

Discussion TopicsFont Colours: [Links](#)

DOIT Geospatial Staff Comments

Recent [updates/changes](#)**1. First Nations – BC Consultative Areas Database**

- <http://maps.gov.bc.ca/ess/hm/cadb/>
- Please read the instructions provided via this map service

2. FTA Submission Issues

- clarifying any persistent issues that come up with submissions that cause rejections and delays on Ministry's end that could be fixed on licensees' end
 - line directionality - clockwise
 - Finger dyslexia – double check your input!
 - cleanup GPS captured data – eg. Self-intersecting loops
 - block labels MUST be EXACTLY same in FTA as RESULTS

3. FTA Road Permits

- how to properly and efficiently complete...
- an existing road permit retirement(deletion) – authorized individual sends MFLNRO (Tammy Steen, cc Josh Doerksen) email with road details for deletion (mapview road number) – full section only
- partial road permit deletion and road permit amendment – licensee resubmits correct road
- road permit extension – amend existing road to include extension
 - MUST keep same name
- manual - <https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/timber-tenures/road-permit/cprt-admin-manual.pdf>
- line directionality - POC to POT

4. RESULTS

- use reserve objective codes effectively in RESULTS submissions, especially important when a WTP is created to protect cultural heritage resources (CHR)
- enter data correctly - **PLEASE DOUBLE CHECK YOUR DATA ENTRY !!**
- Your block label data must match exactly what was submitted via FTA
- Changes CANNOT be made to FTA labels to accommodate incorrect data submitted.
- When entering data into RESULTS, allow one submission to finish processing before entering the next, otherwise the system may link them together. NO MULTIPLE WINDOW SUBMITTING!!

FTA/RESULTS Help email - FORHISP.APPHELP@gov.bc.ca

5. Area Calculations - standardize whether we should use spherical or cartesian area calculations?**6. Data Errors** - how to properly deal with old / inaccurate spatial information (often discovered using ortho/aerial photo underlays, or when new gps data is adjacent to the old info)

- Contact Josh Doerksen to initiate Victoria data fix

7. GPS standards

- what is a "non-critical feature" and what type of GPS units are capable of being used for collecting specific types of data
- Use a handheld unit that is of sufficient quality and USE IT CORRECTLY
- this is a licensee decision
- WAAS preferred, >=3 satellites above the horizon, <5m accuracy (slow down!), never put in pocket

8. Watershed boundaries to use for ECA calculationsBC Data Catalogue (https://catalogue.data.gov.bc.ca/dataset?download_audience=Public)

- "Freshwater Atlas Assessment Watersheds" – (20k) discrete polygons - **preferred**
- "Freshwater Atlas Named Watersheds" - (20k) larger watersheds, should be more accurate vs.

- “WSA - Third-order and Greater Watersheds (1:50K)” (WDIC) - a few more watersheds, should be less accurate but seems more reflective of watershed boundaries
- “TRIM Water Atlas” – very detailed watersheds, should be most accurate but doesn’t appear to be
- FYI: The new TRIM derived Freshwater Atlas 20k was created after 2007 (previously known as the Corporate Watershed Base) and is meant to replace the 50k Watershed Atlas (WSA – WDIC) data

9. Elevation - determining elevations for site plans/maps – everyone using TRIM contour

10. Recreation trails and polygons

- Issues around legally designated vs. “known” vs. existing but not recognized
- **Contact the Recreation Officer at the Cascades NR District whenever you encounter a trail**

11. Stream Classification

- mapped stream classifications “Best Known” data updated November 2018
 - ftp://ftp.for.gov.bc.ca/DCS/external/!publish/FSP_Local_Data/FSP_Local_Data/RIP_StrCls_Nov2018_DCS.zip & [RIP_StrCls_Nov2018_UpdateProject.pdf](#)
- original data auto generated from TRIM data applying Forest Practices Code guidelines to TRIM FCODEs (stream size only) - no fish presence (or not) implied
 - ftp://ftp.for.gov.bc.ca/DCS/external/!publish/FSP_Local_Data/ -
- Habitat wizard - <http://www.env.gov.bc.ca/habwiz/> - Habitat Wizard is a map-based tool created for government, industry, environmental professionals and interested users to spatially access detailed fish and fish habitat information over the internet.

