

Meeting Synopsis

Land Based Investment Strategy (LBIS): Current Reforestation and Timber Supply Mitigation Meeting

Sponsored by

*Resource Practices Branch
BC Ministry of Forests, Lands and Natural Resource Operations*

Ministry of **Forests, Lands and
Natural Resource Operations**



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Reminder of Meeting Agenda

Land Based Investment Strategy (LBIS): FFT Current Reforestation and Timber Supply Mitigation Winter Meeting

Location: Executive Airport Plaza Hotel
7311 Westminster Highway, Richmond, BC

THURSDAY, MARCH 8TH, 2012

Delivering the Program in 2012/13 and Learning from Operational Case Studies

- 8:00 am *Coffee/tea/muffins available – meet and greet*
- 8:30 am **Welcome and introductions**
- 8:45 am **Session 1: Improving Planning and Delivery**
- Review of FY 2011/12 planning/delivery/communication (Al Powelson/Dave Cornwell)
 - How can we make it better in FY 2012/13? (Al/Dave)
 - Review actions from last meeting (Ralph Winter/Dave Cornwell)
 - Reminder regarding RESULTS submissions (Ralph Winter/Matt Leroy)
- 9:30 am **Session 2: Planning and Funding for FY 2012/13** (Al Powelson and Kelly Osbourne)
- 10:00 am *Coffee break (including tea and sodas)*
- 10:15 am **Session 3: Delivery Options in FY 2012/13** (Ralph Winter and Dave Cornwell)
- 11:00 am **Session 4: Delivery Considerations**
- Assessment of Investments Recommendations (Nigel Fletcher)
 - Developing silviculture regimes (Al Powelson and Kelly Osbourne)
 - District constituent meetings (Ralph Winter)
 - Type 2/4 silviculture strategies (Ralph Winter)
- 11:45 pm *Lunch – will be provided (soup and sandwiches including vegetarian choices)*
- 12:45 am **Session 5: Operational Case Studies – Northern Interior**
- 1:45 pm **Session 6: Operational Case Studies – Southern Interior**
- 2:45 pm *Coffee break (including tea and sodas)*
- 3:00 pm **Session 7: Operational Case Studies - Coast**
- 4:00 pm **Adjourn**

Purpose of this Synopsis

At least 50 individuals from districts, regions and branches that are involved or interested in the Forests for Tomorrow (FFT) program attended a one-day meeting held March 8th, 2012 in Richmond, British Columbia (BC). Meeting participants are listed in Appendix 1.

The purpose of this Synopsis is to provide a summary of discussion highlights and action items from the meeting for participants and others that may be interested.

The files for the several of the meeting presentations have will be posted on the LBIS FFT website under 2011/12 Updates at <http://www.for.gov.bc.ca/hcp/fia/landbase/fft/updates.htm>

So as not to repeat material already compiled, this Synopsis should be used in conjunction with the Workbook that was prepared to guide the meeting.

Welcome and Introductions

Dave Cornwell thanked attendees for their participation and for the team work everyone has demonstrated in delivering the LBIS FFT program. Dave asked participants to introduce themselves.

5 Meeting Objectives and Agenda

A reminder of the meeting agenda is provided on pages 4 and 5. The 5 key meeting objectives were:

1. Address the requirement to focus activities on priority areas under the LBIS (see Session 1 in the Agenda)
2. Develop budget for 2012/13 budget process under LBIS (see Sessions 2a to c)
3. Managing key strategic issues: Sowing, backlog NSR and FMPs (see Sessions 3a to c)
4. Address delivery capacity issues by exploring a range of available tools – implementation contractors, BCTS, licensees or, recipient agreements managed by PwC (see Session 4 on Day 2)
5. Identify and address critical training needs in regions and districts (see Session 5 on Day 2)

Session 1: Improving Planning and Delivery

Review of FY 2011/12 and how we can make it better in FY 2012/13

Leith McKenzie asked attendees to write on separate sticky notes:

- What worked well in 2011/12?
- What were issues/challenges in 2011/12?
- What issues/areas do we need to focus on in 2012/13?
- What are your training needs?

And then place the sticky notes on the paper related to each question. Then groups were assigned and asked to sort through and theme the main points that are raised. Below are the outcomes of the exercise – with number of sticky note comments in brackets (each sticky note comment is provided in Appendix 2):

What worked well in 2011/12?

- Good regional support (7)
- Great collaboration and teamwork with BCTS and program (6)
- Districts happy to have FFT in districts: better fit and cost savings (7)
- Flexible and cost-effective contract administration (5)
- Good working relationships with recipients (3)
- Improved governance planning within program (3)
- Good collaboration between districts, region and Victoria (3)

What were issues/challenges in 2011/12?

- Lack of Resources – late budget (20)
- Policy framework (15)
- Contracting out/transition (7)
- Communication (4)
- Reporting out (3)

What issues/areas do we need to focus on in 2012/13?

- Budget (10)
- Program Management (9)
- Priorities (6)
- Workload (5)
- Inventory/mapping (3)
- Spacing (3)
- Websites/standards (2)
- Timber Supply Review (2)
- Other (2)

What are your training needs?

- Contract management (10)
- Return on Investment (5)
- Silviculture surveys (4)
- RESULTS (2)
- Fertilization (2)
- Planning (2)
- Other (5) including field training

Plenary discussion

Budget issue

Branch staff wondered why there was an issue with the 'late budget' as letters were sent in April about the budget. The response from district and regional staff was that it was not entirely clear from the letters if they could start spending or not. Branch staff responded by saying those letters were intended to be provide the 'green light' to start spending right away.

