



How to Improve Your Bioengineering Projects: Lessons Learned from The City of Calgary Riparian Monitoring Program

**Thursday, November 21st, 2024
9 a.m. to noon**

This webinar will focus on providing practical information to improve soil bioengineering planning, design, construction and maintenance practices based on the findings of The City of Calgary Riparian Monitoring Program (RMP). The RMP included a post-construction effectiveness-monitoring component where 69 bioengineering projects located along major rivers and streams in Calgary were assessed over five years (2018-2022).

Detailed observations and data collection from the RMP were analyzed for project design, implementation, maintenance, structure stability, and vegetation establishment. The findings of this analysis will be shared and case studies of successful practices and lessons learned will be discussed.

The event is geared towards practitioners, contractors, and those with interest in the details of the practice of soil bioengineering. The event will include presenters from The City of Calgary, Kerr Wood Leidal Associates Ltd., Terra Erosion Control Ltd., and Longview Ecological.

Agenda

- 9:00 **Doors Open**
- 9:05 **Welcome and Announcements**
David Seeliger, MPE Engineering, ALIDP President
- 9:10 **City of Calgary Opening Remarks**
George Roman, City of Calgary
- 9:20 **City of Calgary Riparian Monitoring Program (RMP) Overview**
Norma Posada, City of Calgary
- 9:30 **Why RMP Results can Improve Your Bioengineering Projects**
Mike Gallant, Kerr Wood Leidal Associates Ltd.
- 9:40 **Planning & Design**
Mike Gallant, Kerr Wood Leidal Associates Ltd.
Alan Dodd, Longview Ecological
- 10:20 **CASE STUDY: Riverdale**
Pierre Raymond, Terra Erosion Control Ltd.
- 10:40 **BREAK**
- 10:50 **Construction, Maintenance and Monitoring**
Mike Gallant, Kerr Wood Leidal Associates Ltd.
- 11:20 **CASE STUDY: Demonstration and Education Project**
Mike Gallant, Kerr Wood Leidal Associates Ltd.
- 11:40 **Q&A and Discussion**
- 11:55 **Closing Remarks**
- Noon **Afterglow**
Informal networking and discussion spillover

THIS EVENT IS FREE OF CHARGE FOR ALL ATTENDEES

Register on Eventbrite at <https://DFT24N.eventbrite.ca>

[Contact the organizer](#)

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*Equipping Albertans to create vibrant, ecologically functional landscapes
within the built environment, through comprehensive stormwater management.*

Speakers



George Roman (MSc, PMP) has over 20 years of experience with strategic watershed planning and management. He has worked as a consultant, for municipal and provincial governments, and for the United Nations. He has long championed bioengineering as a multi-disciplinary approach to integrate flood and erosion control with environmental and recreational objectives in highly valued river valley open spaces. He rejoined The City of Calgary in 2023 as Senior Program Manager and Team Lead for water-related environmental programs.



Norma Posada is a Watershed Engineer for The City of Calgary Climate & Environment business unit. She holds a B.Sc. in Civil Engineering and a Master's Degree in Environmental Engineering from the University of Calgary. She has worked both in the private and public sectors. Joining The City in 2001, she has gained experience in many areas related to stormwater management, environmental planning, and watershed management. She is currently responsible for the development and implementation of riparian protection programs and providing technical support to regional stormwater management initiatives.



Mike Gallant is a senior water resources engineer and green infrastructure specialist with over 20 years of planning, design, construction, and performance monitoring experience for bank stabilization and stream restoration projects. His career has broadly focused on mitigating impacts to river systems and municipal infrastructure from erosion issues using vegetation for erosion control, and fish and wildlife habitat enhancement. Mike is the technical lead for the RMP and was the design lead for the Bow River Bioengineering Demonstration and Education Project. He is also the branch manager for Kerr Wood Leidal's Calgary office.



Pierre Raymond has worked in the natural resources sector in British Columbia, Alberta, Canada, and overseas since 1990. Since 1996, he has focused on soil and water bioengineering, biotechnical slope stabilization, erosion control, and riparian habitat restoration. Pierre's experience includes biotechnical design, prescriptions, implementation, maintenance, monitoring, and training. He has a strong background in the supervision of specialized construction machinery. He has extensively implemented steep slope stabilization, riparian habitat restoration, stormwater outfall protection on riverbanks, and mining reclamation projects.



Alan Dodd is an Ecologist and Professional Agrologist, with a B.Sc. in Environmental and Conservation Sciences (Conservation Biology major) from the University of Alberta (2003). City of Calgary projects include: range health assessments; range health training for City staff; invasive plant species mapping; long-term vegetation monitoring; native plant seed collection for use in greenhouse trials; live staking; photo monitoring; Low Impact Development vegetation studies; and the Water Centre Native Landscape Demonstration project. Mr. Dodd provided vegetation expertise for the RMP. He owns Longview Ecological, a small ecological consulting firm based in Calgary, Alberta.

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