12. Section 7 & GAR

- measuring extent WHAs cover the requirements of the notice for FSP purposes (# hectares)
- links in Information Package below...
- Grizzly Bear WHA’s in TME +700ha short of Section 7 requirements – Aspen/Tolko have a suitable habitat polygon in the Coldwater area to cover this off – contact Aline @ Aspen
- ftp://ftp.for.gov.bc.ca/DCS/external/!publish/FSP_Local_Data/Licensee_Data/

13. OGMA

- The Cascades NRD has a Non-legal Spatial Order for OGMA’s
- A process for the update and maintenance of a local OGMA dataset for the Cascades NRD has been agreed to by the DOIT committee – see **TME_DOIT_Geospatial_Staff_Information_Sept2012.docx** for details (found at the ftp site in the second bullet below). Please do this for both Lillooet and Merritt TSA’s...
- By **October 15 of every year**, Licensees, BCTS and/or FLNRO will provide data to the Cascades NR District for ONLY the relevant added or deleted areas, along with the appropriate attribute data to: ftp://ftp.for.gov.bc.ca/DCS/external/incoming/OGMA_updates_4_Gail/
- Published by **January 2 of every year**, updates are consolidated by Cascades NRD Geomatics staff and update to the BCGW
 - <https://catalogue.data.gov.bc.ca/dataset/old-growth-management-areas-non-legal-current>

14. Species at Risk, Red-listed

- the spatial information available regarding species at risk and red-listed ecosystems (masked, non-sensitive BCGW layers plus Conservation Data Centre and other databases)
- <https://catalogue.data.gov.bc.ca/dataset/species-and-ecosystems-at-risk-publicly-available-occurrences-cdc>
- <https://catalogue.data.gov.bc.ca/dataset/species-and-ecosystems-at-risk-masked-secured-publicly-available-occurrences-cdc>
- CDC map service: <http://maps.gov.bc.ca/ess/hm/cdc/>

15. Grids

- creating proper survey/cruising grids (true north/ magnetic north issues)?
- Cruising - Long/Lat, 100m (or other) grid at true north, southwest corner start
- Silviculture – UTM, 100m grid for entire operating area, create points for all intersections

16. High Hazard Invasive Plant Zones

- mapping High Hazard Invasive Plant Zones (FSP) - 7 species

- <https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/invasive-species/iapp>
- <https://catalogue.data.gov.bc.ca/dataset/invasive-alien-plant-site> – data needs to be buffered by 500m to create high hazard zone

17. WMS layers

- using WMS layers in MapInfo/ Arc/ Google – issues?
- <https://www2.gov.bc.ca/gov/content/data/geographic-data-services/web-based-mapping/map-services>

18. Mapview

- <https://www2.gov.bc.ca/gov/content/data/geographic-data-services/web-based-mapping/imapbc>
-

Information Package

- FSP Website: <https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources>
- DataBC Data Distribution Service: https://catalogue.data.gov.bc.ca/dataset?download_audience=Public
- DCS FTP site: ftp://ftp.for.gov.bc.ca/DCS/external/!publish/FSP_Local_Data/

Lake Management Zone (LMZs)

- Cascades NRD local data ftp://ftp.for.gov.bc.ca/DCS/external/!publish/FSP_Local_Data/

Visual Landscape Inventory (VLI)

- **Established Visual Quality Objectives (EVQO)** – these are the legally established objectives for the Cascades District
- Visual Landscape Inventory (VLI): <https://catalogue.data.gov.bc.ca/dataset/visual-landscape-inventory>
 - o Definition query: `REC_MADE_KNOWN_CODE = 'Y'`
 - o For EVQO use field: `REC_EVQO_CODE` (or `EVQO_CD`)
 - o in the Lillooet TSA, manage to the EVQO - and for all polygons with a VSC class and **no** EVQO, manage to the VSC class
 - use field = `REC_VSC_FINAL_VALUE_CODE`
- Visual Features (TME only) - old data - ftp://ftp.for.gov.bc.ca/DCS/external/!publish/FSP_Local_Data/

Frequency of BCGW Updates – (theoretically!)

- RESULTS - nightly – keep in mind that not all proponents update RESULTS regularly
- VRI layers - Yearly around February, content will always be 1-2 years out of date (ie. the 2014 update is current to 2013/2012)
- Best practice would be to do a regular update of all datasets utilized from the BCGW

PSYU - determining PSYU for cruising

- **FADM - Public Sustained Yield Units:** <https://catalogue.data.gov.bc.ca/dataset/fadm-public-sustained-yield-units>
- PSYU_Special_Cruise_codes_1998.xls added to ftp://ftp.for.gov.bc.ca/DCS/external/!publish/FSP_Local_Data/

Permanent Sample Plots

- <https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/forest-inventory/ground-sample-inventories>
 - Inventory Sample Plots
 - Experimental Plots

Vegetation Resource Inventory (VRI, Forest Cover)