Action #1a: Meet with Regional Executive Directors (REDs) to make clear that the letters that go out in April regarding the allocation mean 'go' (start spending). Al Powelson will attend and make this clear to REDs.

Action 1b: Meet with Regional Management Team (RMTs) to make this clear as they include a finance person. Craig Wickland will do this for the Coast regions, and this should be done also by regional staff involved in FFT for northern and southern interior regions.

It was noted in one region given re-organization (transition from ILMB to FLNR) that region held the FFT funding for about two months before districts received it – thus delaying and impacting field work and delivery.

Contract management

There was discussion on the need for contract management training and to have that training be relevant to forestry (e.g. with examples related to silviculture activities funded through FFT). There were questions about the roles, responsibilities and liabilities of FLNR staff who hire contractors to undertake FFT activities.

Action #2: Develop contract management questions, concerns or scenarios and send them to Nigel Fletcher. Nigel will then convey to Vicky Taylor and provide district/regions with answers.

Field training

Al Powelson asked attendees if their main interest in field training was within their region (versus a provincial perspective), and the response was – yes, main interest is field training within their region.

Review actions from last meeting

Dave Cornwell went over some of the action items from last September's LBIS FFT meeting in Richmond that were summarized in the March meeting workbook. Several of the actions have been completed or are underway.

Action #6: Underscored importance of 'being prepared' should unforeseen funding opportunities emerge.

Action #12: regions/districts confirmed they were provided the specific location of backlog NSR areas.

Action #16: past surveys of silviculture capabilities will be reviewed first in the spring before considering a new survey. It was noted by operations staff that the issue with respect to FFT delivery is getting it prioritized relative to the many other programs/projects; having FFT performance measures with delivery expectations reflected in region/district work plans is key. Al noted that RPB had a meeting with Corporate Initiatives on this important topic.

Action #20: still need to identify who the specialists

Action #27: regarding safety training, it is important to talk to regional training coordinators if there are specific needs e.g. danger tree assessment.

Action #34: Ralph Winter gave 'heads up' that an RFP for proposed carbon work closes shortly, that the minister is involved, and that this could link with FFT with some inter-actions possible in a few weeks. The proponents were given some areas for possible work from RESULTS. Comment suggested that areas with lower ROI that likely would not be eligible for FFT funding should be forwarded for consideration a carbon offset projects. Ralph however noted that want some of the same ground as areas with higher ROI potentially sequester more carbon thus providing more carbon credits.

Action #37: data integrity e.g. in RESULTS is being assessed, but not audit of districts is envisioned. A soft 'check' of district delivery has been done in the past but none planned this year. A comment noted that healthy programs should have independent checks (e.g. audits) as this can support continuous improvement.

Action #38: regarding district attendance, good to see the participation at this meeting, and the exercise with sticky notes that Leith led early was geared to getting more input from regions/districts on program planning and delivery. A comment noted that March may be more conducive to getting district involvement as people tend to 'penny pinch' earlier in the fiscal year regarding travel budgets, and then realize in March that they do have available funds to travel. It was also noted that if the intent is for two meetings per year, and it is made known, then people can budget for that.

Action #3: Two provincial meetings will be put in LBIS key dates: one in September and one in March.

Reminder regarding RESULTS submissions

It was noted that mid-April is when the RESULTS submissions need to be completed so that they can be used in the annual report.

Session 2: Planning and Funding for FY 2012/13

The purpose of this session was to review the funding allocation for all the LBIS categories for next fiscal year, and then more specifically for FFT current reforestation and timber supply mitigation (TSM).

Allocation for LBIS categories

Al Powelson noted that the LBIS is receiving \$10 million (M) more funds next fiscal year than it received this fiscal year (however the budget is expected to drop in FY 2013/14). The breakdown by investment category is noted below:

Investment category	Sub Category	2012/13(\$M)	Sub (\$M)
Forests For Tomorrow	Current Reforestation	46.3	34.45
	Timber supply mitigation		11.85
Invasive Plants		1.7	1.7
Forest Health		8.5	98.5
Tree Improvement		4.0	4.0
Inventory	VRI/Site Productivity	9.0	7.5
	EBM		1.25
	Visual		0.25
Fish		2.50	2.50
Fire Management		0.05	0.05
Ecosystem Restoration		1.0	1.0
Range		1.0	1.0
Water		0.65	0.65
Wildlife		2.65	2.65
Recreation		1.25	1.25
Total		78.6	

The 'invasive plants' category is only one of two (other is tree improvement) currently structured to allow for contribution agreements; it therefore received additional funding given expected lower forecasted LBIS funding for FY 2013/14.

'Inventory' received an additional \$2 M with work in areas such as Vanderhoof, Nadina, Prince George and Fort St James. 'Ecosystem-based management' (EBM) activities include terrestrial ecosystem mapping (TEM). The budget for 'visuals' has doubled.

'Wildlife' is a new LBIS category where activities include habitat inventory and population assessments.

The FFT current reforestation budget of \$34.45 M is basically same amount as this fiscal year. Although the TSM budget of \$11.85 M is also similar, the purchase of fertilizers can now be made using the ministry surplus which effectively adds about \$5 to 6 M to the overall program.

Allocation and Goals for FFT

Kelly Osbourne provided two handouts:

1. Draft Annual Allocation for FFT Regional Break Out that shows the allocation at the district level by delivery agent for both current reforestation and TSM. The delivery agents are: managed internally by FLNR; BCTS; Recipients; and licensees (e.g. TFL recipients for TSM), and
2. Draft Annual Goals for FFT Regional Break Out that shows # of trees to be planted and sowing targets, and hectares of surveys, backlog NSR reductions, site preparation and brushing for current reforestation; and hectares of surveys, fertilization, spacing and brushing for TSM.

