

Information Bulletin

Cone Collection and Climate Based Seed Transfer – May 2018

Amendments to the *Chief Foresters Standards for Seed Use (the ‘Standards’)* were announced on April 5, 2018 and will come into effect on August 6, 2018. Amendments to the Standards introduce new collection, registration and seed transfer standards that mitigate the impacts of climate change and support resilient, climate adapted stands. Refer to the [CBST Information Bulletin - April 2018](#) for more information. ***The changes outlined below align cone collection with the new climate based seed transfer (CBST) standards. Refer to the [Standards](#) for a full description of legal requirements.***

Collection criteria for lots collected from natural stands within British Columbia

Section of Standards	Previous Standards	Change	Amended Standards (in effect August 6, 2018)
5.2.1.1 (a)	a) Material must be collected from a minimum of 10 trees of the same species	a) No Change	a) Material must be collected from a minimum of 10 trees of the same species
5.2.1.1 (b)	b) The trees must all be located within i. The same natural stand seed planning zone, ii. The same biogeoclimatic zone, and iii. A collection area with a radius of no greater than 8 kilometers.	b) i. Deleted ii. Changed iii. No change	b) The trees must all be located within i. <u>A single BEC unit¹ (zone, subzone, variant)*</u> and ii. A collection area with a radius of no greater than 8 kilometers.
5.2.1.1 (c)	c) The range between the lowest and highest elevation of the collection area must be no greater than the range specified in an appendix to the Standards, for that species and natural stand seed planning zone.	c) Deleted	

* An override may be applied in cases where a BEC unit (based on field observation by a person knowledgeable in BEC classification) differs from the published BEC map. Information supporting this override must be recorded in the Override Comments field on SPAR.

Collection area information required to register lots collected from natural stands within British Columbia, including superior provenances

Section of Standards	Amended Standards* (in effect August 6, 2018)
Appendix 1	<ol style="list-style-type: none"> Provenance name of collection area or closest geographic feature identified on a map (e.g., Birch Island) Radius of collection area in kilometres Mean latitude of collection area in degrees, minutes and seconds Mean longitude of collection area in degrees, minutes and seconds <u>Collection area map in digital spatial format</u> (<i>using the Seedlot Collection Area Tool in SPAR CWM SeedMap; or by uploading a shape file</i>) Mean, lowest and highest elevation of collection area in metres BEC unit¹ (Biogeoclimatic zone, <u>subzone, variant</u>) in which collection area is located Natural stand seed planning zone in which collection area is located If the answer to #8 is the Maritime (M) natural stand Seed Planning Zone, is collection area <u>on Haida Gwaii</u>, Vancouver Island or the BC Mainland?

* Text 'underlined' and marked in '**bold**' indicates an amendment to the Standards.

¹ BEC Unit is within one zone, subzone and variant, where applicable; or, within one subzone, where a variant is not applicable.

Identification of natural stand seed sources

To maintain the identity of the Province’s forest tree gene resources in a changing climate, seed collected from natural stands requires identification of the “climate space” (represented by a single BEC unit²) of the seed source. Together with geographic coordinates, this will enable the tracking of each seed (seedlot) source’s ‘climatic origin’ as the climate space of its geographic origin changes over time. This information is critical to the monitoring and evaluation of CBST and will be used to adapt policy and inform the development of future seed transfer standards.

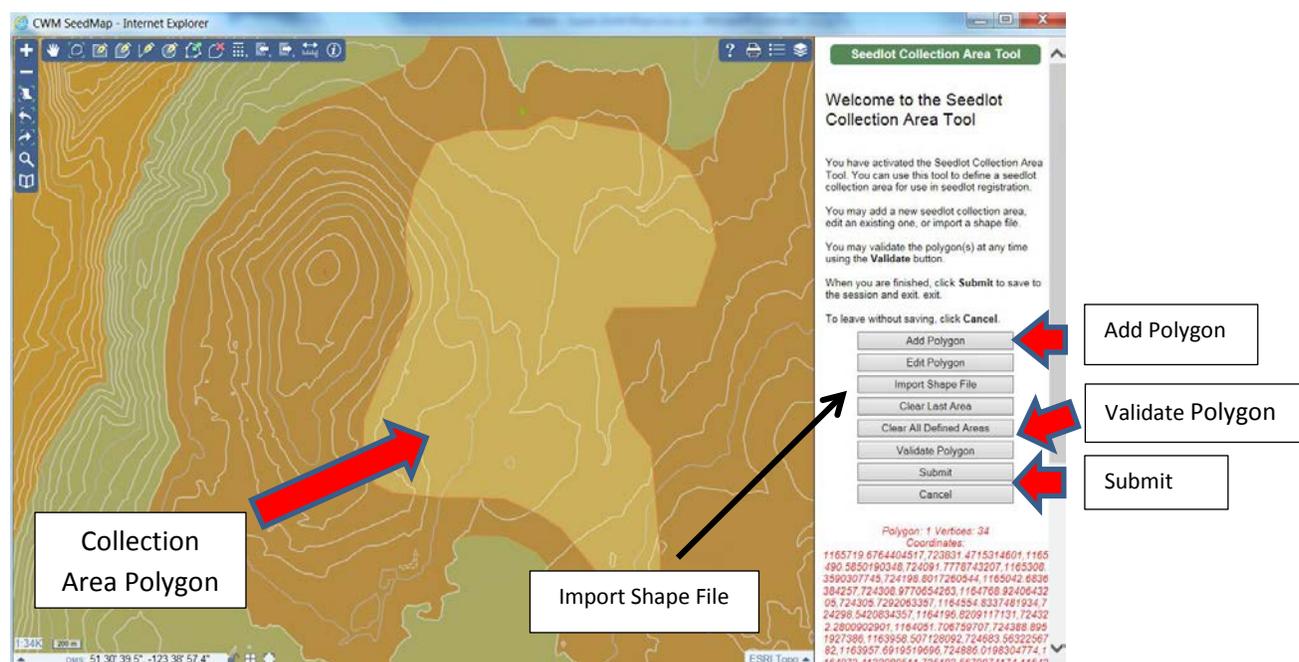
A natural stand Seed Planning Zone will continue to be required for information purposes (Appendix 1 of the Standards) to maintain maximum flexibility in deploying seed in the transition period³ (to full implementation to CBST transfer system). This information will no longer be required after the option to use geographically based seed transfer (GBST) standards has been removed (at completion of transition).

