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Education

Ph.D., Civil Engineering, University of Minnesota	1999
MS, Civil Engineering, University of Minnesota	1995
BS, Civil Engineering, University of Science and Technology of Iran (Elm-o-San-at)	1986



Research Interests

Stormwater BMP Assessment
Environmental Hydraulics
Lake and River Hydrodynamics
Hydraulic Structures
Watershed Modeling and Management

Publications

- Herb, W. R., Mohseni, O., Stefan, H. 2009. Simulation of Temperature Mitigation by a Stormwater Detention Pond. *JAWRA*, 45(5):1164-1178.
- Wilson, M., Mohseni, O., Gulliver, J., Hozalski, R., and Stefan, H. 2009. Assessment of Hydrodynamic Separators for Stormwater Treatment. *The ASCE Journal of Hydraulic Engineering*, 135(5):383-392.
- Janke, B., Herb, W. R., Mohseni, O., Stefan, H. 2009. Simulation of Heat Export by Rainfall–Runoff from a Paved Surface. *Journal of Hydrology*. 365:195–212.
- Herb, W. R., Janke, B., Mohseni, O., Stefan, H. 2008. Thermal Pollution of Streams by Runoff from Paved Surfaces. *Hydrological Processes*, 22(7): 987-999.
- Bogan, T., Othmer, J., Mohseni, O., and Stefan, H. G. 2006. Estimating Extreme Stream Temperatures by the Standard Deviate Method. *Journal of Hydrology*. 317(3-4): 173-189.
- Bogan, T., Stefan, H. G., and Mohseni, O. 2003. Imprints of Secondary Heat Sources on the Stream Temperature/Equilibrium Temperature Relationship. *Water Resources Research*, Vol. 40, No. 12.
- Bogan, T., Mohseni, O., and Stefan, H. G. 2003. The Stream Temperature/Equilibrium Temperature Relationship. *Water Resources Research*, 39(9): 1245-1256.
- Mohseni O., Stefan, H. G., and Eaton, J. G. 2003. Global Warming and Potential Changes in Fish Habitat in US Streams. *Climatic Change*, 59: 389–409.
- Mohseni O., Erickson, T. R., and Stefan, H. G. 2002. Upper Bounds of Weekly Stream Temperatures. *The ASCE Journal of Environmental Engineering*, 128(1): 4-11.
- Mohseni O., Stefan, H. G., D. Wright and G. J. Johnson. 2001. Dissolved Oxygen Depletion in a Small Deep Lake with a Large Littoral Zone. *Lake and Reservoir Management*, 17(3): 288-298.
- Mohseni O. and Stefan, H. G. 2001. Water Budget of Two Watersheds in Different Climatic Zones under Projected Climate Warming. *Climatic Change*, 49(1/2): 77-104.

- Mohseni O., Erickson, T. R., and Stefan, H. G. 1999. Sensitivity of the Stream Temperatures in the US to Air Temperatures Projected under a Global Warming Scenario. *Water Resources Research*, 35(12): 3723-3734.
- Mohseni O. and Stefan, H. G. 1999. Stream Temperature/Air Temperature Relationship: A Physical Interpretation. *Journal of Hydrology*, 218(3-4): 128-141.
- Mohseni O., Stefan, H. G., and Erickson, T. R. 1998. A Non-Linear Regression Model for Weekly Stream Temperatures. *Water Resources Research*, 34(10): 2685-2693.
- Mohseni O. and Stefan, H. G. 1998. A Monthly Runoff Model. *Water Resources Research*, 34(5): 1287-1298.