The handouts, when finalized, are the reference for the expenditure budget letters that go out in April. \$2 M is also put for s. 108 expenditures with any unused funds moved to purchase fertilizers.

Action #4: Regions/districts to help refine handouts. Kelly Osbourne will send letter to remind people to refine the goals in the handout. The handout needs to be refined next week (by March 16th). Note: This action has been completed.

Ralph Winter noted that the backlog NSR reduction in the handout needs to total 80 000 hectares to reflect the throne speech commitment to eliminate the backlog.

Kelly said the 24 M in sowing requests may be too high given expected available funding to plant the seedlings in the future; may need to reduce the requests to about 20 M. Ralph suggested that we keep the sowing requests until about July as we may have a better indication of future budgets at that time. The sowing request deadline in September is after surveys are done this summer; therefore the pairing down of requests can be done later. If the requests need to be paired down, it was noted that the requests should target highest priority areas.

District staff noted that it is best to wait about 5 years after a wildfire before undertaking a survey – in order to leave some time to determine if natural regeneration is satisfactory or not. Once the annual allocations and goals for FFT Regions and Districts have been completed, the allocation letters will go out. This is ‘go’ to proceed with the work.

Action #5: FFT allocation letters will be cc’d to Districts. That way they know they can proceed with the work. The FFT allocation letters will also be shared at FFT calls. The Stewardship Leadership Team can also help communicate the letters to regions/districts so that work can be initiated.

LBIS Transfer of Funds

Kelly provided a handout on LBIS transfer of funds that identifies the maximum funding level of transfer approval by authority. For example, at one end up to \$50 000 can be transfer with the authority of the Stand Establishment Officer, and at the other end any transfer exceeding \$1 M require authorization from either the ADM, Resource Stewardship or the Deputy Minister, FLNR. Part of the handout included a LBIS Funding Transfer Decision Request Form where the applicant describes the issue, provides a business rationale, notes the options considered, and provides a recommendation.

Silviculture Funding Criteria

Al provided copies of the Silviculture Funding Criteria 2012/13 to 2014/15 for distribution at the meeting. The document was refined from last year considering comments that were received, and also new information (e.g. using the lasts wildfire #s in the timber harvesting land base.

Action #6: Send any comments or concerns to improve the Silviculture Funding Criteria document to Al Powelson. Next year’s version can then address that feedback

Session 3: Delivery Options in FY 2012/13

BC Timber Sales

There is a LBIS service agreement (MOU) with BCTS where BCTS gets 10% for delivery work. The agreement covers all LBIS categories, including FFT (surveys, fertilization, etc), fish passage, etc, and is renewed each year. It is important that this agreement be used, and that regions or districts not develop ‘one-off’ agreements that are different than the provincial MOU.

Rob Bowden and Kelly will be sending a ‘package’ to BCTS Timber Sale Managers shortly that covers the MOU and explains the opportunities to help with LBIS delivery.

The Innovative Timber Sale License (ITSL) is a complementary partnership that enables BCTS to harvest low value stands and reforest using LBIS FFT funding.

Districts

In FY 2011/12, 10% overhead funding was provided to districts only to help deliver FFT programs such as TSM, current reforestation and forest health. Some districts may have needed less than 10% to deliver the program whereas other districts may have needed more. Under consideration for FY 2012/13 is to provide the 10% to regions who can then provide the flexibility to help address the specific needs for each district.

PwC

PwC is still available for use, for example, if districts need a licensee or a consultant to deliver aspects of the program.

Discussion

There was discussion on the 10% overhead for districts – that there be clear guidance on how this is to be applied. It was noted that some project had an overhead allowance (or implementation costs) imbedded within the cost whereas others did not.

Action #7: An overhead allocation letter will be prepared and sent to clarify how it will be implemented and used. Dave Cornwell noted that its use needs to be directly related to delivery goals. Update – Regional Executive Directors have been provided a briefing on overhead allowances.

Concern was expressed that districts might lose the overhead with the new approach of sending the 10% to regions. Dave clarified that the allocation letters go to regions who get all the funds for the entire project, then regions distribute to districts. So the overhead going to regions is similar in that regard. With the new overhead delivery approach, regions and districts can discuss what is needed with respect to overhead, and build this into their budget based on those needs. The 10% overhead covers both region and district needs, there is no separate overhead allocation to region.

Session 4: Delivery Considerations

Assessment of investments recommendations

Nigel went over a recently review of the current reforestation program largely under the previous recipient agreement approach (also see Appendix 3). The field and office review picked a random sample of primarily fire-disturbed areas that were reforested using FFT funding. The findings were that 71% of the sites were satisfactorily restocked (SR), 18% were borderline SR, and 11% were still NSR. Where SR, the stocking levels looked good. About 15% of the sites are not on track to free-growing, and probably should not have been planted.

About 17% of the sites will likely need vegetation management and 50% a stocking survey thus underscoring the need why a silviculture regime is needed to support FFT treatments such as planting.

Based on field surveys it is recommended that under planting of MPB killed stands should no longer occur as the results were poor.

From the office review, recommendations included that: a consistent policy is needed on data transfer and/or storage; there needs to be clear rules (a simpler, more repeatable approach) when assessing ROI; and policy is needed on when to survey after wildfire a MPB infestation.

The next FFT review will be to check s. 108 funding/projects; fertilization may also be addressed.

