

Why the Difference?

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Monitoring of channel form and/or of substrate materials are intended to provide insight into how a channel is responding, or adjusting, to a change (e.g., stormwater management mitigation measures, channel restoration). Results of the monitoring program are intended to determine ‘success’ or ‘failure’ and/or to identify areas of concern for future monitoring. But how reliable is the data? Do measurements of channel change reflect real changes, or are these an artefact of field technique and monitoring approach? If a change is measured, is it a cause for concern, is it within the range for measurement error, or within a natural rate of change? We completed a series of field assessments intended to define potential error terms that could be present within monitoring data. Lessons learned and results will be presented.

Biography

Mariëtte Pushkar is a senior geomorphologist at Ecosystem Recovery where she is supported by multi-disciplinary team. She has over 20 years of consulting and research experience, applying the science of geomorphology to better understand watercourse form, function and processes from the drainage network to local site scales in urban and rural settings. She has co-authored protocol and guidance documents for regulatory agencies and municipalities; participates in research and development initiatives for clients; and is a member of Natural Channel Systems Initiative Committee.