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Education:

TEFL 2007 Certificate in Teaching English as a Foreign Language and Intercultural Studies, Wheaton College, Wheaton, IL.
Ph.D. 1996 Civil Engineering. University of Minnesota, Minneapolis, MN.
M.S. 1990 Civil Engineering. Michigan Technological University, Houghton, MI.
B.S. 1989 Civil Engineering. Michigan Technological University, Houghton, MI.

Registration: Professional Engineer, State of Indiana, No. PE19900473

Teaching Experience:

2012-present Professor, Department of Civil Engineering, Valparaiso University (Interim Department Chair 2014-2016)
2013-2014 & 2004-2005 Visiting Professor, St. Anthony Falls Laboratory, University of Minnesota
2002-2012 Associate Professor, Department of Civil Engineering, Valparaiso University (Department Chair academic years 2003-2004, 2005-2007)
2007-2008 English Language Teacher, Harbin Engineering University, Harbin, Heilongjiang, PRC
1998-2002 Assistant Professor, Department of Civil Engineering, Valparaiso University
1996-1998 Assistant Professor, Department of Civil and Environmental Engineering, University of Hartford

Consulting Experience:

Summers 2002 - 2017 Consultant to the University of Minnesota. Part of a team that developed the manual "Assessment of Stormwater Management Practices on the Water Quality of Runoff" for a Minnesota Pollution Control Agency funded project. Guided, advised, and helped with various other research projects related to the performance and assessment of stormwater treatment practices and technologies including the topics of iron-enhanced sand filtration for dissolved phosphorus removal, cost and effectiveness of stormwater management practices, phytoremediation of dissolved metals, and permeable pavements in cold climates.
2004-2005 Consultant to JF New, Indianapolis, IN. Investigated the effectiveness of alternative stormwater management practices by monitoring stormwater runoff from a watershed in Valparaiso, IN before and after the implementation of low impact development (LID) stormwater control strategies.
June 1997- August 1998 Consultant to Northeast Utilities, New Britain, Connecticut. Wrote "Plan of Action" to meet dissolved oxygen requirements downstream of a Northeast Utilities hydroelectric power plant.
1990-1992 Engineer, Boss Engineering Company, Howell, Michigan.
Duties: Project management, design and layout of subdivisions and industrial parks including roads, water mains, sewer systems, septic fields, detention ponds, drainage ditches, and pump stations. Field inspection on construction projects and surveying of drainage basins and waterways.

Honors:

Alvin G. Anderson Award, 1995. Annual award given for academic achievement in Water Resources/Environmental Engineering at the University of Minnesota.
Summerfeld Fellowship, 1993. University of Minnesota.
Civil and Environmental Engineering Endowed Fellowship, 1989; Michigan Technological University.
Selected to the *National Dean's List*, 1989.
Basil Vagin Memorial Scholarship, 1987. Michigan Technological University.
Rice Memorial Scholarship, 1986 and 1987. Michigan Technological University.
Gene Timmer Scholarship Award, 1986. Varsity football award for academic and athletic achievement.

