The City of Toronto, the Province of Ontario, and the Government of Canada are undertaking a massive design and redevelopment of the Port Lands as part of the Waterfront Toronto Port Lands Flood Protection and Enabling Infrastructure (PLFPEI) Project. The Port Lands are a 1,000-acre area on the shore of Lake Ontario, immediately east of downtown Toronto. The area was man-made through decades of infilling of historic wetlands and has historically been used for heavy industry. Contaminants of concern primarily include petroleum hydrocarbons and metals. Much of the area is within the flood plain of the Don River and therefore flood protection must be created before the area can be fully developed. This includes the design and construction of a new River Valley that will connect the existing Don River to Lake Ontario.

This presentation will provide an overview of the risk management measures being constructed to prevent the migration of contaminants into the new River Valley. These measures will include structural and non-structural concrete secant pile walls, concrete slurry walls, clay berms, a geosynthetic clay liner, a geomembrane, and a reactive (activated carbon) layer.

David Bertrand

Mr. David Bertrand is a Principal at Geosyntec Consultants. He is a hydrogeologist with over 20 years of experience in environmental consulting, brownfield redevelopment, waterfront revitalization, investigation and remediation of sites with recalcitrant contaminants, and vapor intrusion assessment and mitigation. Mr. Bertrand has directed and managed many interdisciplinary projects including site redevelopment, design and installation of risk management measures, environmental site assessment, and remediation of sites with recalcitrant contaminants.