Action #8: A final report is being prepared that addresses the current reforestation review.

Quarterly reports

Nigel provided a reminder to complete 4th quarter annual reports. This can be done by cloning the previous report and then making any needed changes. A new item to report on direct \$\$ that have been provided to First Nations has been added. There was question on this: the prime contractor was not First Nations but 50% of the crew that they hired was First Nations. It was recommended that 50% of that contract then be considered as direct \$\$ to First Nations in the quarterly reports. Although there is no First Nations target for expenditures, the question will invariably be asked, so it is important that the program can provide the answer.

Action #9: Districts need to complete the quarterly report by April 15th, 2012

Action #10: Regions/districts let Nigel know of the reporting applications can be improved

Developing Silviculture regimes

Al and Kelly addressed this topic. Although there is no legal obligation to ensure that the areas planted using LBIS FFT funding reaches free-growing, there is a moral responsibility to address this. RESULTS is tool where we can identify silviculture regimes that are needed to help ensure sites planted reach free-growing. Various silviculture regimes were created in RESULTS several years ago which may be useful to consider in order to help ensure treated sites get to a free growing state.

A question was raised about priorities: is it free growing for planted areas? Or planting new areas? The reply was that both are important; we do want to plant new areas, but we also don't want to lose the investments that we have made.

Another question was raised regarding stocking standards. The new survey standards that Dave Weaver has prepared provides guidance; if the natural regeneration tree count is sufficiently high, then there is not no need for FFT current reforestation treatment.

District constituent meetings

Ralph Winter noted that just as it is important that provincially we have an FFT meeting in September and another in March, similarly there is a need for two local LBIS planning sessions meetings with constituents at the district level. This is important so that district staff and constituents, (like licensees who may also be involved in delivering aspects of the program) are on the same page. The Spring meeting can address the what went well in the past fiscal year, what can be improved, clearly identifying what budgets are available and identifying who will take a lead on delivering various activities in the business plan for the new fiscal year. The session should be used to ensure that the program is delivered in a coordinated manner for the new fiscal year. It is important that it be crystal clear who is delivering the program. The Fall meeting would involve meeting to review and refine the 3 year plan and develop the annual plan for the next fiscal year. The session would ensure any new silviculture strategy summary information is used to adjust the creation of the 3 year and annual business plans.. A total of \$5000 will be assigned each district to hold a minimum of 2 one-day sessions with key delivery agents for the Spring and Fall meetings.

Type 2/4 silviculture strategies

Ralph distributed a copy of the Williams Lake TSA Type IV Silviculture Strategy Organizational Meeting. Five Type IV silviculture strategies (SS) are intended for FY 2012/13. One of the key reasons for the Type IV SS is to provide management unit targets such as for species composition. With IFPA and the Fort St. John pilot project winding down, the Type IV SS is expected to be the 'home' for management unit level targets.

The recommendations of the recent audit of FLNR timber management by the Auditor General was the need for timber objectives and targets. The Type IV SS help address that recommendation.

If new funding opportunities were to emerge, it is important to be prepared, and we can use a Type IV SS strategy to be 'ready' with projects that make sense should new funding become available.

Session 5: Operational Case Studies – Northern Interior

Backlog NSR

Anna Monetta described the update of pre-87 backlog NSR in the northern regions. The work is being done by recipient agreement holders and their staff. Some earlier work was managed by licensees through the FIA program.

There are four main phases for this work:

- 1) Paper file review
- 2) Aerial reconnaissance
- 3) Ground survey or reconnaissance, if required
- 4) RESULTS activity, forest cover and spatial updates.

These steps usually occur over two fiscal years and most openings are acknowledged as free growing following the aerial reconnaissance. Many openings have been surveyed in the past and there is sufficient information on the paper file to help make this determination. The backlog stocking standard guidance is used to determine stocking status and very few areas are found to require treatment.

To ensure data integrity all work must pass a RESULTS quality assurance process.

In the Mackenzie TSA, the bulk of the pre-87 backlog NSR was contained within large, old fires in the northern part of the district. In this case the recipient's GIS staff used existing VRI data to update forest cover and spatial for these openings.

Anna provided per hectare costs for undertaking different aspects of the project.

Through discussions it was noted the vegetation resource inventory (VRI) is updated every year e.g. by adding a year of age and growth to forest stands and also using survey information that is entered into RESULTS.

District and BCTS Collaboration

In Vanderhoof district, two large fires impacted about a 25 000 ha in total. Using the provincial LBIS/BCTS MOU, BCTS submitted a proposal for a 2012/13 collaborative program with district. BCTS will be planting over 850 000 seedlings and preparing site prescriptions. Districts will undertake stocking surveys to help determine where FFT current reforestation efforts are most needed.

Due to timber supply issues, BCTS was downsizing in the Vanderhoof district area and therefore was interested in getting involved in FFT delivery. BCTS is able to combine a timber sale block with a FFT block to lower overall costs. FFT also provides new training opportunities for BCTS staff e.g. in use of ROI/TIPSY.

The challenges BCTS is facing is that they don't want to be overly dependent on FFT, they need to deliver FFT in a manner where they do not lose money, and with FFT they have two data systems to work with: BCTS' GENUS and RESULTS. Via discussions it was noted that aspects of GENUS that are applicable to RESULTS can be download by using a contractor.

Districts provide budget and planning roles which keeps contract management skills up, and develop a good relationship with BCTS.