Peer Reviewed or Refereed Journal Articles

1. Erickson, A.J., **Weiss, P.T.**, and Gulliver, J.S. "Monitoring and Maintenance of Phosphate Adsorbing Filters," *Journal of Environmental Engineering*, 144, 1: 05017007, DOI: 10.1061/(ASCE)EE.1943-7870.0001296, 2018.
2. Erickson, A.J., Gulliver, J.S., and **Weiss, P.T.** "Phosphate Removal from Agricultural Tile Drainage with Iron Enhanced Sand," *Water*, 9, 672; DOI:10.3390/w9090672, 2017.
3. **Weiss, P.T.**, M. Kayhanian, J.S. Gulliver, and L. Khazanovich. "Permeable Pavement in Northern North American Urban Areas: Research Review and Knowledge Gaps," *International Journal of Pavement Engineering*, DOI: 10.1080/10298436.2017.1279482, 2017.
4. **Weiss, P.T.**, and J.S. Gulliver. "Effective Saturated Hydraulic Conductivity of an Infiltration-based Stormwater Control Measure," *Journal of Sustainable Water in the Built Environment*, 1(4), 2015.
5. **Weiss, P.T.**, A.D. Westbrook, J.D. Weiss, J.S. Gulliver, and D.D. Biesboer. "Effect of Water Velocity on Hydroponic Phytoremediation of Metals," *International Journal of Phytoremediation*, 16(2), 203-217, 2014.
6. Erickson, A.J., J.S. Gulliver, and **P. T. Weiss**. "Capturing Phosphates with Iron Enhanced Sand Filtration," *Water Research*, 46(9), 3032–3042, 2012.
7. Erickson, A.J., Gulliver, J.S., Kang, J.H., **Weiss, P.T.**, and C.B. Wilson. "Maintenance of Stormwater Treatment Practices," *Journal of Contemporary Water Research and Education*. 146(1), 75-82, December 2010.
8. **Weiss, P.T.**, Erickson, A.J., and J.S. Gulliver, "Cost and Pollutant Removal of Stormwater Treatment Practices," *Journal of Water Resources Planning and Management*, vol. 133, no. 3, pp. 218-229, 2007.
9. Erickson, A.J., Gulliver, J.S., and **P.T. Weiss**, "Enhanced Sand Filtration for Stormwater Phosphorus Removal," *Journal of Environmental Engineering*, vol. 133, no 5, pp. 485-497, 2007.
10. **Weiss, P.T.**, and J.S. Gulliver, "What Do Students Need In Hydraulic Design Projects?," *Journal of Hydraulic Engineering*, vol. 127, no. 12, pp. 984-991, 2001.
11. **Weiss, P.T.**, and L. Scarola, "Using an English Tutor in the Engineering Classroom," *Journal of Engineering Education*, vol. 87, no. 4 pp. 451-453, 1998.
12. **Weiss, P.T.**, Gulliver, J. S. and M.J. Semmens, "In-Stream Hollow-Fiber Membrane Aeration," *Journal of Hydraulic Engineering*, vol. 124, no.6, pp. 579-588, 1998.
13. **Weiss, P.T.**, Gulliver, J. S. and M.J. Semmens, "Hypolimnetic Aeration with Hollow Fiber Membranes," *Lake and Reservoir Management*, vol. 12, no. 4, pp. 468-476, 1996.
14. **Weiss, P.T.**, Oakley, B. T., Gulliver, J. S. and M.J. Semmens, "Bubbleless Fiber Aerator for Surface Waters," *Journal of Environmental Engineering*, vol. 122, pp. 631-639, New York, NY, 1996.
15. **Weiss, P.T.**, Oakley, B. T. , Gulliver, J. S. and M.J. Semmens, "The Performance of a Vertical Fiber Membrane Aerator," *Aeration Technology*, R. E. A. Arndt and A. Prosperetti, eds., American Society of Mechanical Engineers, New York, NY, Fed. Vol. 187, pp. 59-66, 1994.

Book Chapters:

1. First author of Chapter 2 in *Economic Incentives for Stormwater Control*, Hale W. Thurston, ed., CRC Press, ISBN: 9781439845608. Chapter is titled "Costs and Effectiveness of Stormwater Management Practices," by **Peter T. Weiss**, John S. Gulliver, and Andrew J. Erickson, 2011.

Books:

1. A.J. Erickson, **P.T. Weiss**, and J.S. Gulliver, *Optimizing Stormwater Treatment Practices: A Handbook of Assessment and Maintenance*, Springer Publishing, New York, NY, USA, 2013.

Conference Proceedings:

1. **Weiss, P.T.**, Aljobeh, Z.Y., Bradford, C., and E.A. Breitzke, "An Iron-Enhanced Rain Garden for Dissolved Phosphorus Removal," Proceedings of the World Environmental and Water Resources Congress, May 22-26, 2016, West Palm Beach, FL, USA. pp. 185-194. doi: 10.1061/9780784479889.020.
2. Erickson, A.J., Gulliver, J.S., and **P.T. Weiss**, "Measuring Performance and Scheduling Maintenance for Stormwater Treatment Practices," Proceedings of the 12th International Conference on Urban Drainage, September 11-16, 2011, Porto Alegre, Brazil.
3. Erickson, A.J., Gulliver, J.S., and **P.T. Weiss**, "Capturing Dissolved Pollutants from Stormwater," Proceedings of the 12th International Conference on Urban Drainage, September 11-16, 2011, Porto Alegre, Brazil.
4. Erickson, A.J., Gulliver, J.S., and **P.T. Weiss**, "Capturing Dissolved Pollutants from Stormwater," Proceedings of the International Conference on Stormwater and Urban Water Systems Modeling, February, 24-25, 2011, Toronto, Canada.
5. Erickson, A.J., Gulliver, J.S., **Weiss, P.T.**, and B.J. Huser, "Iron Enhanced Sand Filtration for Stormwater Phosphorus Removal." Proceedings of the Transportation Research Board Annual Meeting 2010. January 10-14, 2010, Washington D.C.
6. Erickson, A.J., Gulliver, J.S., **Weiss, P.T.**, and B.J. Huser, "Iron-Enhanced Sand Filtration for Stormwater Phosphorus Removal." Proceedings of the 17th Congress of the Asia and Pacific Division of the International Association of Hydraulic Engineering and Research incorporating the 7th International Urban Watershed Management Conference. February 21-24, 2010, Auckland, New Zealand.
7. Erickson, A.J., Gulliver, J.S., **Weiss, P.T.**, and B.J. Huser, "Capturing Dissolved Phosphorus with Iron-Enhanced Sand Filtration." Proceedings of the 9th Annual StormCon. August 2-5, 2010, San Antonio, TX.
8. Hettler, E., Gulliver, J.S., Erickson, A., and **P.T. Weiss**, "Stormwater Sediment Particle Size Distribution and the Impact on BMP Performance," Proceedings of the 8th Annual StormCon. August 16-19, 2009, Anaheim, CA.
9. Erickson, A.J., Gulliver, J.S., **Weiss, P.T.**, and C.B. Wilson, "Survey of Stormwater BMP Maintenance Practices." Proceedings of the Universities Council on Water Resources (UCOWR)/National Institutes for Water Resources (NIWR) Annual Conference. July 7-9, 2009, Chicago, IL.
10. Erickson, A.J., Kang, J.H., **Weiss, P.T.**, Wilson, C.B., and J.S. Gulliver, "Maintenance of Stormwater BMPs." Proceedings of the ASCE/EWRI World Environmental and Water Resources Congress. May 17-21, 2009, Kansas City, MO.
11. Erickson, A.J., **Weiss, P.T.**, and J.S. Gulliver, "Enhanced Sand Filtration for Storm Water Phosphorus Removal." Proceedings of the ASCE/EWRI Environmental & World Water Resources Congress 2006. May 22-25, 2006 Omaha, NE.
12. **Weiss, P.T.**, D.J. Weiss, "Hands-on Projects to Engage Non-engineering Students," Proceedings of the ASEE Annual Conference 2001, June 2001, Albuquerque, New Mexico.
13. **Weiss, P.T.**, J.S. Gulliver, "What Do Students Need in Hydraulic Design Projects?," Proceedings of the ASCE International Water Resources Conference, August 1999. Seattle, WA.
14. **Weiss, P.T.** and J.S. Gulliver, "A Bubbleless Hollow Fiber Membrane Aerator for Surface Waters," Third International Symposium on Air-Water Gas Transfer proceedings, AEON Verlag & Studio, Hanau Germany, pp. 461-472, 1995, Heidelberg, Germany

Online Manuals:

1. Gulliver, J.S., A.J. Erickson, and **P.T. Weiss** (editors), Online Manual: "Stormwater Treatment: Assessment and Maintenance." University of Minnesota, St. Anthony Falls Laboratory. Minneapolis, MN, 2010 (Available at: <http://stormwaterbook.safll.umn.edu/>).

Other Publications:

1. **Weiss, P.T.**, Kayhanian, M., Khazanovich, L., and J.S. Gulliver, "Permeable Pavements in Cold Climates: State of the Art and Cold Climate Case Studies," Report #: MN/RC 2015-30, Minnesota Department of Transportation, St. Paul, MN, 2015.
2. Ahmed, F., Natarajan, P., Gulliver, J.S., **Weiss, P.T.**, and J.L. Nieber, "Assessing and Improving Pollution Prevention by Swales," Final Report, published by Minnesota Department of Transportation, Research Services & Library, St. Paul, MN, August 2014.
3. Nieber, J.L., Arika, C.N., Lahti, L., Gulliver, J.S., and **P.T. Weiss**, "The Impact of Stormwater Infiltration Practices on Groundwater Quality," prepared for the Metropolitan Council, St. Paul, MN, July 2014.

