



# Best Management Practices/ Questions & Answers for District and PWC Recipient Delivery of FFT and FCI-FESBC Funded **PLANTING CONTRACTS & COVID-19**

April 6, 2020

Please follow these suggested Best Management Practices (BMPs) when you are managing planting contracts. These BMPs are not intended to replace guidance provided by Provincial or Federal Health Authorities, WorkSafe BC, BC Forest Safety Council or the Western Forestry Contractors Association (WFCA). This document also contains a Question & Answer section to address frequently asked questions. **This document has been adapted from the BCTS BMP and will be updated as new information becomes available, please check to see if you have the latest version. The document is provided as guidance to front line District, and PwC administered Recipient Agreement holders who are directly managing planting contracts.**

## Best Management Practices

### 1. Key principles:

- a. ***Safety first for Workers (Ministry staff and PWC recipients , planting contractors, implementation contractors, cold storage facility workers) & Communities.***
- b. ***Starting your planting program:***
  - ***Interior planting programs – the Chief Forester issued a communique on March 26, 2020 recommending a delay to the start of the interior planting season to the week of May 4, 2020 . The purpose of the delay is to allow planting companies and others involved in planting projects extra time to put measures in place to keep workers and communities safe. Contractors that can meet current COVID 19 orders and protocols prior to May 4, should be encouraged to start. Starting planting contracts when site conditions allow will not only spread out work for Cold Storage facilities and other suppliers that support the planting operation, but will ultimately allow for more trees to be planted before sites dry out and stock deteriorates to the point where survival is significantly reduced.***

## **2. Cold Storage and ordering of seedlings**

- a. *Cold Storage facilities are full this year and thaw space is limited, the anticipated pinch point for the large spring plant volume this year is the ability to thaw enough seedlings in a timely manner. Planters will need to work with the Cold Storage facilities and change some existing practises to ensure a successful spring plant.*
- b. *Avoid placing thaw orders on Spec – before placing an order be 100% confident that the trees will be picked up as per the order. This is critical for the first 6 weeks of the planting season as extra thaw space can not be created until cooler rooms are emptied.*
- c. *Include specifics on all orders – request key, seedlot, # of trees required. A best practice is to order by numbers of boxes required, not number of trees.*
- d. *Do not amend orders – Get it right the first time.*
- e. *Mondays and Fridays tend to be heavy days for seedling pick up – try and spread out the seedling pick ups throughout the week.*
- f. *Ensure transport companies arrive on time – if the first truck shows up an hour late, the schedule is off for the whole day and disrupts other carriers that show up on time later in the day.*
- g. *Consider an overnight haul instead of an early pick up in order to make the destination that same day.*
- h. *Give the Cold Storage facility a tentative thaw plan for the season which is finalized when thaw orders are submitted.*
- i. *Consider ordering in a manner where the load contains some frozen stock, some partially frozen stock, and some fully thawed stock to start planting with. The idea is that as you work through the load the stock will be thawed when you are ready to plant it.*
- j. *Let the Cold Storage facility build the bush loads – give general info on the order the stock will be planted in but do not submit detailed maps of how the load should be built. The Cold Storage attendants are proficient in building efficient loads and this cuts down the loading time at the Cold Storage facility, especially when loading multiple trucks on the same day.*
- k. *Information we need our Field Foresters to provide to their planting contractors:*
  - *trees per box and box size for each request key,*
  - *anticipate that some orders will be semi thawed (crunchy) when picked up, these will need additional monitoring in the field to ensure a proper thaw.*

- l. Note: spring trees cannot be held by nurseries, if they can't be planted in the spring they will need to be destroyed. There is more flexibility with summer trees.*
- m. Communicate with Seedling Service staff in your regions for specific questions related to your seedling orders and the nurseries, Cold Storage facilities that you work with.*
- n. When prioritizing stock to be planted, and where practical, consider larger green house grown species first, (Sx, Fdi).*

