## **LEARNING NARRATIVE - STD 4- Element - 4.1.1 - Tree and other plant identification (regional context), including keys.**

- Through my courses at UBC, I developed a deep understanding of the components of
  physiology and ecology and applied them in a practical sense in the field. I learned to
  identify plants in a regional context (including the use of identification keys) and can
  explain the interaction between plants and the environment.
- While employed at Fraser Mills, I also gained experience in this standard by performing stand and vegetation analyses for silvicultural prescription data collection in a variety of biogeoclimatic (BEC) zones, ranging from IDF dry-belt fir, through to Engelman Spruce-Subalpine Fir (ESSF) wet ecosystems. This involved identifying and classifying plants and stratifying their communities in order to better understand the broader forest ecology. I used indicator plants to help stratify communities, as various herb, shrub and tree species would provide indications of moisture and temperature regimes. I also used indicator plants to help guide my soil assessments, linking plant physiology to the abiotic components. I also assessed forest stand structure for timber types to facilitate more consistent layout for planning foresters.
- While employed at Williams Rivers District, I perform field reviews, before, during and after harvest, which have further demonstrated the relationship between various plant communities, plant morphology and plant physiology through the various silviculture systems, succession and regeneration patterns. The district covers a broad geographic and ecological range, with dry, desert bunchgrass ecosystems in valley bottoms, through to wet and cold ESSF at higher elevations. Through differences in moisture and temperature regimes, these different ecosystems demonstrate a range of regeneration delays, tree densities, crown closure, time to free-growing, yield and mortality rates, to name a few. These field reviews have also been helpful in broadening my silviculture experience, as stand establishment techniques vary across the district.
- I believe that my combination of education and experience has given me the knowledge and the skills required to meet this competency element.

## **LEARNING NARRATIVE - STD 8A-2.1 Legal and policy requirements**

- At West Fraser, I gained operational exposure to provincial and federal legislative and regulatory frameworks, including Forest and Range Practices Act (FRPA), the Forest Act, the Wildlife Act, and the Species at Risk Act, and the hierarchical nature of forest planning and management, as well as the broader forest regulations and legislation that need to be met, and that inform the results and strategies within a Forest Stewardship Plan. This is part of the broader hierarchical nature of legal and policy framework, where federal, provincial, and regional legislation and policies inform the forest management planning at the site-level.
- As an Authorizations Forester, my experience with legislation and policy has expanded, as I review and research legislation (Forest Act, FRPA, Water Sustainability Act, etc.), their associated regulations, and district policy to understand requirements, limitations and implications.
- I understand how provincial initiatives implemented at the regional level impact the regulatory
  framework in forest management, such as from new Government Action Regulations. In my
  work at the district, I have gained better understanding of the hierarchical legislative
  frameworks that forest management operates within, as well as how this framework can be
  impacted as new objectives require forest managers to adjust their strategies to align with
  societal expectations.
- Through my work with the Ministry of Forests, I've been able to see first-hand the government's role in legislation and policy development, and how this impacts natural resource management. The legislative framework set by the provincial and federal legislative bodies, serves to create laws and objectives that provide for social, economic, and environmental benefits. This legislation is further delineated into regulations and policy, which help guide decisions and operations on the land-base. Overall, the role of government's legislative abilities in society is to ensure the statutory laws in place set the framework for natural resource management and operations on the land base, that provide for societal expectations.
- As a result of my education and experience, I understand how forest legislation and policies at different levels operate and have the knowledge and experience to meet this performance indicator.