Technical Reports

- (1) Mohseni, O., Howard, A. and Lueker, M. Physical model study of the Fairfax Water Off-Shore Intake: New modifications and the study of the flow patterns around the sand barrier. *Project Report No. 516 SAFL*, University of Minnesota, Minneapolis, MN. September 2008.
- (2) Christopher, R. A., and Mohseni, O. The Physical Model Study of the Bond Falls Emergency Spillway. *Project Report No. 512 SAFL*, University of Minnesota, Minneapolis, MN, June 2008.
- (3) Lueker, M. L. Mohseni, O., Gulliver, J. S., Schulz, H. and Christopher, R. A. The Physical Model Study of the Folsom Dam Auxiliary Spillway System. *Project Report No. 511 SAFL*, University of Minnesota, Minneapolis, MN, June 2008.
- (4) Mohseni, O., and Fyten, A. Performance Assessment of Modified ecoStorm Hydrodynamic Separator. *Project Report No. 495B SAFL*, University of Minnesota, Minneapolis, MN, June 2008. [PDF](#)
- (5) Sander, A., Novotny, E., Mohseni, O. and Stefan, H. Road Salt Budget for the Minneapolis/St. Paul Metropolitan Area. *Project Report No. 503 SAFL*, University of Minnesota, Minneapolis, MN, December 2007. [PDF](#).
- (6) Mohseni, O. and Lueker, M. A Physical Model Study of the Fairfax Off-Shore Intake in the Potomac River. *Project Report No. 500 SAFL*, University of Minnesota, Minneapolis, MN, October 2007.
- (7) Herb, W., Janke, B., Mohseni, O. and Stefan, H. G. A Model for Mitigation of Surface Runoff Temperatures by a Wetland Basin and a Wetland Complex. *Project Report No. 499 SAFL*, University of Minnesota, Minneapolis, MN, August 2007.
- (8) Mohseni, O., and Fyten, A. Performance Assessment of ecoStorm Hydrodynamic Separator. *Project Report No. 495A SAFL*, University of Minnesota, Minneapolis, MN, November 2007.
- (9) Wilson, M., Gulliver, J., Mohseni, O., Hozalski, R., Performance Assessment of Underground Stormwater Treatment Devices. *Project Report No. 494 SAFL*, University of Minnesota, Minneapolis, MN, July 2007. [PDF](#)
- (10) Herb, W., Janke, B., Mohseni, O. and Stefan, H. G. Estimation of Runoff Temperatures and Heat Export from Different land and water Surfaces. *Project Report No. 488 SAFL*, University of Minnesota, Minneapolis, MN, February 2007. [PDF](#).
- (11) Herb, W., Janke, B., Mohseni, O. and Stefan, H. G. An Analytical Model for Runoff and Runoff Temperature from a Paved Surface. *Project Report No. 484 SAFL*, University of Minnesota, October 2006. [PDF](#).
- (12) Herb, W., Janke, B., Mohseni, O. and Stefan, H. G. Heat Export and Runoff Temperature Analysis for Rainfall Event Selection: Simulation for a paved surface and analysis of Historical Events. *Project Report No. 483 SAFL*, University of Minnesota, April 2007. [PDF](#).