- Layer to download and use for operational purposes
- **VRI - Forest Vegetation Composite Polygons and Rank 1 Layer:** <https://catalogue.data.gov.bc.ca/dataset/vri-forest-vegetation-composite-polygons-and-rank-1-layer>
 - FYI: Dead and Live Volumes are highly suspect, add them back together to get Total Stand Volume
 - Crown Closure is NOT 'aged' electronically as part of the VDPY process

- **Stocking Class** is determined based on the leading commercial species and/or the size (diameter) and number of stems per hectare. – no longer included in the VRI, must recreate

Permitted Values:

Blank = default

0 – Immature stands

R – Immature/Mature Stands:

Disturbed 26 to 75% area or volume

1 – Mature Stands

Not disturbed 26 to 75% by area or volume, 76 or more trees per hectare, 27.5 cm + dbh

2 – Mature Stands

a. Leading species NOT lodgepole pine: fewer than 76 trees per hectare, 27.5 cm + dbh

b. Leading species lodgepole pine: no info. on number of stems, 7.5 cm + dbh

3 – Mature Stands

Leading species lodgepole pine

311 or more stems per hectare 17.5 cm + dbh

50% or more of the stems 7.5 cm + dbh are equal to or greater than 12.5 cm dbh

4 – Mature Stands

Leading species lodgepole pine

0 - 311 stems per hectare 17.5 cm + dbh

Fewer than 50% or more of the stems 7.5 cm + dbh are equal to or greater than 12.5 cm dbh

Accounts and Measures for Managing Identified Wildlife

- <http://www.env.gov.bc.ca/wld/frpa/iwms/accounts.html>

Section 7, GAR, etc...

- Section 7 - <http://www.env.gov.bc.ca/wld/frpa/notices/uwr.html>
- UWR - http://www.env.gov.bc.ca/wld/frpa/uwr/approved_uwr.html

Wildlife Habitat Areas

- Approved WHA - <https://catalogue.data.gov.bc.ca/dataset/wildlife-habitat-areas-approved>
- Proposed WHA - <https://catalogue.data.gov.bc.ca/dataset/wildlife-habitat-areas-proposed>
 - should be up to date, but probably isn't

Land Status Data

Is known to be questionable, both positionally and status wise (private or not) - always error on the side of caution!

- ❖ Option – contact Regional Districts (sign confidentiality agreement) to obtain their data
- ❖ Private Land – may be positionally questionable – **when in doubt, find the pins on the ground!**
 - Data Catalogue: https://catalogue.data.gov.bc.ca/dataset?download_audience=Public
 - TANTALIS - Crown Land Rights-of-way
 - TANTALIS - Surveyed Right-of-way Parcels
 - ParcelMap BC Parcel Fabric: <https://catalogue.data.gov.bc.ca/dataset/parcelmap-bc-parcel-fabric>
- ❖ Indian Reserves – may be positionally questionable
 - Data Catalogue: https://catalogue.data.gov.bc.ca/dataset?download_audience=Public
 - TANTALIS - Administrative Areas ---- Provincial data, used in FTA
 - CBM - Integrated Cadastral Fabric (Public View) ---- contains IR's, used in FTA
 - Indian Reserves – Administrative Boundaries: <https://catalogue.data.gov.bc.ca/dataset/indian-reserves-administrative-boundaries> ---- **FEDERAL data, should contain all IR's but is often spatial questionable**
- ❖ Parks, etc...
 - Data Catalogue: https://catalogue.data.gov.bc.ca/dataset?download_audience=Public
 - TANTALIS - Administrative Areas ---- **Provincial data, used in FTA**
 - TANTALIS - Wildlife Management Areas (*Land Act; Wildlife Act*)
 - TANTALIS - Conservancy Areas (*Parks Act*)
- ❖ National Parks
 - National Parks - National Framework Canada Lands Administrative
 - Data Catalogue: https://catalogue.data.gov.bc.ca/dataset?download_audience=Public
- ❖ Conservation Lands – may be positionally questionable
 - Conservation Lands
 - Data Catalogue: https://catalogue.data.gov.bc.ca/dataset?download_audience=Public

- these areas have been acquired primarily for wildlife conservation and management and the Regional Manager (now Director of Resource Management and/or Wildlife Section Head in each region) must grant consent for a forest-related activity to occur and/or be authorized via another appropriate statute.
 - o 'Wildlife Management Areas' - designated under s. 4 of the Wildlife Act
 - o 'Administered Lands' - acquired by the Conservation Lands program via direct purchase/donation/exchange, long term lease from a private landowner, or former transfer of administration under s.106 of the Land Act
 - o 'Reserve Lands' - comprised of Land Act s. 15, 16, 17 reserves or notations of interest for fish and wildlife purposes

