

Great Bear Rainforest Order

TEM/PEM Site Series Group Spatial Database and Representation Table

2017 Implementation Layer

The TEM/PEM Site Series Group (SSG) spatial database **TP14c_2017** supports legal biodiversity objectives in Part 1 of the 2016 Great Bear Rainforest Order. It is used to track and maintain old forest representation in each site series group (SSG) in the GBR, by landscape unit and by the GBR plan area. It includes a combination of TEM data current to 2013/14 and PEM data where TEM was not available as of 2014. This layer will be updated annually for harvest depletions using RESULTS, and at the next 5 year review to incorporate new TEM data.

2017 TEM/PEM SSG Implementation Layer Notes:

TEM/PEM SSG source layer

The 2017 TEM/PEM SSG implementation layer is based on the Joint Solutions Project's 2013/14 **TPv4a2** resultant layer. This is the layer from which SSG targets in the GBR Order were developed, and targets are tied to the data. Available TEM data for 2014/15 and 2015/16 has not been incorporated into the implementation layer but will be distributed separately for use as a values layer in landscape reserve design (LRD) planning.

In addition to TEM SSG information, the TPv4a2 resultant included a number of other data sources including forest stand age and seral class, forest management land base, timber harvesting land base, parks and protected areas, and hard reserves for wildlife including grizzly bear class 1 polygons, wildlife habitat areas (WHA) and ungulate winter range (UWR). Several of these layers have been updated since 2013/14 and were recently incorporated into the TP14c layer.

Updates and Enhancements to the 2013/14 layer

RESULTS harvest depletions to 2017

- Stand age and seral class were updated for depletions to 2017 using RESULTS data from January 2017. Depletion update accuracy was visually confirmed with Landsat satellite imagery, where available.
- The 2017 RESULTS update was built using the RESULTS spatial tables WHSE_FOREST_VEGETATION.RSLT_OPENING_SVW and WHSE_FOREST_VEGETATION.RSLT_FOREST_COVER_RESERVE
- In-block reserves and reserves adjacent to cutblocks that were identified in the RESULTS database have been retained as standing timber in the SSS database and count toward old forest representation if they are old.
- Forest stand ages and seral classes were projected (aged) to 2017.
- Landsat verification identified a small number of cutblocks harvested during 2014/15 that were not present in RESULTS. These areas are not expected to have a significant

impact on summary numbers due to their infrequency of occurrence. Another RESULTS updated is planned for fall 2017 to capture all 2016 harvest updates that will be submitted to RESULTS by June 2017.

THLB and TEM gaps filled

- A small TSR3 THLB gap in the Strathcona TSA (Thurlow LU) was filled with TSR4 THLB
- A small TEM gap in the Gray LU was filled

Updated GBR Exclusions layer

- The exclusions layer was updated and refined using newer and more reliable data
- Local knowledge was applied to correct a few remaining discrepancies
- Exclusion adjustments were made for timber licence eliminations within CFAs resulting in additional SSG forest area added to the South Bentinck, Smitley/Noeick and Taleomey/Asseek landscape units

New SFMAs incorporated

- The Park_PPA field (parks and protected areas) and aggregate HrdRes field now reflect the new SFMAs

Other hard reserves updated

- The Grizz, WHA and UWR fields were updated to reflect current Class I grizzly bear habitat, WHAs and UWRs
- The aggregate HrdRes field was updated accordingly

Special Notes:

The TEM/PEM SSG layer will be updated annually for age and seral stage (based on RESULTS data) and periodically for administrative or tenure boundary changes (e.g. active timber licenses). No changes will be made to the BEC Unit and Dominant SSG fields until the next periodic review .

Spatial Data

The 2017 TEM/PEM SSG geodatabase is an ArcGIS version 10.2 file geodatabase named **TP14c_2017.gdb**. "TP" indicates TEM/PEM, "14" indicates the latest year of TEM in the layer (2013 TEM project data delivered in 2014), "c" represents the third version of the full 2013/14 TEM resultant, and "2017" represents the year of age updates. The GDB contains the following feature classes and tables:

Name	Type	Description
TP14c_2017	Feature Class	2017 SSG database (version 14c)
GBRSchA_GBR_20160104	Feature Class	Schedule A GBR Order boundary
GBRSchA_LU_20160104	Feature Class	Schedule A GBR landscape units
GBRSchB_CNC_20160104	Feature Class	Schedule B Central and North Coast area boundary
GBRSchC_CNC_20161105	Feature Class	Schedule C South Central Coast area boundary
EXCLUSIONS_GBRf	Feature Class	2017 GBR Exclusions layer
LU_GBR	Table	List of landscape units in GBR
LU_Old_Targets_Impl_Guidance	Table	Table version of Non-legal landscape unit SSG targets for implementation guidance
SchF_SSG_MOFRL_LT20pct	Table	Table version of Schedule F landscape unit SSG MOFRLs less than 20%
SchG_Old_For_Targets	Table	Table version of Schedule G GBR Order area OFRTs and MOFRLs
SSG Lookup	Table	Lookup table connecting site series to site series groups
TP14cGbrRepTable	Table	Table version of the GBR SSG representation table
TP14cLuRepTable	Table	Table version of the landscape unit SSG representation table (includes key field for linking to TP14c_2017)