Mapping collection areas using the Seedlot Collection Area Tool in SPAR

The **Seedlot Collection Area Tool** can be accessed from the Seed Planning and Registry (SPAR) Seedlot or Vegetative Lot Registration screen by clicking on the **Collection Area Capture** tab.

The Collection Area Capture tab opens **SPAR CWM SeedMap** with the geographic location displayed based on the latitude and longitude coordinates entered on the lot registration screen.

Click on “Add Polygon”, draw polygon on map, click on “Validate Polygon,” and then click “Submit”. In the example below the lighter brown area is the collection polygon drawn on the map. **Alternatively**, you can import your own shape file by following the prompts at “Import Shape File”, and “Submit”.



² BEC Unit is within one zone, subzone and variant, where applicable; or, within one subzone, where a variant is not applicable.

³ Currently, a minimum of 2 years is anticipated for full implementation to transition from use of geographically-based seed transfer.

Implications of new Collection Standards on Seed Transfer options

The intention of the April 5, 2018 amendment to the collection Standards is that all new collections of seed will be for use **with the CBST transfer standards**. This is primarily to reduce the likelihood of increasing seed inventories that may not be plantable after the transition period.⁴

Under CBST transfer standards, the collection area must be within a **single BEC unit**⁵ and within 8 km of a central collection point; and, may comprise one or more seed planning zones. However, If you wish to maintain the option to use geographically based seed transfer (GBST) standards during the transition period, you will need to collect seed **from a single BEC unit**⁵ **and the same natural stand seed planning zone**. In addition, if intending to use the GBST option, the mean elevation of the collection area is also required to apply transfer limits (upward/downward elevation). Note. During transition you will be required to enter the seed planning zone in which the majority of the collection is located as SPAR is limited to only one field for the collection area seed planning zone.

When Planning a Cone Collection

SPAR currently provides the ability to view a **CBST Area of Use** for (i.e. a list of suitable BEC variants) for a given seed or vegetative lot on the **Seedlot CBST** screen (also accessible through the Suitable Seed/Vegetative Lot for CBST screen). However, if you are in the planning stages of a cone collection, and intend to collect seed for use under CBST, it is recommended that you use the **CBST Tool** (Version 2.0) in “I have a Cutblock” mode to view a complete list of **suitable Seed BECs** for a given species and Plantation BEC (i.e. list of all Seed BECs regardless of whether registered seedlots are available, or not). Alternatively, you can view this full list of suitable Seed BECs in the **CBST Area of Use – April 2018** document posted on the CBST web page.

Registration of seedlots before and on, or after, August 6, 2018

Unless you choose to waive the notice period for the new Standards, seed collected with a lot registration form received and approved on SPAR prior to August 6, 2018 will be processed under the current standards. This includes cones/seed stored offsite (interim storage) where a lot registration form has been received and approved prior to August 6, 2018. Lot registration forms received and approved on SPAR on, or after, August 6, 2018 will be processed under the new standards.

For more information:

Visit the Climate Based Seed Transfer (CBST) website at: www.gov.bc.ca/climatebasedseedtransfer

And, the Chief Forester’s Standards for Seed Use web site at:

<https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/tree-seed/legislation-standards/chief-forester-s-standards-for-seed-use>

Or, contact,

Margot Spence, Tree Seed Policy Officer, Margot.Spence@gov.bc.ca

Susan Zedel, Seed Resource Specialist, Susan.Zedel@gov.bc.ca

Spencer Reitenbach, Tree Seed Centre, Spencer.Reitenbach@gov.bc.ca

Forest Improvement and Research Management Branch, FLNRORD

⁴ Currently, a minimum of 2 years is anticipated for full implementation to transition from use of geographically-based seed transfer.

⁵ BEC Unit is within one zone, subzone and variant, where applicable; or, within one subzone, where a variant is not applicable.