

Minutes  
**CSA Community Advisory Group**  
**To Western Forest Products**  
**October 5, 2015**  
**Western Forest Products Boardroom**

Attendance: refer to attached sheet

6:00 pm: Meeting called to order  
Quorum met.

**Safety Review**

Facilitator noted fire exits and first aid attendants in case of emergency. Meeting place in case of emergency was noted.

**Code of Conduct**

Code of Conduct for Community Advisory Group was reviewed.

**Welcome and Introductions**

Chair welcomed guest speaker and members introduced themselves

**Review and Acceptance of Agenda**

Agenda was accepted.

**Review and Acceptance of Minutes**

Minutes will be available for review and acceptance via email.

**Correspondence**

Copies of recent correspondence was provided and reviewed

Letter to PRPAWS

Emails to First Nations

Email thank you to Mike Peters

**Operational Information Map Review**

**Speaker – Annette Van Niejenhuis, Tree Improvement Forester, WFP – Climate Change and Assisted Tree Migration**

Annette quoted ‘The difference between weather and climate is a measure of time’. Weather is what conditions of the atmosphere are over a short period of time, and climate is how the atmosphere “behaves” over relatively long periods of time...Climate is the average of weather over time and space...’ from the NASA website.

We like to think of climate as stable, but we are now finding that climate is becoming less stable and that is why we are talking about things like assisted migration. Climate affects tree growth. Different species will be more abundant at higher elevations and others will grow in lower elevations. That reflects the change in climate as well as other factors in the local environment. The accumulation of this weather affects moisture and nutrient availability. Site conditions can be changed by the cumulative effects of weather. We are seeing that climate change affects the ranges of tree species as well as insect species and disease species.

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How resilient our forests are to these changes in climate depends on a number of factors: age of trees, actual weather, location, site conditions, species interactions, synchrony of phenology, tolerance of individuals, acclimatization, biological adaptation, ability to migrate and human adaptive efforts.

Annette showed a climate change model created at UVIC for the Powell River area. This shows temperatures up a couple of degrees, precipitation is up a bit (but not in the summer), snowfall is way down, growing days and frost free days are up.

*Question: What period of time are they talking about for those changes?*

The historical period is 1961 – 1990, the current period is 1991 – 2020, and the projection is to 2050 which are all 30 year periods. Thirty years is used because it is a significant time period.

If you are bringing native species from another part of the range you are practicing assisted migration. We will be looking at different populations further south and bringing them up here.

Western Forest Products objectives in species selection and assisted migration are: productivity, minimum risk and forest sustainability.

Regulations stipulate that they must have a Forest Stewardship Plan (FSP) and the regulation outlines what the FSP must contain. One of the things it must contain are the stocking standards. The Chief Forester's Standards for Seed Use limits the selection to native species and seed transfer distances. The seed transfer limits do allow them to use some American sources from just south of the border from natural stands and some of their orchards.

Biogeoclimatic Ecosystem Classification (BEC) provides the framework for our understanding of the important components of the terrestrial ecological systems. The zones reflect climate, site factors, and associated vegetation. The BEC is a tool for reducing complexity and organizing and communicating our knowledge. It has a site component and a zonal component. The zones we have in Stillwater fall into one of a handful of these zones and then it gets further brought down into the site series. The site series reflects how fertile the site is and what sort of a moisture regime it has.

Annette presented some maps of the Campbell River district (because maps to this level of detail have not yet been done for this area). The maps portray the current BEC and the predicted BEC based on climate alone showing the expected changes. This will have implications on seed planning and management.

*Question: What is the status of white pine?*

It is on the list. Blister rust is a problem and there is a lot of breeding effort going on right now to overcome the blister rust and at this time they are seeing some success. It is a disease that went through assisted migration to get here. I just put together the sowing request for this year and I have ordered around 175,000 for our operation which is a 7.5 million tree program so, it is not a big part of the program but there are places where we have root rot in Douglas fir ground so people are very interested in using it. Until there is enough to be in its own sort it will not be treated as valuable. There is interest and in the niche market there is a lot of opportunity.

*Question: Are you or someone else creating blister rust resistant stock?*

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We have 'major gene resistance' from a population in the States towards the Interior. If we use that resistant material it doesn't grow as well as our Coastal trees but it is resistant. We are breeding that with our Coastal stock and having good success although it is not completely immune. Some foresters say it just takes longer to die. These breeding programs for disease resistance are very important and challenging to move forward. It is very good to get feedback from people. The seed supply is very important and it takes a long time to develop seedlings when you consider that it takes two years for a white pine cone to develop. We want to know what is going on with the climate changes so that we can plan to have the seed supply there when we need it.

Climate related hazards include insects, diseases and abiotic factors. Yellow cedar dieback on the Alaska and Northern BC coast is caused by an abiotic factor. It is damage caused by frost because there is not enough snow covering the roots in the spring. They are having mature trees die. There are risks in migrating species but this shows us that there are also risks in not migrating species.