### **3. Before the pre-work:**

- a. Recognize that the large volume of trees in this years planting program and risks such as fires, Covid-19 etc. elevate the risk to success; planter availability may be reduced due to planter illness (hopefully not) or requirement to self-isolate due to recent international travel or other factors.*
- b. Hold communication via phone and Skype as much as you can; for any in-person communication follow current guidance re: hand washing, physical distancing, sanitizing meeting rooms etc.*
- c. Review contracts for 'force majeure' clauses; discuss the planting companies contingency plans and plans for planter safety re: COVID-19, i.e. are they live to it and what steps are they taking.*
- d. Communicate early with planting companies re: any interruptions in receiving their seedlings; planter availability, setting up planter accommodation – camps & hotels, availability of other possible accommodations; their plans for keeping workers safe re: COVID-19; their plans for communicating with communities they will be staying in and travelling in – note: it is the planting companies responsibility for this communication, we are expecting that there will also be communication from Senior FLNRORD to the Union of BC Municipalities to address community concerns. Planting companies may want to: get camps set up early and self-isolate the whole camp prior to planting; not allow planters to leave and return to camps, have a runner bring groceries (i.e. limit the number of people leaving and returning to the site). Reference BC Ministry of Health COVID-19 Interim Communicable Disease Control Guidelines for Industrial Camps: <http://www.bccdc.ca/Health-Info-Site/Documents/COVID-19-guidelines-industrial-camps.pdf> and the WFCOA COVID-19 guidelines for camps, hotels, planting activities: <https://wfca.ca/>  
Check to see if companies with planting camps have a plan in place that ensures they are receiving and implementing updates from the Provincial Health Officer, e.g. notices that restrict the size of gatherings:*

<https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/reports-publications/covid-19-pho-class-order-mass-gatherings.pdf>

- e. Access to blocks: Actively check the condition of access to the blocks, use drones to help with the assessments if available and effective. Where the block is ready but the roads are not, if the planting contractor has all measures in place to keep workers and communities safe - consider plowing to open roads for an early start. If you require additional budget to do this – document a rationale and seek FFT/FCI/PwC approval, The OCF and FESBC are supportive of reasonable requests.
- f. If you plan to use aircraft to assess and access blocks, please follow the guidance provided by BC Wildfire Service.



BC Wildfire Service  
COVID 19\_safety\_bulle

- g. Consider prioritizing blocks to limit planter travel time, e.g. planting a large block closer to town would be a priority over a group of smaller dispersed blocks further from town.
  - h. Check-in between District/Regional FLNRORD staff to arrange coordination / prioritize critical blocks. Identify areas where there is flexibility in order to shift capacity to higher priority areas where there are biological / stock concerns.
  - i. Planting costs could potentially increase due to social distancing and limiting group size thus requiring less people per vehicle, more camps.
    - i. If the planting company requests an increase in price due to impacts of COVID-19, check for flexibility in your contract to accommodate the price increase, if it is a reasonable cost increase (<10%) – document a rationale, and amend the contract. For price increases >10% – document a rationale and seek FFT/FCI/PWC (for recipients) approval prior to amending the contract, OCF and FESBC are supportive of reasonable requests.
    - ii. Follow best practices for documenting any price increases, this is important information and may also come in useful if there is Government funding made available in the future to provide relief of increased costs. Forward any contract amendments for COVID-19 price increases in excess of 10% to the designated FFT/FCI/PWC approvers:  
FFT: Ljiljana Knezevic and John Hopper

*FCI: Mike Madill ( Cariboo and Thompson Okanagan Regions)*

*PwC: Colin Campbell or designated Investment Manager*

- iii. For FESBC funded projects, all COVID19 related additional costs are to be tracked as a separate milestone within the FESIMS project plans. Where it is anticipated that 'net' project plan amount will be more than the approved amount in FESIM's, amendments must be submitted and approved as soon as practicable. District FESIMS managers are to work with their FES Operations Managers and FCI representative and Recipients are to work with PwC Investment Managers to make these amendments.*