Mid-Term Timber Supply Issue

Aaron Benterud made a presentation about a mid-term timber supply issue facing the Kalum TSA and opportunities for more spacing to mitigate some of those issues. There is a recipient agreement with a person working for TFL 1. About 80 000 ha of the TSA is in the timber harvesting land base (THLB). Treaties are expected to be in place; the agreement-in-principle (AIP) would see significant areas of THLB being removed from the TSA's THLB. The timber supply forecast for the TSA with the current THLB indicates there will be drops in timber supply before reaching mid-term level. However most of the profile assumed available for harvesting in the short-term in the timber supply projection is actually comprised of a profile of mature timber that is uneconomic or marginally economic (decadent and pulp dominated stands or stands with prohibitive access costs). Consequently, early harvesting of spaced stands is expected to comprise part of future mid-term AAC (1-3 decades) and further compromise the significant reduction in available timber supply forecast for decades 3-9. The timber supply model is based on oldest stands harvested first and does not account for the early harvesting of spaced stands that is occurring.

Piece size is the key benefit as it increases with spacing. The projected volumes are similar for spaced and unspaced stands, however an increase in piece size offers an earlier opportunity for harvest and a shorter rotation age. Previous spacing efforts targeted accessible stands (along mainlines). As easily accessed spacing candidate stands are depleted, future spacing efforts will require access upgrades to reach suitable areas for spacing (deactivated spur roads). Combined with the loss of AIP areas, access conditions will limit the extent of spacing that can realistically occur in the TSA. Funding dedicated to access management is key for program success.

During discussions, a number of comments noted the need to correct timber supply review assumptions so that it more realistically reflects current practice with respect to the harvest profile. It was suggested that there be an AAC partition regarding the problem forest types.

Session 6: Operational Case Study – Southern Interior

Collaboration with BCTS

Mike Madill and John Hopper discussed the Thompson/Okanagan experience getting BCTS involved to remove low value MPB killed trees so that areas could be reforested. The local pulp mill needs fibre yet before FFT cut and burned killed stands that precluded their use as pulp. The pulp mill in Kamloops does not have a sawmill therefore it needs to purchase chips. There

are about 500 000 ha of low quality stands with small piece sizes, low volume, with dead wood, checked wood.

Through the ITSLs, a lump sum sale for an area of wood was undertaken where there was no need for scaling or log grading. The ITSL sale is through a competitive bid process on the harvesting; reforestation costs are addressed separately. BCTS does the FFT survey work and undertakes the First Nations consultation. Studies have shown that under planting is not working out due to insufficient light; removing the dead overstory results in better reforestation. The use of the overstory through the ITSL provides both fibre for the pulp mills and jobs.

The ITSL agreement is resulting in significant FFT cost savings since FFT does not have to pay for overstory removal. The stands targeted for ITSLs clearly have to have low value well below what would be done under an economic salvage operation. The project was submitted for a Premier's Award and it is currently a finalist.

Before getting involved in FFT, BCTS's interest was targeting high volume dead pine stands. With FFT, BCTS can now target much lower volume stands that might not otherwise be reforested. An emerging challenge is that BCTS is going to be running out of sites within their operating area to treat. BCTS's operating area is about 20% of the overall area, with 80% outside their operating area. Although there are potential opportunities for BCTS to be involved in ITSLs outside their operating area, there can be objections from NRFL holders (many of whom are First Nations) who want to maintain opportunities for future salvage harvesting. During discussions it was noted that this issue needs to be addressed in future so that opportunities for FFT investments using ITSLs are not unduly constrained.

It was noted that FFT reforestation targets are for higher densities (about 1800 seedlings/ha) than normally for stocking (which is about 1600 seedlings/ha). This is because the objective of FFT is to increase fibre, and increased densities help account for losses due to forest health impacts on new stands – enables FFT to be a 'flagship' program.

It was also noted that it is important to ensure stands targeted for ITSLs are well below what an average operator is taking, and that this has to be locally determined as stands used in one TSA for normal salvage harvesting may not be economic in another TSA.

Session 7: Operational Case Studies – Coast

Juvenile Spacing

Jack Sweeten described the FFT juvenile spacing and fire rehabilitation work in the Chilliwack District. District did not get funding confirmation until late (after June). Over the next three months, a contractor was hired to do the surveys and find blocks. There are 40 First Nations in the Chilliwack area so the First Nations consultation work about the blocks did not get completed until December 2011.

A contract was awarded to undertake the juvenile spacing, and another to undertake the RESULTS submissions. The spacing work occurred between January and March with about 2

ha per day of spacing in order to achieve the goal of 180 ha of spacing. Since this was the first spacing work in the district in about 15 years, there were not a lot of experienced people; however a key person was found and hired.

There is varying professional opinion about spacing e.g. what density? The Campbell River district spacing standards were helpful. There was also learnings from the Post Increment Treatment Assessment (PITA) in the Vedder Mountain area that was treated in the 1990's e.g. did we get what we were hoping for?

Lessons learned from this experience is to hire someone experience in spacing, and to take advantage of the work done in other districts (e.g. Campbell River experience).

Incremental Spacing Project

Scott Dunn presented the experiences of the Campbell River District in an Incremental Spacing Project. A review of spacing in other jurisdictions was undertaken. Hired a skilled contractor who then guided them in the development of stand selection criteria. For example, in some sites there was about 1000 stems of planted Douglas-fir with 90% survival and 2000 to 5000 stems of ingress hemlock. This might suggest undue competition. However, the planted Douglas-fir consisted of fast growth genetically improved stock so its height was well above the hemlock, and there was not competition for light and thus no need to space. Most of the hemlock would eventually die.