There are a number of factors taken into account when deciding where seeds can be sent. Transfer limits are considered. The Ministry tree breeders and researchers from other agencies and organizations use common garden tests to decide how far to move seeds and in what direction. The speed seedlings grow and survival rates are important factors to consider. Our stands are already somewhat behind the times because the parents of these seedlings are 80 or more years old and there has already been some increase in temperature.

Greg O'Neil is the Provincial seed transfer specialist. He is doing a lot of seed transferability tests establishing new common gardens tests and looking at some of the old common gardens tests that were established. There are many sites in BC where testing of Douglas fir and cedar tests for transferability of seed are taking place. There are risks in long distance transfer, and with short distance transfer if the climate distance is long.(eg. Up a mountain). Transfer south is not Assisted Migration. Assisted Migration wants to correlate things to the changing climate. In present terms it means moving things up a mountain and moving things north. It is an adaptive response.

Greg has many graphs for a number of species. Annette displayed one showing Mean Annual Temperature (MAT) vs. Productivity. It is not only mean annual temperature that you consider frequently it is a new variable that the statistics deliver from the combination of many climate variables. MAT shows that a temperature change of +1 degree makes a big difference in productivity at the site. He is measuring volume by hectare not height. This is important because it takes into account survival as well. Handled correctly we can get lots of production and ecosystems out of our stands. Sticking to local as best is not always the way to go. We want local climate that now may come from somewhere else.

Between 2009 and 2012 Dr. O'Neil initiated a large long term climate change research study called "The Assisted Migration Adaptation Trial". He took seeds from 15 species growing in BC and neighbouring US states and planted them in sites from Northern California through to the Yukon. He looked for very specific sites to include extremely hot sites, wet sites, cold sites that the trees would be insulated by. He did include some normal sites but he is trying to kill some of these trees to really know what the limits of the transferability are. There is one of these sites on the WFP Holberg operations lands. It is a very wet site. There are many species in the seed lots that he has tested including both orchard lots and wild collections. At the moment he is waiting for results from these trials. He will have collected early data on survival but to see the real performance he will want at least 5 or 10 years data. At present there is a big push in the Ministry to get climate based seed transfer into effect and the science foundation behind it. Exactly what the policy is going to look like is very much in question.

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Currently 80% of the seedlings planted come from seed orchards which mean that they will be continually changing their seed orchards to have the right material for the ground that they plant. Wild seed is fairly restricted for climate distance planting but can have great geographic distance assisted migration. They are currently expanding the range of Western larch and planting it very much north of where it naturally occurs but very much within its climate envelope. This is one of the things that is going on as an interim measure for climate based seed transfer. Annette expects that within a year there will be some documents circulating for feedback from the Ministry to comment on policy.

*Question: If they discovered a tree that was growing somewhere in Europe that they thought would do well here can it be brought in for trials?*

Yes. For trials. There are parts of the Interior where they may be challenged to keep areas forested without going to possibly a different species that is not here, but our conifer species have huge amounts of genetic variation within individual populations and among all of the populations so it is quite likely that we will find populations that fit and work. To bring a species in it takes a very long time of testing. We can accept tests from south of the border more readily than we can accept tests from Europe because we expect it to be more the same. It is not impossible, although the province is certainly not looking to that to be a solution at this stage.

*Question: If there was a Douglas fir in Scotland that was doing better that looked promising for here? Same species.*

We have had that experience with Sitka spruce. Sitka spruce and Douglas fir are grown all over the world. Haida Gwaii Sitka spruce is what is grown in Scotland and they have a really good breeding program over there. It is ahead of our breeding program because they don't have to worry about a weevil. Haida Gwaii also doesn't have the weevil so we got material back from them into our breeding program because it is still our Sitka spruce. It did bump up our program more than it would have been if we didn't have that material. So for Haida Gwaii we now have some Sitka spruce with 6% gain in the bank. The material is in trials not in our orchard yet. Our orchard is at 6% so if we brought that material in we could bump our orchard up to 12% just like that.

*Question: How many seeds are coming up from the States right now?*

Not that many. We have parents from the States in our orchards. I expect we will get more over time. We could also just bring up pollen and breed that into our program.

*Question: With this unusually warm weather we have now are planting times going to be different considering our long hot summer?*

Annette asked Nancy if she had drought related survival issues this year. Nancy said not as bad as she had expected. Annette said the same was said for other operations as well. There were a couple of articles in a Nanaimo newspaper about TimberWest and their drought resistant Douglas fir orchard stock. The Western red cedar that we have in our orchards is high gain and also has a leaf blight resistance which is necessary for the wet weather in places like Holberg. Right now our orchards, TimberWest's orchards and the Ministry's orchards likely have the same selections, but I can see in the future TimberWest will likely need to go to a different orchard because they are operating on a little bit different ground. Those are the kind of things I expect to see with this new climate based seed transfer.