- j. Ensure you access the most current version of guiding documents as these documents are evolving to address emerging developments. Eg: Check the WFCA's web-site so you are aware of guidance being provided to planters and planting companies:*

*<https://wfca.ca/2020/03/wfca-rumour-mill-roundupdate-volume-20-issue-3/>*

#### **4. At the pre-work:**

- a. Hold communication via phone and Skype as much as you can; keep contractors informed as to alternative means of communication that may be required during the project.*
- b. Discuss contingency plans and options such as extension, subcontracting, potential for additional planter availability.*
- c. Confirm that the planting company has plans for keeping workers & communities safe re: COVID-19, are they following the WFCA guidelines, ask how implementation of the plan is going.*
- d. Confirm that the planting company has a plan for communicating with communities where they will be staying or accessing services, ask how implementation of the plan is going.*
- e. Ensure the contract administrators (Ministry, PwC) are kept up to date with affects on project due to increased Covid-19 and self-quarantine situations.*
- f. If the planting company requests a price increase – see guidance under section '3 g (i). Before the pre-work' above.*

## 5. During the active planting season:

### a. At the planting site:

- *Check the site as usual maintaining physical distance; deal with the minimum # of people as possible, deal with the supervisor.*
- *if you are unwell stay at home/send someone else, we need to do our part to protect the health of the planters and each other as well as other workers on site.*

### b. At camps:

- *Health checks of camps – check during planters work hours while planters are absent from camp and ask questions around hygiene and physical distancing.*
- *Follow guidance to BC Govt Employees re: if you are unwell stay at home/send someone else, we need to do our part to protect the health of the planters and each other.*

### c. Managing the planting contract:

- *If the planting company requests a price increase – see guidance under section ‘3 g,(i)2. Before the pre-work’ above.*
- *Prioritizing blocks to be planted if planter capacity is reduced:*
  - *Key principles: know your site condition and hazards (i.e. moisture, RH levels, brush/grass hazard) we don’t want to plant trees off-site; do our best to not have to destroy trees; we want trees to survive;*
  - *Where you have a contract that includes (FFT, FCI- FESBC) funded blocks:*
    - *if you have blocks in close proximity to each other that continue to plant them as you normally would, i.e. plant all of those blocks before moving to the next geographic area;*
    - *if time becomes a limiting factor, prioritize planting areas with the highest probability of success and the highest site productivity.*
    - *communicate with FFT and FCI staff before moving trees from blocks where they were originally planned to be planted.*
- *Consider delaying other activities associated with planting when time is a factor. – The priority is to get the trees in the ground, over activities like putting protective cones on seedlings or fertilization at time of planting so that planter efforts can be focused on getting trees planted .*

- **Planting density:**
  - *Key principle: we don't want to destroy trees.*
  - *If planter capacity is reduced, consider increasing planting density if it is appropriate for your site, particularly in situations where lower survival is anticipated.*
- **Extending the planting season:**
  - ***For spring trees: planting deadline is June 21, know your site – conditions may allow going past June 21 by 2 weeks maximum.***
  - *For summer trees: delaying planting can be problematic at the nursery as they are set up for early July planting. Nurseries would need to hold them in a dormant state, and risk having reflush, susceptible breakage, and other issues. You may be able to delay your summer trees for planting the following spring if there are no other options, consult your local Seeding Services contacts.*
- **Dealing with trees that can't be planted:**
  - *At the cold storage facility/nursery: trees that cannot be planted will be destroyed by the cold storage facility/nursery;*
  - *In the field: encourage planters to not order more seedlings than they can handle in case they can't be planted, in order to minimize the number of trees that need to be destroyed. If trees need to be destroyed in the field – require that planting companies appropriately manage the plastic wrap around tree bundles and planting boxes. If planting operations are cancelled with seedlings still stored in the field encourage the dumping of seedlings in the block rather than leaving them on roads and landings.*

## **Questions and Answers**

- 1. Why can't the cold storage facility hang on to spring trees until next season, or out plant so we can plant them next season?** *Answer: Seedlings have a certain amount of food reserves that are depleted during cold storage. Holding trees in storage will deplete these reserves and essentially kill the tree. With regard to out planting of trees, this is not part of current nursery practice, nurseries may not have the space to out plant trees and where they could out plant they may have to hire additional staff thus increasing costs, and risking seedling survival.*

**2. Why can't the nurseries hang on to summer trees so that we can plant them next planting season?** Answer: with the large seedling order for the 2020 -2022 planting seasons, nurseries do not have the capacity to hold onto the 2020 trees, nor is there room to store them. – they will need to make space for 2021/2022 trees.

