

**Whitehorse - Tuesday, September 11, 2018**

**Session #3 - Revegetation in Northern Environments**

**Time** 130pm-150pm

**Topic** **Revegetation for challenging sites in northern latitudes - Case studies in Northern reclamation.**

**Abstract** Revegetation has never been simple or assured in northern climates. With a limited growing season and schedules for revegetation constrained by logistics and site access, the revegetation plans are often implemented outside of the optimum conditions for germination, expression and establishment of desired species. Many standard revegetation specifications are taken from construction practices and site conditions may be substantially different than that of a typical construction activity.

Promoting viable plant communities that can cycle nutrients long term and prevent erosion is the desire of most revegetation efforts. Unfortunately, often restoration efforts fall short of expectations.

This presentation will look at challenges and shortcomings to conventional restoration methods and specifications. While examining current specifications, their shortcomings, and contrasting with alternatives used in successful case studies the restoration efforts will be assessed. From Northern Manitoba to Alaska Alex Zimmerman has been working on restoration of mining and construction sites for over 20 years; working with site managers to facilitate successful restoration with the simplest specifications and using methods available to the area. Through planning the sequence of restoration as well as the specifications better long-term results are achieved with native vegetation establishment in the north. Incorporating and understanding of the biological processes and the environment necessary for successful revegetation is critical to any effort. Organic matter and microbial activity will be critical to a project's success. Attendees will learn how to incorporate biotic soil amendments into any restoration effort that will increase plant density and ensure long term erosion control and soils stability. Additionally, successful restoration will allow permits to be closed out and reduce long term liability for property owners and operators. Using case studies from projects North of 60 degrees this presentation will show how revegetation of severe sites in northern latitudes can be successfully achieved with proper planning, specification and materials verification. Using the information from over 10 years of northern site case studies Alex will provide an engaging presentation with useful take home methods that can be incorporated in many future project successes.

**Presenter(s)** Alex Zimmerman, Erosion Sediment Control Association of Canada

**Bio(s)** Alex Zimmerman brings over 20 years of large scale construction and reclamation experience to Erosion and Sediment Control and stormwater training. From large disturbance, linear, and single-family construction to restoration and emergency landslide repair, his experiences add to informative trainings on real world issues for construction site and facility operators, inspectors, and designers.

Alex has been helping project teams succeed by planning for the productive and compliant completion of varied construction and restoration projects.

Alex has been recognized by various associations and agencies for his professional course preparation and delivery. Developing custom trainings for audiences as varied as Alaska Army Corps of Engineers, Alaska Department of Transportation, South Dakota Solid Waste Management Association, Building Industry Association of Washington, North Dakota Solid Waste & Recycling Association, Alaska Department of Environmental Conservation, Northwest Territories Department of Transportation, and the British Columbia Erosion and Sediment Control Association. Alex stays up to date and informed on the latest regulations and compliance challenges. He was a past recipient of the Educational Achievement award by the International Erosion Control Association.