



HYDROTECHNICAL ENGINEERING

MASc Theses

Current as of May 2007

YEAR	THESIS TITLE	AUTHOR	SUPERVISOR(S)
2007	A mixed integer-linear programming model for solving the hydroelectric unit maintenance scheduling problem	Tang, Yuehao	Z. Shawwash
2006	Assessing the Suitability of the MAGIC Model for Analysis of Acidification Potential in the Oil Sand Region of Northeastern Alberta	Kampala, B. M.	B. Lence
2006	Implications of Non-Uniform Wind Stress on Lake Circulation	North, R. P.	M. Isaacson/B. Laval
2005	Evolution and Mixing in Asymmetric Holmboe Instabilities	Carpenter, J. R.	G. Lawrence/B. Laval
2005	A Neural Network Model for Flood Forecasting for Small Hydro Plants	Li, J.	Z. Shawwash
2005	A Framework for Assessing the Performance of Sustainable Technologies for Building Projects	Nelms, C. E.	A. Russell/B. Lence
2005	Hydraulics Of East Creek, British Columbia: A Headwater Stream With High Relative Roughness	Perkins, T. J.	R. Millar
2005	Effects of Uncertainty in Hydrologic Model Calibration on Extreme Event Simulation	Roche, A. D.	B. Lence
2004	A Hybrid System to Optimize the Value of Imports for Hydro Systems	Alavi, A. A.	Z. Shawwash
2004	Air-Actuated Pumping Technology in Urban Drainage	Bohnen, D. A.	S.O. Russell
2004	An Evaluation of the Gravel Transport Capabilities of MIKE 11: Case Study - The Fraser River Gravel Reach	Crofton, J.	R. Millar/M. Quick
2004	The Direct Joint Probability Method for Estimating Extreme Sea Levels	Liu, J. C. H.	B. Lence/M. Isaacson
2004	Comprehensive Review of Plunge Pool Performance at four BC Hydro Dam Sites and Assessment of Scour Extent	Monfette, M.	R. Millar
2003	Riparian Disturbance sensitivity Index for Gravel-Bed River Morphology	Bailey, C. E.	R. Millar
2003	Assessment of Hazards and Risks for the Comision Municipal de Agua Potable y Saneamiento de Xalapa, Veracruz, Mexico	Bridger, S. A.	B. Lence
2003	Generalized Optimization in the British Columbia Hydroelectric System	Fane, L. A.	B. Lence/Z. Shawwash
2003	Water Induced Erosion of Mine Waste: Complicating Characteristics and Predictive Tools	Harrison, B.J.	B. Lence
2003	A Visual Model for Predicting Stream Response of Alluvial Gravel-Bed Rivers	Moscote, N. Y.	R. Millar
2001	Assessment of the Likely Impact of Climate Change on Infrastructure and Natural Ecosystems of a Small Watershed in BC: Implications for Hydraulic Infrastructure Design and Stormwater Management	Denault, C.	R. Millar/B. Lence

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2001	Application of a Two-dimensional Hydrodynamic Model for the Assessment and Design of Instream Channel Restoration Works	Jay Lacey, R. W.	R. Millar
2001	A Genetic-Algorithm based Automatic Model Calibrator for the UBC Watershed Model	Lan, Y-H.	M. Quick
2001	Application of a two-dimensional Hydrodynamic Model to the Fraser River Gravel Reach	Yusuf, F.	R. Millar
2000	Reservoir Turbidity Modelling using Artificial Networks and the Estimation of Performance Indicators	Chan-Yan, D. A.	B. Lence
2000	Genetic Algorithms for Multi-Objective Optimization in Water Quality Management Under Uncertainty	Tolson, B. A.	B. Lence
1999	Water and Material Balance at Mine Tailings Impoundments - Software Program Development and Risk Analysis	Estergaard, A. H.	R. Millar
1999	An Analysis of the Legal Implications of Engineering Responses to Selected Dam Owner Issues	Joyner, J.	B. Lence
1999	Application of a Rational Model of Stream Equilibrium for Predicting Channel Adjustments	MacVicar, B. J.	R. Millar
1998	Large Woody Debris Fish Habitat Structure Performance and Ballasting Requirements	D'Aoust, S.	R. Millar
1998	Cross-Shore Sediment Transport on Mixed Sand and Gravel Beaches	Dyksterhuis, P.	M. Quick
1998	A study of Scour below Ruskin Dam Spillway using a Non-cohesive Bed Hydraulic Model	Galvagno, G.	M. Quick
1998	Regional Flow Estimation Using a Hydrologic Model	Micovic, Z.	M. Quick
1998	Bed Mobility of Gravel Rivers: Mobilization (scour) Depth of Chum Salmon Redds, and Equilibrium Bedload Transport	Rennie, C.	R. Millar
1997	Distributive Fairness Considerations and Measures for Sustainable Project Selection	Matheson, S.	B. Lence
1996	Water Quality Management of the Veszpremi-Sed River and Malom and Nador Channel System in Hungary	Fan, K. Y. D.	B. Lence
1996	Development of an Instream Velocity Barrier to Stop Sea Lamprey (Petromyzon Marinus) Migrations in Great Lakes Streams	McAuley, T. C.	B. Lence