❖ **Other Management Areas**

- **Nlhahten/Cayoosh Cultural Management Area** in Lillooet TSA
 - <ftp://ftp.geobc.gov.bc.ca/publish/Regional/Surrey/LilwatLandUse/maps/>
 - http://archive.ilmb.gov.bc.ca/slrp/lrmp/surrey/s2s/docs/S2SLRMP_G2G_Agreements/S2SG2G_Lilwat_BC_Agreement.pdf
 - **TANTALIS - Crown Land Reserves and Notations**
 - Data Catalogue: https://catalogue.data.gov.bc.ca/dataset?download_audience=Public
 - query for CROWN_LANDS_FILE = '3412156'
- **Nlhahten/Cayoosh Wildlands Area** in Lillooet TSA, in the area west of Duffey Lake Park, the GAR order was signed in 2012
 - <https://www.for.gov.bc.ca/tasb/LEGSREGS/frpa/frparegs/govact/orders/cascades.htm>
 - **TANTALIS - Crown Land Reserves and Notations**
 - Data Catalogue: https://catalogue.data.gov.bc.ca/dataset?download_audience=Public
 - query for CROWN_LANDS_FILE = '3412430'
- **South Chilcotin Mountains Mining and Tourism Areas** (Paradise, Taylor and Slim Creeks) - when the old Spruce Lake Park was 'redone' based on recommendations from the Lillooet LRMP, the final park was reduced in size and renamed to South Chilcotin Mountains Park and three "Mining and Tourism Areas" were created and signed off in 2010.
 - http://www.env.gov.bc.ca/bcparks/planning/mgmtplns/lillooet/background-documents/big-creek_south-chilcotin/south-chilcotin-mountains-map.pdf
 - RMP Legal: <https://catalogue.data.gov.bc.ca/dataset/legal-planning-objectives-current-polygon>
 - Definition Query: STRGC_LAND_RSRCE_PLAN_NAME LIKE '%Lillooet%' AND LEGAL_FEAT_OBJECTIVE = 'Mining and Tourism Area'

Cabinet Approved Study Areas (CASA)

- **Approved Study Areas PAS Merritt TSA:** <https://catalogue.data.gov.bc.ca/dataset/approved-study-areas-pas-merritt-tsa>
- OR a zipped shapefile is in ftp://ftp.for.gov.bc.ca/DCS/external/!publish/FSP_Local_Data/

Background: These two areas came out of the old Protected Areas Study (PAS) and Area of Interest (AOI) processes, and while all the other areas in our district have been dealt with in some manner, these two remained. The only 'official' documentation I can lay my hands on is the Thompson-Okanagan Sub-Regional Managers Committee Decision Note, dated August 31, 2009 (see clip below), that officially deletes all the Areas of Interests in the Merritt TSA **except** for Kentucky-Alleyne and Paradise Lake...

The working forest base in the Merritt TSA is 660,000 hectares. Of that, 5% of the working forest base (31,607 hectares) lie within AOIs. Portions of two of the original AOI areas – Kentucky-Alleyne (1,743 hectares) and Paradise Lake (187 hectares) – were established as Cabinet Approved Study Areas (CASAs) and are not included in this analysis or the final recommendations in this decision note.

What we currently have, is staff **memory of** the process and signed documents, but no physical documentation. Also, there are Notation of Interests and/or Map Reserves covering similar or larger areas as the original AOI's.

- Gail Smith, GIS Analyst, Cascades District

- **TANTALIS - Crown Land Reserves and Notations:** <https://catalogue.data.gov.bc.ca/dataset/tantalus-crown-land-reserves-and-notations>
 - **Kentucky-Alleyne** in Merritt TSA, query for CROWN_LANDS_FILE = '3407222'
 - **Paradise Lake** in Merritt TSA, query for CROWN_LANDS_FILE IN('3405894','3407223')
 - **Reserves and Notations** = "An area of Crown land recorded on provincial reference maps due to a fish and wildlife conservation interest (not a reserve or withdrawal) which does not preclude tenure applications."
- **Arthur Seat Range (MR)** - an old CASA in the Lillooet TSA
 - Recommended as a park via LRMP but **not** approved/finalized
 - <https://catalogue.data.gov.bc.ca/dataset/non-legal-planning-features-current-polygon>
 - Definition Query: NON_LEGAL_FEAT_PROVID = 'KAM_1_1009'
 - Two (2) small pieces exist in "Conservation Lands" as a "Reserve Lands - Map Reserve" which is "An area of Crown land that has been withdrawn from disposition under the Land Act to conserve and manage fish and wildlife habitat."