that don't offer traction for hauling on steep grades, especially when they are wet).

Dave noted that young basalts are basically lava and can have till underneath them.

Dave gave an example of the Karmutsen Formation (228-235 million years old) adjacent to the Keogh 238A1C spur road, featuring pillow basalts, and noted that this rock can present a safety hazard as chemical weathering washes away the matrix that holds the balls together at the surface, though the area underneath can be more stable, if it has not weathered.

Dave moved on to soils, referring to colluvium deposits, glacial deposits, marine sediments and some common terrain issues associated with each of these types. He noted that colluvium tends to be thin on the coast and that it is derived from weathering of the parent material.

He added that glacial deposits are the till that we see, including loose material, hard or compact till, glaciofluvial, and glacial lacustrine material. He noted the stuff under the ice is called basal till. He stressed that glacial deposits are the result of a highly dynamic system. He pointed out how material rides on top of the ice and deposits as the ice melts.

Dave showed how moraines are formed. He noted that layers can form in glacial fluvial tills that result from dewatering. He noted that glacial deposits tend to thin with elevation and they tend to lose lateral continuity.

He gave an example of poorly sorted, well compacted till along Cluxewe Main and how this can be all right for road construction.

He talked about marine deposits that were once under the ocean and now exposed, and noted that they tend to show bioturbation. He noted these are rare on the Island above 30 metres and are not good for road building.

He discussed deposits that turn easily into mud and do not make for good road building, in that they have poor physical properties, may absorb water and are not stable when oversteepened.

Dave noted that compact till is relatively stable until disturbed, as at Wady.

Dave discussed some terrain issues around Wady. He referred to a glaciofluvial deposit in the Quatam River Valley, featuring layered silts and sands. He noted the sand is more porous and that water can flow through these layers and start to wash away the sands and create a plane of weakness. Dave stressed that fractures should not be created in these types of terrain

Patrick asked about the red material around Hushamu Creek and the Hushamu 1500 road system.

Dave reviewed the various kinds of landslides, including debris flows, mud flows, debris floods and debris avalanches. He noted there were three zones to a landslide, including initiation, transportation and deposition zones.

It was noted that slides can start when toe support is lost. Dave noted that most slides on the coast tend to start up high. He reviewed a debris flood above Mahatta Camp, resulting from an intense rain event. He noted the landslide events around Port Alice can be quite large.

Dave reviewed some other slides and noted that when they are not channelized, they can be fairly wide. He noted that landslides can occur in forested and non-forested areas.

Dave noted that heavy precipitation often occurs at the same time as high wind speeds and there can be windthrow associated with the slides.

Dave noted forest hydrology has an impact, in that when trees are harvested there is a dynamic change in interception and transpiration. He noted that, because of forest hydrology, if a harvested area can last five to ten years without a landslide, the chances of that area remaining stable are greater.

Dave reviewed additional slide triggers, including rock fall, snow avalanches and embankment failures.

Dave reviewed some of the yarding issues potentially associated with scouring effects and slides.

Dave reviewed a rockfall avalanche.

Dave summarized his presentation, noting that there is a highly varied and complex terrain, and many different rocks and soils on the North Island. He added that rock and soil types change rapidly, and that this presents many challenges to forestry development. He noted that numerous factors can cause landslides, e.g. piping, windthrow.

Dave Trebett asked about the Benson 200 road system and noted that there is a draw up there with boulders the size of the building scattered all over. He asked what the cause of this might be. Dave noted there has to be saturation first to allow this kind of rock type to be generated. He noted that rockfall in mountainous terrain is very common. Dave noted that there is a long ridge on the west side of Maynard Lake. He noted that, if fissures are very close, a weakness is created a frost heave or earthquake can peel large pieces of rock off.

Dave noted that, once trees are mature, air photos don't allow us to distinguish a slide area.

Members agreed that Dave should be invited to participate in the September 12th field trip later this year, and Annemarie invited members to contact Jon with any suggestions for areas they would like to see.

4.0 PRELIMINARY DISCUSSION OF 2013 ANNUAL REPORT AND ONGOING DISCUSSION OF PROPOSED REVISIONS TO SFMP INDICATORS AND TARGETS: JON FLINTOFT

Jon reviewed some of the results that had been compiled to date for the 2013 annual report. He noted that most of the targets for the 25 indicators that had been finished had been met. He noted that he should have all of the results for the April meeting.

Jon went through the results for each of the 25 indicators completed to date, including Indicator 1.2.3, proportion of regeneration comprised of native tree species. There was a discussion of species selection for climate change. Jon noted he was trying to plant more Douglas fir around the Port McNeill area but was losing out to natural hemlock regeneration. He noted there was some replanting of shore pine in very wet areas and that alder was being planted on some of the richer and moister growing sites. He noted it was a fast growing and high value species if managed well. He added weevil resistant spruce trees were being planted. He added that in 2014, WFP would be planting some rust resistant western white pine within the DFA on some drier sites as a trial.

Paul noted there used to be quite a bit of western white pine on Vancouver Island before it was wiped out by the pine beetle.

Other indicators that were reviewed included Indicator 2.2.2 permanent access for DFA. Jon noted the target was met overall and that where the target was not met at the site specific level, rationales had been provided. Jon added that the windfall edge treatment indicator variance had been met.