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Do we have the capacity to change? You have to identify what new parents you want in your orchard and then it takes 5 or 6 years to get them up to production and you can't be changing them too often. That is why when you select parents you select parents that are stable and do well over a large range of environments. We are in pretty good shape on that front although if we continue to have these extreme droughts it will be a different question. Regarding timing of planting, many foresters were calling the nursery and stock coordinator in July saying we are not sure if we want to do a summer plant (which happens in September/October). They were worried about planting if the drought continued. The answer was they had to do the plant because the stock was all ordered and the nursery doesn't have enough cold storage to keep all of the seedlings until spring. Environment Canada predicted it would be a normally wet fall and that is what has happened. The plant started about 3 weeks later for some of the operations and now there seems to be some interest in an additional fall plant to avoid any late spring plants that would be vulnerable to drought.

### **Nanton Concerns Lake**

*Question: How does WFP and the Ministry share the supervision of the canoe route and the campsite? I have been hearing from members of my recreational group that are confused as to who is managing these areas. There are signs at the campsite that say 'Managed by Western Forest Products' so I assume the Ministry of Rec Sites and Trails contracts to WFP and then WFP subcontracts the work out to somebody to take care of the onsite management. When I was using the campsite this summer some individuals came through and said that work was going to be done but that notification would go out to user groups. This did not happen. In September when the kids go back to school retired people like to use the campsite and when they got there they found that it had been torn apart. I understand that there were danger trees and of course this means they must come out. I am just concerned about the lack of communication. Where does WFP fit into the equation?*

Nancy said that she was notified that the campsite would be closed for new site development on September 30<sup>th</sup> and then she heard from the contractor that it would be earlier. So as soon as she found out when it was going to be – which was the next week – they put it on their website. Part of the confusion may be is that we have just switched from the road hotline to putting the updates on the website.

*Comment: I would never have thought to look at the website.*

I know. Most people wouldn't have thought to look there. There were apparently 10 signs placed along the road at strategic points and at other campsites with the dates of closure listed.

*Comment: I was up there about a week ago and I did not see any signs except one right at the campsite. They had already been in there for 1 ½ to 2 weeks. It is a mess.*

They are supposed to be creating 3 new campsites and the campsites at the bottom end that have been flooded over the last couple of years are being turned into day use campsites. They are taking out the danger trees and some brush so that we can plant some cedar. We are trying to get rid of all of the alder because they are becoming dangerous.

*Question: Going forward can we get information out to the public regarding what the outcome will look like? I heard you were taking out 4 sites and putting in 7 which is different than what you just told us.*

Oh. That was the last I heard. I haven't actually seen the contract.

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Stuart said the answer is WFP holds the maintenance contract for all of the rec sites and the canoes route and ensures the work is all done. There are times when Rec Sites and Trails BC will do a contract for a capital improvement with a third party that doesn't involve WFP.

*Comment: That is what I understand has happened.*

Nancy agreed. A contract was given directly to Bob Marquis without any involvement of WFP.

*Comment: I think WFP should look for more information so that when somebody sees your signs saying you manage the rec sites and trails you will be able to answer their questions. Next spring your sign will be sitting there.*

Stuart said there will be more information out for the new online WFP road hotline.

Nancy suggested that the website send email updates to anyone that signs up to the website.

*Comment: Websites can be set up so that if people subscribe they will be automatically emailed*

**Action:** Stuart to look into having the website email subscribers.

**Action List Items**

**Action Items**

<i>Ongoing</i>	Who	Meeting	When
Find somebody to talk about visuals	Stuart	May 13, 2015	
Bring contact info re: National Forest Research Survey	Stuart	Sept 14, 2015	
Look into having the website send emails regarding updates to subscribers	Stuart	Oct 5, 2015	

**Adjourned 8:10 pm**

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**Stillwater CSA Community Advisory Group  
Western Forest Products  
October 5th Attendance**

<b>Name</b>	<b>Position</b>	<b>Member Seat</b>
<b>PRESENT</b>		
Jane Cameron – Chair	Primary	Member at large
Dave Hodgins	Primary	Recreation
Bill Maitland	Primary	Local Business
Wayne Brewer	Alternate	Tourism
Patrick Brabazon	Primary	Local Governments
Nancy Hollmann	Primary	Tourism
Paul Goodwin	Primary	Forest Dependent
Karen Skadsheim	Alternate	Local Governments
Read English	Alternate	Recreation
Andy Payne	Primary	Employment & Education
Rory Maitland	Primary	Contractor
8 Seats represente d		
<b>ABSENT MEMBER S</b>		
Barry Miller	Primary	Environment
Mark Anderson	Alternate	Member at large
Mark Hassett	Alternate	Contractor
Cathy Bartfai	Alternate	Member at large
Russ Parsons	Alternate	DFA Worker
George Illes	Alternate	Environment
Doug Fuller	Primary	DFA Worker

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Joseph McLean	Alternate	Local Business
Laura van Diemen	Alternate	Employment & Education
PRESENT	WFP	
<b>Resource – others</b>	<b>Resource – others</b>	
Stuart Glen	WFP	
Valerie Thompson	Facilitator/Secretary	
Nancy	WFP	
Annette Van Niejenhuis	WFP	