Looking at previously treated stand and past studies regarding spacing help provide insights as to where to best invest. It is important to be clear on the objectives – why are choosing spacing? For example, is it to affect harvest flows, to improve forest health, to achieve a ROI, etc? Forest level plans can help make the objectives clear. If a TSR is coming up, the modeled behavior with spacing can be compared to current behavior of timber supply without the spacing – and this can assist in developing the forest level plan. If logging trucks are hauling second growth but the timber supply model says 'oldest first' – need to challenge those assumptions as government has an important role in not only looking after today but also the future.

Contract management course(s) are important to understand district's liability role as prime contractors, and the rules of engagement.

Adjourn

Dave thanked the presenters of the Case Studies in the afternoon, those who led discussions in the morning sessions, and to all meeting attendees for taking time from their busy schedules to attend and to actively participate.

Action #11: Please send any feedback to Dave Cornwell on how you feel the meeting went. Was the meeting worthwhile from your perspective? Did it meet your expectations? How could it have been better?

Thanks for your participation!

Appendix 1: List of Meeting Participants

An attendance list was distributed but some participants may not have received it and may have been inadvertently overlooked in the list below.

Name	Organization
Delee Anderson	Vanderhoof District
Paul Barolet	North Island – Central Coast District
Frank Barber	Resource Practices Branch
Aaron Benterud	Kalum - North Coast District
Rob Bowden	BC Timber Sales (BCTS)
Ian Brown	PriceWaterhouseCoopers
Glen Buhr	Skeena Stikine District
Dave Cornwell	Resource Practices Branch
Sam Davis	Mackenzie District
John DeGagne	Vanderhoof District
Scott Dunn	Campbell River District
Nigel Fletcher	Resource Practices Branch
Dave Gill	BCTS Okanagan-Columbia
Neal Gooding	Fort St. James District
Rainer Gruenhege	Sunshine Coast District
Larry Hanlon	Kootenay Boundary Region
John Hopper	BCTS Kamloops
Kerri Howse	Cariboo-Chilcotin District
Elizabeth Hunt	Peace District
John Illes	Nadina District
Lyn Konowalyk	Rocky Mountain District
Katherine Ladyman	Okanagan Shuswap District
Kevin Lavele	Selkirk District
Monty Locke	Resource Practices Branch
Heather MacLennan	Kamloops District – Clearwater Field Office
Mike Madill	Thompson Okanagan Region
Rob Martin	BCTS Strait of Georgia
Dave McArthur	100 Mile House District
Leith McKenzie	Thompson Okanagan Region
Anna Monetta	Omineca Region
Ed Nedokus	Cascades District
Dan O’Brian	PriceWaterhouseCoopers
Kelly Osbourne	Resource Practices Branch
Michael Pelchat	Quesnel District
Bernie Peschke	Thompson Okanagan Region
Ann Peter	Chilliwack District
Brad Powell	Quesnel District
Allan Powelson	Resource Practices Branch
Nina Sigloch	Kamloops District
Peter Stroes	Cascades District
Norma Stromberg-Jones	Prince George District – McBride Field Office
Jack Sweeten	Chilliwack District
Andrew Tait	Fort St James District

Geoff Tindale	BC Timber Sales - HQ
Miodrag Tkalec	Mackenzie District
Terje Vold	Terje Vold & Associates Consulting Ltd
David Weaver	Resource Practices Branch
Craig Wickland	Coast Region
Ralph Winter	Resource Practices Branch

Appendix 2: Sticky Note Comments from Session 1

What worked well in 2011/12?

Good regional support:

- Great region/district/BCTS communication
- Good regional support
- Region did the work
- Regional staff very helpful
- BCTS and contracting options to get work
- Good support from region
- Good regional coordination re: budget

Great collaboration and teamwork with BCTS and program

- Good transition from recipient to BCTS and district
- Good 'partnership' with BCTS
- Good communication and collaboration between BCTS and FFT
- BCTS delivery of program goals
- Awesome collaboration with BCTS and FFT
- Good teamwork at regions and districts and BCTS

Districts happy to have FFT in districts: better fit and cost savings

- Great to have districts on board
- Getting FFT back to the districts to deliver
- Transition to district delivery
- Transition support from recipient holder through contract work
- Delivery projects using in-house staff has saved big dollars
- Better integration with district staff
- Return of dedicated forest professionals to field-based forestry

Good working relationships with recipients

- Support from recipient agreement
- Licensee recipient delivery of the timber supply mitigation program especially with short time frames for planning and prescriptions

Improved governance planning within program

- Early 2013 AOP development and 5 year plan
- Early allocation letters!
- Good LBIS strategy, funding criteria, delivery

Good collaboration between districts, region and Victoria

- Good communication between region, district, BCTS in program delivery
- Good communication with Victoria people
- Improved communication between Resource Practices Branch and regions and districts

Flexible and cost-effective contract administration

- Being allowed to ‘tag’ onto existing contracts to reduce cost/administration
- Reduced use of third party contractors to make strategic decisions
- Use full phase Implementation
- Select lists
- Camping out with Arrow staff

What were issues/challenges in 2011/12?

