In 2000, Director Land Environment (DLE) initiated a research and development (R&D) project on “Range and Training Area Characterization.” The goal of the project is to understand the impacts of training and find solutions to mitigate the adverse impacts of training with live fire ammunition. All these efforts are done to ensure that our ranges will be sustainable in the future. Having a better understanding of the fate and transport of energetic materials, the project is now evolving at looking more closely at policies, procedures, and development of a new design for training ranges that seeks to reduce the impact of future munitions on the environment.

This project is still ongoing on active Canadian Army Bases and involves the collection of surface soils, biomass, surface water, and groundwater samples. Up to now, the major Army training ranges have been studied and protocols have been designed to ensure effective characterization of all types of Canadian Ranges.

The characterization work is a three-phased approach where samples are collected each year in order to better delineate the contamination pattern. Surface soil sampling, which is conducted in close collaboration with U.S. scientists, is part of the work involved. Groundwater surveillance wells are installed and geological formations also have been investigated.

The information obtained through this project is considered critical by DLE in order to better manage our training ranges in a sustainable manner. This presentation will cover DLE vision on Army training ranges, with the legacy from the past to the ranges that will prevail in the future.