- (13) Christopher, R. A. and Mohseni, O. Testing a Single Lateral of an Underdrain System. *Project Report No. 482 SAFL*, University of Minnesota, October 2006.
- (14) Herb, W., Janke, B., Mohseni, O. and Stefan, H. G. All-Weather Ground Surface Temperature Simulation. *Project Report No.478. SAFL*, University of Minnesota, September 2006. [PDF](#).
- (15) Mohseni, O., Carlson, L., and Lueker, M. Hydraulic Model Study of the Stilling Basin with a Baffled Chute, *Project Report No. 476, SAFL*, University of Minnesota, August 2006.
- (16) Mohseni, O., and Stefan, H. G. Modeling of Phosphorus Transport in Swan Lake, *Project Report No. 474, SAFL*, University of Minnesota, August 2006.
- (17) Lauer, W., Wong, M. and Mohseni, O. Sediment Production Model for the South Branch of the Buffalo River Watershed, *Project Report No. 473, SAFL*, University of Minnesota, May 2006.
- (18) Carlson, L., Mohseni, O., Stefan, H. G. and Lueker, M. Performance Evaluation of the BaySaver Separation System. *Project Report No. 472, SAFL*, University of Minnesota, November 2005.
- (19) Mohseni, O., Lueker, M., Barnacle, T., and Stefan, H. G. Physical Model Study of the San Antonio River Lock System. *Project Report No. 471, SAFL*, University of Minnesota, October 2005.
- (20) Mohseni, O., Spitael, M., and Stefan, H. G. Stilling Basin Hydraulic Model Study. *Project Report No. 469, SAFL*, University of Minnesota, September 2005.
- (21) Mohseni, O., Lueker, M., Christopher, R. A., and Stefan, H. G. Physical Model Study of the Intake Structure of the Prairie Du Sac Hydroelectric Project. *Project Report No. 468, SAFL*, University of Minnesota, August 2005.
- (22) Ellis, C., Christopher, R. A. and Mohseni, O. Testing an Underdrain System under Backwash Flow Conditions for the Chaparral Water Treatment Plant. *Project Report No. 467, SAFL*, University of Minnesota, March 2005.
- (23) Herb, W., Mohseni, O. and Stefan, H. G. Lake of the Woods Shoreline Erosion: Historical and Existing Data Collection and Analysis. *Project Report No. 466, SAFL*, University of Minnesota, November 2004.
- (24) Mohseni, O. Review of Existing Hydrologic Studies of the Vermillion River Watershed. *Project Report No. 465, SAFL*, University of Minnesota, August 2004.
- (25) Mohseni, O., Weiss, J., Cantelli, A., and Wilson, B. Scoping Study for the Development of Design Guidelines for Bioengineering in the Upper Midwest. *Project Report No. 464, SAFL*, University of Minnesota, August 2004.
- (26) Mohseni, O., Stefan, H. G. and Gulliver, J. R. The Physical Model Study of the Fish Bypass Louver System of the School Street Hydroelectric Project. *Project Report No. 462, SAFL*, University of Minnesota, June 2004.
- (27) Ding, C., Carlson, L., Ellis, C. and Mohseni, O. Pressure Loss Coefficients of 6, 8 and 10-inch Steel Pipe Fittings, *Project Report No. 461, SAFL*, University of Minnesota, March 2004.
- (28) Othmer, J., Mohseni, O., and Stefan, H. G. Statistical Estimation of an Upper Bound on Weekly Stream Temperatures. *UMSI 2001/141*, University of Minnesota Supercomputing Institute, November 2001.
- (29) Mohseni, O., Graske, G., Donovan, R., Stone, Fleming, R., M., and Stefan, H. G. Design of an Aeration System to Enhance Trout Habitat in Holland Lake. *Project Report No. 450, SAFL*, University of Minnesota, August 2001.

- (30) Mohseni, O. and Stefan, H. G. Groundwater Interactions with Holland Lake, MN. *Project Report No. 449, SAFL*, University of Minnesota, April 2001.
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- (32) Mohseni, O. and Stefan, H. G. Projections of Fish Survival in US Streams under Global Warming. *Project Report No. 441, SAFL*, University of Minnesota, February 2000.
- (33) Erickson, T. R., Mohseni O., and Stefan, H. G. Required Record Length for a Nonlinear Weekly Air/Stream Temperature Regression Model. *Project Report No. 436, SAFL*, University of Minnesota, March 1999.
- (34) Mohseni O., Erickson, T. R., and Stefan, H. G. Projection of Climate Change Effects on Stream Temperatures in the US. *Project Report No. 407, SAFL*, University of Minnesota, August 1998.
- (35) Erickson, T. R., Mohseni O., and Stefan, H. G. Estimation of Upper Bounds Weekly Stream Temperatures. *Project Report No. 424, SAFL*, University of Minnesota, August 1998.
- (36) Erickson, T. R., Mohseni O., and Stefan, H. G. The Effect of Record Length on a Nonlinear Regression Model for Weekly Stream Temperatures. *Project Report No. 419, SAFL*, University of Minnesota, July 1998.
- (37) Mohseni O., Hanratty, M. P., and Stefan, H. G. Uncertainties in Projecting Streamflows in Two Watersheds Under 2xCO₂ Climate Conditions. *Project Report No. 416, SAFL*, University of Minnesota, March 1998.
- (38) Mohseni O., Erickson, T. R., and Stefan, H. G. A Non-linear Regression Model for Weekly Stream Temperatures at 585 Gaging Stations in the U.S. *Project Report No. 401, SAFL*, University of Minnesota, September 1997.
- (39) Mohseni O. and Stefan, H. G. Calibration of the Monthly Time Scale Runoff Model. *Project Report No. 397, SAFL*, University of Minnesota, November 1996.
- (40) Mohseni O. and Stefan, H. G. Estimates of Climate Effects on Monthly Stream Runoff. *Project Report No. 391, SAFL*, University of Minnesota, September 1996.
- (41) Mohseni O. and Stefan, H. G. A Methodology to Estimate Climate Effects on Monthly Stream Runoff. *Project Report No. 384, SAFL*, University of Minnesota, March 1996.