Resources – late budget

- Timing of budget did not allow adequate time to implement contracts in 2011/12
- Budget came too late in the year for proper planning
- Not enough resources
- Funding and resources
- Resources
- No staff to plan or implement program
- Late budget
- No district management support for program
- Late budget
- Funding – our district was not allocated much
- Staffing limitations in districts
- Difficult to get the time for proper planning for timber supply mitigation program
- HST and investment schedules
- Funding coming too late
- Managing overhead amounts
- If no new resources district manager directed re-distribution of workload
- Late budget
- Additional resources needed
- Contract clerk challenge (shortage)
- Funding support in district that is not prepared/oriented toward doing work over the winter

Policy framework

- Challenge: clarification of priorities took time
- Not all activity treatment contract schedules were readily available
- Timber supply mitigation: short time frame for planning, prescriptions and delivery
- Lack of coordinated approach to identification of fires in need of reforestation
- Heavy scrutiny on proposed projects

- Started with new regional direction in August
- Shifting priorities
- Spacing contract forms outdated
- Branch unilaterally changing policies
- Uncertainty regarding current administrative practices
- Insufficient clarity around administrative allowance calculation and limitations of use
- Late budget and lack of clarity on how overhead dollars could be spent
- Clear funding policy direction on in-scope and out-of-scope activities
- Fewer First Nations issues
- Lots of First Nations interest and involvement

Contracting out/transition

- Branch flexibility allowed shifting of funds between FFT/timber supply mitigation when contracts received no bids
- Maximizing flexibility for LBI delivery
- Fairly high juvenile spacing bids due to inexperienced contractors
- Finding experienced juvenile spacing contractors
- Transition from recipient to FLNR
- Thrown into planning mix pretty quick when district took over from recipient
- Difficult transition from recipient

Reporting out

- Financial reporting – lack of access to financial systems by budget managers
- Mixed reporting formats: web – on-line LBIS; FFS
- Data issues; poor forest cover inventory

Communication

- District not aware of what treatments being carried out – not included in recipient planning
- Too many e-mails and information from at least 5 people at branch/region – overload!
- Difficult or challenging to navigate the FFT/LBIS websites to find most current information
- Disconnect with implementation contractor (program administered by third party)

What issues/areas do we need to focus on in 2012/13?

Program Management

- Region/branch collaboration on provincial allocations to regions/districts
- Stability in direction
- Improve dialogue and discussion between branch and region; too much downloading from branch
- Focus on consistency between districts
- Effective communication: short, clear, concise

- Gain a sense of timing re: implementation and delivery
- Annual/semi-annual regional meeting with district/BCTS to discuss program priorities/delivery
- Consistency in what project/how projects approved
- Better longer term planning (especially timber supply mitigation)

Budget

- Need to know budget allocations earlier
- Stability in the funding
- 10% delivery allowance was confusing; needs clarity
- Access management allocations a priority; needs line item in timber supply mitigation budget
- Constant budget levels
- More funding required
- Overhead allowance not clear
- Funding should be given from the district-level based on their priorities and not from top-down
- Funding needs to come early (April)
- Managing change in timber supply mitigation budget

Priorities

- More focus on analysis to support program and less on just doing work
- Rehabilitation of high site index areas where no harvest planned
- Fix the priority ranking criteria to reflect return on investment
- Finalize MOU amendments and stand selection criteria i.e. VCU/TCU, vol/ha, etc
- Planning MPB rehabilitation if any
- Get the \$ to highest priorities

Workload

- Need to ensure districts have resource to do the job (auxillaries, staff)
- Lack of district staffing resources to deliver the program
- Continued ability to combine resources to save time/cost
- Leave the work where there are people to do the work, or send staff
- FFT program is being delivered at the expense of other programs?

Inventory/mapping

- Aerial photos capturing secondary stand structure for MPB stands
- Better inventory of dead pine going forward
- Some inventory projects to update forest cover of some backlog NSR blocks. Some of the older blocks with poor access (40 years) too costly/inefficient to survey

Websites/standards

- Websites/standards need work/updating with current documents

- More user friendly website

Timber Supply Review

- Lack of linkage between TSR assumptions and timber supply mitigation investments
- Look closely at future timber flow and where to mitigate

Spacing

- Reduce spacing costs
- Review spacing target stems/ha
- Spacing and fertilization: more guidance on how to select stands as well as how to implement e.g. contract templates, etc

Other

- Focus on training
- Create recognition reward for best run FFT program

What are your training needs?

Contract management

- Contract formation; contract administration
- Contract management
- Contract implementation (not contract management)
- Contract set-up and management
- Contract management
- Training around prime contractor
- Relevant and effective contract training
- Contract management
- PCMP 300 level courses
- Contracting

Return on Investment (ROI)

- ROI
- Use of ROI in a consistent and appropriate manner
- TIPS/ROI
- Training in ROI
- ROI

Silviculture surveys

- Silviculture surveys refresher
- Surveys – all types
- ‘Required surveys’ workshop; new to program and don’t know the history and standards and forms

- Silviculture survey courses/standards

RESULTS

- RESULTS – spatial updates
- RESULTS – tracking/using project id #s – mandatory for FTM funded activities?

Fertilization

- Fertilization project management
- Fertilization program delivery

Planning

- Program planning
- Planning function

Other

- Danger tree assessment
- Field trips to view successes and failures
- Field quality check/monitoring
- Training on the program, software, contracts
- How to do post spacing inspections. How to fill in FS 751B

Appendix 3: Assessment of Current Reforestation Program

Based upon the Interview Assessments, overall the Current Reforestation Program was managed and functioned at a satisfactory to a highly satisfactory level.

In respect of the Field Assessments, 67.2% Net Planted Area (NPA) are “On Track to FG” and 17.5% NPA are “Potentially On Track to FG”. Eighty-four point seven percent of all NPA was assessed as being free growing achievable. This is assessed as being satisfactory (Note: >85% would be highly satisfactory).

The following are selected data results from the Field Assessments. The data is presented as percentages of the total net planted area (NPA) of the APop.