Patrick asked Jon if he had talked to the Ministry of Transportation regarding the stability of roadside trees. Jon noted that MOT has right-of-way immediately next to highway 19, and that area is often under the jurisdiction of the province. It was noted that VQO's had to be taken into consideration as well.

Jon noted that there had been concern expressed by the public about VQO's when an area alongside the Port Alice Highway had been logged, but that the windfall hazard of leaving a visual screen would have been greater than not leaving the screen there.

Jon reviewed Indicator 3.1.1 on level of soil disturbance and noted that the variance had been met. He noted that a number of slides areas were now being rehabilitated.

Jon noted that the coarse woody debris target had not yet been revised, but that the April speaker would be addressing this topic to provide a foundation for revising the target for the 2014 annual report. He noted the variance was met in 2013 for this target.

Jon noted that there is a risk-based system used to help protect watershed areas and determine whether roadsides should be re-vegetated. He noted that there were only certain times when grass seeding was carried out, generally in May and again in September.

Jon reviewed the indicator related to safety and environmental training. He noted that, overall, the target had been met. He pointed to some of the challenges in tracking the training that had been provided. He noted that new software had been developed to track training.

Jon noted that WFP had 9 summer students this past year, so the target of five had been exceeded. Jon pointed to the positive results of recruiting and hiring local high school students. It was noted that industry representatives do go into the schools and that there was a trades and business fair at NISS on May 14th that industry representatives should attend.

Jon noted that Indicator 5.2.3 had been met in that it had been a big year for production.

Jon reviewed Indicator 6.1.1 and noted that this target had been met in 2013. He noted that the target for Indicator 6.3.2 had been met.

Jon noted that there were overall positive results from the VINWAG survey and that this target had been met. He noted there were only two survey responses.

Jon noted that the variance had been met for Indicator 6.4.3, target number one. Jon noted the first FNIEG meeting would be held in April or May this year.

Jon noted the variance had been met for Indicator 6.4.3, target number two.

Jon noted the target for number of VINWAG meetings had been exceeded, with 6 meetings and a field trip being held in 2013.

Jon noted that Indicator 6.5.1 would likely be met in 2013, once all the data was in. He pointed out that a group of medical students, European forestry students and Norwegian forestry students had been taken on tours.

Jon noted that Indicator 6.5.1, to develop forest management brochures for fishing lodges had not been met. Jon asked if some National Forest Week information could be included and Fred suggested that the work that was being done with the high schools should also be included as educational outreach.

It was suggested that information on forest management should be made available to tourism operations generally, and that it might be just a matter of passing on existing information on forestry management to tourism operators.

Jon noted that the targets on availability of information for the public had been met, for example through the establishment of the North Island PAG website.

Jon noted that the target for corporate monitoring and research projects had been met, e.g. in VRAM, SCHIRP and Species at Risk (e.g. northern goshawk), Seed Orchard Pollination Dynamics. LiDAR (for growth and yield studies), Tree Improvement studies and Seed Orchard Pest Management studies.

5.0 UPDATES ON A SURVEY OF PUBLIC PERCEPTIONS OF VIEWSCAPES ASSOCIATED WITH WINDFARM DEVELOPMENT AND A REQUEST TO HAVE THE CHIEF FORESTER ADDRESS PLANS FOR THE FUTURE AND FOR SUCCESSION INTERNALLY: JON FLINTOFT

Annemarie noted she and Jon had participated in a survey conducted by MOFLNRO to determine public perceptions of viewscapes associated with windfarm development in December 2013. She asked Paul if he would keep VINWAG members apprised of the results of that Province-wide survey.

Paul noted that there are guidelines for visual quality associated with windfarm development.

Jon noted that he had asked Shannon to come up and address a joint meeting of VINWAG and NWAC on October 23rd about building capacity for the future of WFP.

Jon added that WFP was organizing a trip with PHSS through the Connections program out to Holberg.

6.0 REVIEW OF RESULTS OF THE ANNUAL PARTICIPANT SATISFACTION SURVEY: ANNEMARIE KOCH

Annemarie noted that there were two responses to the survey and that, while these responses indicated current satisfaction with the process, there were two recommendations, namely:

1. Continue to be open to and review whether new sectors need to be added to the membership and continue to fill positions of existing sector representatives, as required.
2. Add the following question to the 2014 participant satisfaction survey:
Do you believe that our recommendations are being distributed to 'on the ground' management as well as head office upper management?

7.0 REVIEW OF MEMBERSHIP AND CONTACT INFORMATION

Annemarie distributed the current draft of the membership contact information sheet and asked members to ensure the information was complete and correct. She noted that she would also distribute a draft to the broad membership by email so the rest of the members could update their information.

8.0 NEXT MEETING:

It was agreed that the next meeting would take place on April 24, 2014 as per the proposed schedule of meetings confirmed by the membership. Annemarie noted that the proposed topic was the ecological role of coarse woody debris, related to Criterion 3 and that the proposed speaker was Nancy Densmore of the Resources Practices Branch at MOFLNRO. It was agreed that Annemarie should try to send out the notice of the special meeting on October 23rd with the Chief Forester as a meeting request through Outlook.

Annemarie and Jon thanked everyone for coming and wished them a safe journey home.

When: APRIL 24th, 2014
Dinner: 6:30 p.m.
Meeting: 7:00 p.m.