

# **Agronomic Receptor Evaluation for Direct Soil Contact**

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The ecological direct contact pathway for soil salinity is currently ubiquitously applied to all land use scenarios at all depths; however, the Ecological Criteria Advisory Subgroup has agreed that at some depth, ecological exposure will no longer occur (CCME 2006). The depth at which the ecological direct contact pathway is no longer a relevant factor has not been determined. Remediation due to the assumption that the ecological direct contact pathway applies to salinity at all depths may lead to unnecessary surficial disturbance and degradation to overlying vegetation, without resulting in risk reduction.

The overarching objective of the study is to develop a scientifically defensible depth at which the eco-soil contact pathway is applicable. The specific objective of Phase 2 is to validate effective rooting depth by confirming the effects of salinity on above and below ground plant health when found at various depths within the profile (within and below the effective rooting zone). InnoTech Alberta and Millennium EMS Solutions Ltd. collaborated to execute a greenhouse

growth experiment designed to address the project objectives.

2022 Report

2020 Update

2019 Event Presentation – May 2, 2019

2019 Final Report