- 67.4% were fire origin stands, 32.2% were MPB, and 0.4% were TAL units;
- 57.9% was planted underneath live and/or dead stems and 29.7% were cleared areas;
- 71.4% was SR, 17.5% Borderline SR (where LCL < MSS), and 11.1% was NSR;
- Only 5.0% was assessed to have excessive stocking. This is an assessment of the naturals plus the planted stock.
- 98.5% of planted stock was assessed as “good” to “very good” for the sites;
- 92.7% had “good” to “very good” species mix (planted and naturals);
- 74.2% of planted stock health and 79.1% plant stock vigour were “good” to “very good”. Coincidentally, 87.4% of the natural’s stock health and vigour was “good” to “very good”.
- The survival rate of planted stock was assessed at 72.8% “good” to “very good”;
- 17.1% was assessed to have a “high” to “very high” need for vegetation management;
- 49.3% are recommended for a stocking survey, 39.4% for a future free growing survey and 3.7% to “leave as is”. There is a need for follow-up surveys to ensure that the LBIS investments are maintained;
- Due to the concern in respect of stocking levels, the question of “Was planting necessary?” became an issue. 82.4% was assessed as requiring planting; and,
- Most importantly, 67.2% are “On Track to FG” and 17.5% are “Potentially On Track to FG” (meaning with appropriate management they should achieve FG). The 15.3% that are “Not On Track to FG” typically are sites that should not have been planted, in the first place, or are in need of some immediate and possibly major intervention to achieve FG. These sites may not be advisable to proceed with further or any treatment.

2.1. **Recommendations:**

The following Assessment recommendations are based upon observations and results from the interviews and field assessments. Please note that Recommendations One to Six are the most important and Recommendation One requires immediate attention:

1. There is no consistent policy throughout the province on how data transfer and/or storage is undertaken. This is very problematic going forward, especially when you consider that in the long-term, there is a silviculture “responsibility” up to free growing. This issue requires further examination, planning, and set storage and transfer policies by the Ministry before more Recipient Agreements expire;
2. A simple, measurable and repeatable system for Return On Investment (ROI) is needed. The current system (i.e., TIPSY, where ROI fieldcards are not used) is expensive and can be manipulated to provide the desired result. It is recommended that the development of standardized ROI fieldcards, for the major species and species mixes, would make the ROI calculation straightforward and simple to repeat (by an adjudicating body);
3. There should be a set policy across the province in respect to requiring a recalculation of ROI where a post survey treatment prescription (TP) is significantly different than the original TP (from which the original ROI was based and used to rationalize treatment). However, if ROI fieldcards were developed for most major species and species mixes the ROI would remain constant and only the treatment regime budget would change and could be readily compared to the maximum cost allowance;
4. Typically Recipients received funding sufficient to their Investment Plans and therefore prioritizing of treatment units (by strategic plan, site index, or return on investment) was not required. However, in future, with potential funding limitations a system of priority ranking units for future treatment will need to be defined on a MU and subsequently on a provincial level. The use of standardized ROI fieldcards, for the major species and species mixes, would make that practical;
5. The MADA system by all measures is a good system to address non-timber values on a site where the ROI is <2%. However, there are two issues in respect of MADA:
 - 5.1. Where MADA was used to justify treating sites with <2% ROI, follow-up should be undertaken to determine if the other values have been met. It appears that this has not been undertaken on a consistent basis; and
 - 5.2. MADA uses a benchmark of a SI 17 for treatment. However, a SI of 17 would exclude many areas of the province for treatment. Either the SI threshold should be removed or be modified to reflect the unique site indices throughout the province;
6. Many of the assessment sites require a current stocking survey to determine stocking status and requirements, if any, for future treatment/s (e.g., fill-planting, vegetation management, etc.) to ensure survival and performance rates. This also would be important for planning and budget forecasting. It is expected that this is a need through-out the global population;
7. Based upon the Field Assessments there are five “Fire Origin Units” related issues that require further review and/or study:
 - 7.1. There is a need to analyze natural regeneration efficacy, i.e., SR versus NSR (post fire data). In that, what percentage of net area of wildfires regenerates naturally to SR versus those that are NSR?
 - 7.2. There should be a consistent policy in respect of when a germinant assessment and/or natural regeneration stocking status are undertaken;

- 7.3. What is the best timeline for planting to optimize survival and performance?
- 7.4. What is the stock survival and performance (natural and planted) when comparing immediate plant (following season, or same season if feasible) to post-NSR natural regeneration stocking survey plant?
- 7.5. There is a need for cost analyses of:
 - a) "Immediate plant" (same or following season) versus waiting and classifying naturally regenerated SR versus NSR; and,
 - b) The impacts of "opportunity lost" due to potential better stock performance with an "immediate plant" and earlier free growing declaration, than with natural regeneration and/or fillplanting;
8. The expanded use of greater species diversification needs to be reflected within the provincial stocking standards, as opposed to district or regional variances to the standard;
9. Planting sites such as wildfires and beetle killed stands requires greater flexibility in respect of minimum inter-tree distance, in order to plant the best possible micro-sites (i.e., 1.0m MITD);
10. Treatment prescriptions should (and in this case ROI determination) factor in a "margin of error" to account for the potential requirement for fillplanting, vegetation management, etc.;
11. Underplanting beetle killed Pli stands is not recommended due to mixed results; in that, stocking survival and performance could not be adequately predicted (i.e., may or may not be successful). Note: From the majority of Field Assessments, success was marginal;
12. Further analysis is required to determine whether ROI should be increased from the current $\leq 2\%$; and,
13. A ROI RESULTS record that can be queried and updated (when TP change) would be beneficial for the effective management of the CRP.