Other Publications (continued):

4. Erickson, A.J., Gulliver, J.S., **Weiss, P.T.**, and W.A. Arnold. "Enhanced Filter Media for Removal of Dissolved Contaminants from Stormwater," St. Anthony Falls Laboratory Report No. 572. Prepared for the U.S. Environmental Protection Agency Section 319 Program and the Minnesota Pollution Control Agency. University of Minnesota, Minneapolis, Minnesota, USA, 2014.
5. Erickson, A.J., Gulliver, J.S. and **P.T. Weiss**, "Capturing dissolved phosphorus with iron-enhanced sand filtration," *Public Works Magazine*, April 2011.
6. **Weiss, P.T.**, LeFevre, G., and J.S. Gulliver, "Contamination of Soil and Groundwater Due to Stormwater Infiltration Practices: A Literature Review." St. Anthony Falls Laboratory Project Report #515. Minneapolis, MN, 2008.
7. Kang, J.H., **P.T. Weiss**, C.B. Wilson and J.S. Gulliver, "Maintenance of Stormwater BMPs: Frequency, Effort and Cost," Vol 9, no. 8, *Stormwater*, Nov/Dec, 2008.
8. Hussain, C.F., Brand, J., Gulliver, J.S., and **P.T. Weiss**, "Water Quality Performance of Dry Detention Ponds with Underdrains," Report 2006-43, Minnesota Department of Transportation, St. Paul, MN, 2006.
9. **Weiss, P.T.**, Erickson, A.J., and J.S. Gulliver, "The Cost and Effectiveness of Stormwater Management Practices," Report 2005-23, Minnesota Department of Transportation, St. Paul, MN, 2005.
10. **Weiss, P.T.**, "Development of a Bubbleless Hollow Fiber Membrane Aerator for Surface Waters," Ph.D. thesis, University of Minnesota, Minneapolis, MN, 1996.
11. **Weiss, P.T.**, "A Study of the Direct Step Method for Computing M-1 Backwater Profiles," M.S. Thesis, Michigan Technological University, Houghton, MI, 1990.

Oral Presentations:

1. "Advancements and Challenges of Stormwater Management Along Highways" Plenary Session at the Indiana Association for Floodplain and Stormwater Management Annual Conference, September 8, 2017, South Bend, IN.
2. "Permeable Pavements in Cold Climates" at the Indiana Association for Floodplain and Stormwater Management Annual Conference, September 7, 2017, South Bend, IN.
3. "Iron Enhanced Sand Filtration for Dissolved Phosphorus Removal" at the Indiana Association for Floodplain and Stormwater Management Annual Conference, September 7, 2017, South Bend, IN.
4. "Permeable Pavements in Cold Climates" at the Permeable Pavement Success Workshop. Hosted by MS Consultants, August 21, 2017, Columbus, OH.
5. "An Iron-Enhanced Rain Garden for Dissolved Phosphorus Removal," World Environmental and Water Resources Congress, May 22-26, 2016, West Palm Beach, FL.
6. "Measuring Performance and Scheduling Maintenance for Stormwater Treatment Practices," at the 12th International Conference on Urban Drainage, September 12, 2011, Porto Alegre, Brazil.
7. "Capturing Dissolved Pollutants from Stormwater," at the 12th International Conference on Urban Drainage, September 15, 2011, Porto Alegre, Brazil.
8. "Preventative Maintenance for Stormwater Treatment Practices" at the North American Stormwater and Erosion Control Association-Wisconsin workshop on Stormwater BMPs, October 11, 2010, Madison, WI
9. "The Realities of Maintenance" at the North American Stormwater and Erosion Control Association-Wisconsin workshop on Stormwater BMPs, October 11, 2010, Madison, WI.
10. "The Cost and Effectiveness of Stormwater Management Practices" at the American Water Resources Association National Conference, 2005, Seattle WA.
11. "Systematic Approach to Stormwater Best Management Practices," presented at Developing and Planning Sustainable Communities, September 2005, Chesterton, IN.

Poster Presentations:

1. **Weiss, P.T.**, Westbrook, A.D., Weiss, J.D., Gulliver, J.S., and D.D. Biesboer, "Water Velocity Affects on Heavy Metal Accumulation in Tissues of Hydroponically Grown *Scirpus validus*," poster presented at the The Annual Conference on Soils, Sediments and Water, University of Massachusetts, Amherst, MA, October 2005.
2. **Weiss, P.T.**, Erickson, A.J., Gulliver, J.S., "The Cost and Effectiveness of Stormwater Management Practices," poster presented at the Minnesota Water 2005 and Annual Water Resources Joint Conference, Brooklyn Center, MN, October 25-26, 2005.