Data fields for feature class **TP14c_2017**:

Field Name	Type	Description
OBJECTID	Object ID	System-generated identifier
Shape	Geometry	Polygon (Ignore)
BAPID	Long Integer	TEM Project Identifier
PROJECT	Text	TEM Project name
LU_BECUNIT2_DOM_SSG	Text	Concatenation of Landscape Unit Name, BEC_UNIT2 and DOM_SSG (for linking layler to MS Access version of the SSS representation table)
BGC_ZONE	Text	Biogeoclimatic zone
BGC_SUBZON	Text	Biogeoclimatic subzone
BGC_VRT	Long Integer	Biogeoclimatic variant
BEC_UNIT	Text	BGC zone/subzone/variant combination
BEC_UNIT2	Text	Adjusted BEC_UNIT values for GBR EBM purposes
DOM_SSG	Text	Dominant site series group
SDEC_1/2/3	Short Integer	TEM Site series decile 1 or 2 or 3
SITE_S1/2/3	Text	TEM Site series 1 or 2 or 3
SITEMC_S1/2/3	Text	TEM Site series map code 1 or 2 or 3
WTLD_U1/2/3	Text	TEM Wetland 1 or 2 or 3
SITE_ASSOC_S1/2/3	Text	TEM Site association 1 or 2 or 3
STRCT_S1/2/3	Text	TEM Structural Stage 1 or 2 or 3
STRCT_M1/2/3	Text	TEM Structural Stage substage or modifier 1 or 2 or 3
SITE_SSG1/2/3	Text	Derived GBR Site series group 1 or 2 or 3
ECO	Text	
AGR_ECO	Text	
Bracket_SS	Text	
LU_PROVID	Text	Landscape Unit number (ignore)
LU_NAME	Text	Landscape Unit Name
TRIM_WATER	Text	Indicates TRIM water features
FMLB_IND	Text	Forest Management Land Base indicator (productive forest)

Field Name	Type	Description
PROJ_DATE	Short Integer	Year to which Projected Ages are projected
PROJ_AGE	Short Integer	Projected age at Projected Date year
SERIAL_CLASS	Text	Seral class corresponding to projected age
CONTCLAS	Text	THLB contribution class (C or P), adjusted for current protected areas and hard reserves
INCLFACT	Double	THLB Inclusion factor,), adjusted for current protected areas and hard reserves
CONTCLAS_PRE2017	Text	Original THLB contribution class (C or P) from TPv4a2
INCLFACT_PRE2017	Double	Original THLB Inclusion factor from TPv4a2
MgtUnit	Text	Management Unit (TFL or TSA) to which THLB CONTCLAS and INCLFACT apply
TSR	Text	TSR version to which THLB CONTCLAS and INCLFACT apply
Park_PPA	Text	Park and protected area indicator
UWR	Text	UWR indicator
WHA	Text	WHA indicator
Grizz	Text	Schedule D Class 1 grizzly bear habitat indicator
HrdRes	Text	Hard reserve indicator (any of the four categories above)
GBR_EXCL	Text	Exclusions from the GBR Order (private, IR, WLs, CFAs)
Shape_Length	Double	Polygon perimeter (m)
Shape_area	Double	Polygon area (m ²)

Additional metadata:

Distribution date:	May 26, 2017
Distribution source:	MFLNRO, West Coast Region (Nanaimo)
Version number:	TP14c_2017
Created by:	The TEM/PEM SSG resultant is a compilation of TEM/PEM inventories, age data from TFLs and provincial VRI, and other administrative layers. The original compilation was assembled by Joint Solutions Project and updated in 2017 by MFLNRO, West Coast Region
Created for:	GBR EBM practitioners for tracking seral stage representation in site series groups and for landscape reserve design support.
Disclaimer:	<p>The TEM/PEM site series group database is a compilation of inventory datasets from several sources, some of which have been generalized. The various source datasets may have been built in different formats and to different standards. The 'normalization' process necessary to join multiple datasets may not maintain the full integrity of the source datasets. The SSG database is suitable for tracking seral stage representation at strategic levels. Other uses, particularly stand level analysis, are not recommended.</p> <p>The Ministry of Forests, Lands and Natural Resource Operations does not guarantee the accuracy, quality, or completeness of the source datasets.</p>

2017 SSG Representation Table:

The SSG representation table spreadsheets for the GBR plan area and landscape units, reflecting TP14c site series groups and ages projected to 2017, are found in [SSGRepTable_14c_20170526.xlsx](#). The table is filtered to facilitate viewing of smaller sets of records.

Last revision to this document: May 26, 2017

Contact: John Sunde

Ministry of Forests, Lands and Natural Resource Operations, West Coast Region
(Nanaimo)
(250) 751-7111
john.sunde@gov.bc.ca