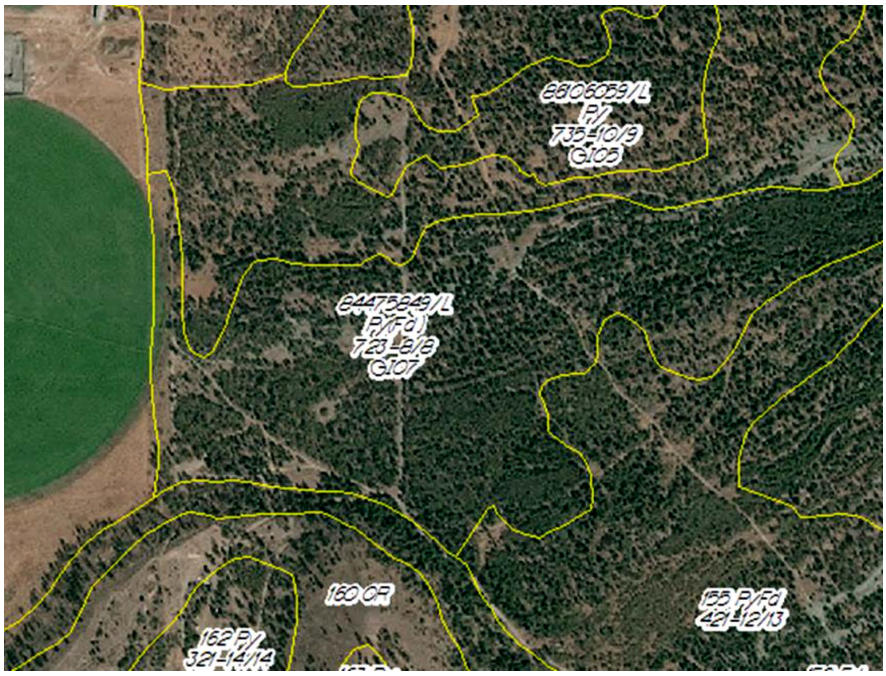
New Vegetation Resources Inventory (VRI)
Photo Interpretation in the Fraser TSA

Overview

Forest Analysis and Inventory Branch (FAIB) is planning to conduct a multi phase Vegetation Resource Inventory (VRI) photo interpretation project within the Fraser Timber Supply Area (TSA). The Fraser VRI implementation will occur in two parts, Fraser East (2021-2023) and Fraser West (2022-2024). This new VRI will update and replace the existing forest cover mapping within the Fraser TSA and will tie to the previously updated forest cover inventories surrounding the TSA, those being Merritt, Lillooet and portions of the Soo TSA. The Fraser Inventory project will be guided by the objectives and interests identified in the *Fraser TSA VRI – Project Implementation Plan for Photo Interpretation (*under development).

What is a VRI?