**3. Can trees be out-planted in bare root beds and planted this fall? Planted the following spring?** Answer: On a large scale, the answer is no. Bare root beds either don't exist any more, have been abandoned, or converted to greenhouse/open compound ground. As well, nurseries no longer have the tools, expertise, or manpower to ramp up to a large scale to accommodate this. Cost would be prohibitive.

- Planting in the fall; fall is the riskiest season to plant trees, as it is weather dependent, and can easily be shut down if conditions aren't right. This would mean seedlings would need to be overwintered for the following spring. Removing seedlings from bare root beds in the fall would be difficult, as seedlings have many new, fragile roots. Harvesting seedlings in the fall would result in significant root damage, and tree mortality.
- Holding a significant amount of seedlings over in bare root beds for spring plant is also not recommended. Next years planting program is already 300 million seedlings. Cold Storage is maxed out and would require new facilities to be built. Planting capacity will already be maxed out next year, and any additional trees will create issues. As well, 2+0 seedlings are grown differently than 'holding over' seedlings. Current spring seedlings are already at spec, and planting in beds for next year would increase the size of these seedlings substantially, and would require larger boxes, more storage, increased planting costs, and may no longer be suitable for intended sites. Also, nurseries will be stretched as is with 300 million trees to lift next year. Adding this complexity could create complications at lift, and increased risk to stock.
- Cold Storage compressors are designed to keep stock frozen during the winter months and into the spring, not during the hot summer months. The hotter weather makes the compressors work overtime and they could fail when worked too hard.

**4. Why can't we extend the spring planting season past June 21?**

Answer: Spring planted seedlings must undergo a complete phonological cycle after planting which includes root egress, breaking bud, shoot elongation, bud set and stem lignification before late summer frosts. Delaying spring planting past June 21st potentially increases the risk of



*plantation failure. While many factors can be variable on a site (i.e. soil moisture) The longer that spring trees are planted after June 21 – their chance of thriving and surviving is diminished.*

**5. Why can't we shift a portion of our planting program to the fall?**

*Answer: Spring trees are stored in cold storage and dormant prior to thawing and planting. Seedlings respond to the environment as if they were coming out of winter and establish shoot and root growth during the growing period (see 4.). Fall hotlift trees are active and grow in response to being planted in the fall conditions (establish roots, no shoot growth).*

**6. If I order too many trees to be thawed, can any extras be refrozen until I need them?** *Answer: No. Once trees are thawed they are awake, and respiring, and putting them back in the freezer will essential kill them. When ordering trees, ensure only those that are needed are ordered, not only for tree health, but also because cold storages cannot hold thawed trees for extended periods, as there is a que of other orders that need to be thawed and space to hold orders is at a premium.*

**7. What other options are available to plant spring trees?** *Answer: At this point we are reviewing what options, if any, may be available.*

**If you have questions or concerns, please connect with your supervisor. We are also available to answer your questions, see below for specific contacts.**

**Contributors to this BMP document:**

*Kerri Brownie, Stewardship Officer, BCTS HQ*

*Mark Hay, Manager, BCTS Seedling Services*

*Sherrie Carter, Manager, BCTS Procurement Excellence*

**Contacts for this BMP document:**

*John Hopper, Silviculture Extension Specialist RPB*

*Ljiljana Knezevic, Forest Establishment Officer RPB*

*Mike Madill Forest Carbon Technical Advisor CCIPB*

*Colin Campbell PWC*

*Dave Conly, Operations Manager FESBC*