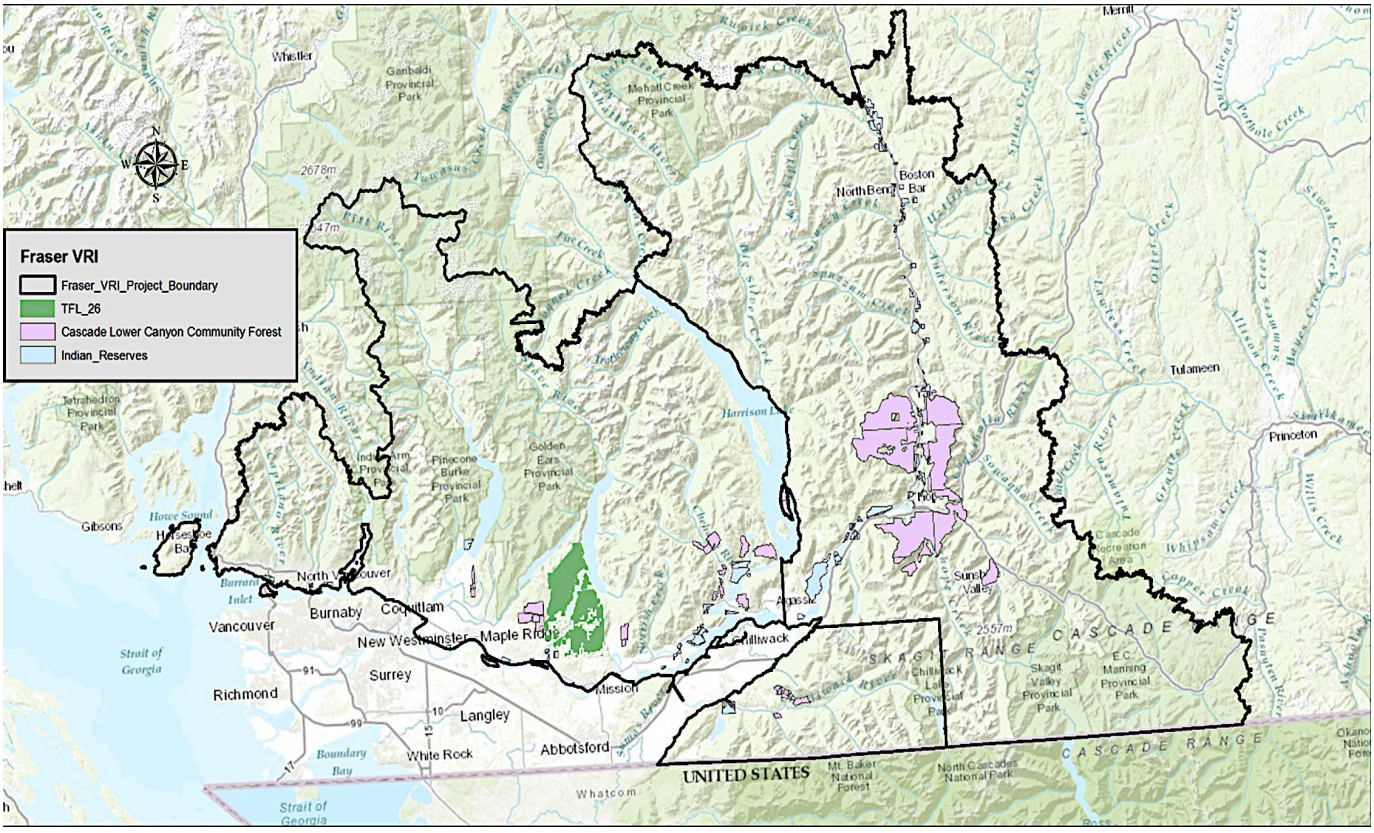
- VRI is a very low impact way of capturing the current conditions of forested and non-forested land base.
- VRI is a multi-phased process consisting of photo interpretation and ground calibration.
- The most commonly utilized VRI product is the provincial forest cover – maps of the forest characteristics in the province.
- VRI information can then be used for a wide spectrum of forest management purposes including assessment of forest biodiversity and old growth, wildlife habitat modelling, watershed modelling, timber supply reviews, and many other applications to ensure that forest resources are managed in a sustainable manner
- FAIB and its contractors do not store or display any potentially sensitive information such as traditional use areas, culturally modified trees, or locations of archeological sites.
- The Provincial Forest Cover contains information on the species, age, height, volume, and many other attributes of a stand in the forest. (Example Below)



Why create a new VRI in the Fraser TSA?

- The Ministry re-inventories areas in the province that are in need of an update due to catastrophic losses or are very old (changes due to succession). Recently completed projects in the surrounding area include the Lillooet and Merritt TSA's.
- The Fraser TSA's inventory was completed between 1996 and 1998, being one of the first VRI's in the province.
- The effects of insect damage and wildfire throughout the TSA will be captured and updated.

What are the steps in creating a new VRI?
The Image below is an overview of the Fraser TSA VRI Plan. The project area is 1,346,523ha covering 83.5 individual BCGS 1:20,000 full and partial map sheets.



VRI methodology consists of 3 phases:

- **Delineation** (drawing lines around like forest characteristics using digital stereo photo pairs in the office on a computer)
- **Calibration** (sampling the forest to help determine what is in the delineated polygons**)**
  - Calibration Program is created to be low impact to minimize any adverse impacts to the environment. Typically, the field calibration stage takes 2 weeks to complete and usually occurs in spring or fall.
- **Attribution** (office interpretation of polygon attributes)

Loading of data to the Ministry databases continues as interpretation is completed, however the final product is only loaded to the BC Geographic Warehouse on a yearly basis for public consumption. Approximately half of the Fraser East will be available in around March 2023 with the rest available in March 2024

Who completes a VRI project?

- The Ministry contracts out VRI photo interpretation to certified contractors. Quality Assurance is performed by certified interpreters within the Ministry or through 3rd party contractors, with final review and loading completed by Ministry staff.
- Certified photo interpreters have completed training and completed examinations to ensure that the new inventory is completed to a high standard.
- Interpreters use special computer hardware and software to complete interpretation.

Who can access the new Inventory?

- Everyone! All of BC's VRI forest cover mapping is available free of charge for all users at: https://catalogue.data.gov.bc.ca/dataset/vri-forest-vegetation-composite-polygons-and-rank-1-layer
- Inventory data can be downloaded in a GIS friendly format or can be viewed online.

For more information on the Fraser TSA VRI Photo Interpretation project, please contact:

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