

**CURRICULUM VITAE**  
**MARTIN M. KARPISCAK**

**EDUCATION**

Ph.D., University of Arizona, September 1980.

M.S., University of Arizona, August 1973.

B.S., City College of New York, January 1968.

**EMPLOYMENT**

December 2003-Present	Research Scientist - Conduct research programs on water quality, constructed wetlands, and water treatment and reuse. Perform research on revegetation of disturbed areas.
July 1994-December 2003	Associate Research Scientist - Conduct research programs on water and energy conservation, constructed wetlands, and water treatment and reuse. Perform research on revegetation of disturbed areas.
September 1979-June 1994	Assistant Research Scientist – See above.

**SELECTED PAPERS/REPORTS**

- Karpiscak, Martin M. C.P. Gerba, R. Marrerro-Ortiz, K.R. Riley. 2006. Evaluating Water Quality Individual & Small Systems in Arizona. *Southwest Hydrology*. 5(5):26-27.
- Orosz-Coghlan, P., P.A. Rusin, M.M. Karpiscak and C.P. Gerba. 2006. Microbial Source Tracking of *Escherichia Coli* in a Constructed Wetland. *Water Environment Research*. 78(3):227-232.
- Quanrud, D., I.M. Bjolseth, M.M. Karpiscak, W. Ela, K. Lansey, and R. Arnold. 2004. Fate of Estrogenic Activity in a Constructed Wetlands Receiving Wastewater Effluent. In: *Proceedings, Seventh Annual Symposium of the Arizona Hydrological Society*. Tucson, AZ. September 15-18, 2004.
- Quanrud, D.M., K. Quast, O. Conroy, M.M. Karpiscak, K.E. Lansey, W.P. Ela and R.G. Arnold. 2004. Measurement of Estrogenic Activity and Volume Contribution of Treated Wastewater in Water from Wells Along the Santa Cruz River, Arizona. *Ground Water Monitoring & Remediation*. 24(2):86-93.
- Quanrud, D.M., M.M. Karpiscak, K.E. Lansey, and R.G. Arnold. 2004. Transformation of effluent organic matter during subsurface wetland treatment in the Sonoran Desert. *Chemosphere*. 54(6):777-788.
- Karim, M.R., F.D. Manshadi, M.M. Karpiscak, and C.P. Gerba. 2004. The persistence and removal of enteric pathogens in constructed wetlands. *Water Research*. 38(7):1831-1837.
- Karpiscak, M.M., K.J. Kingsley, R.D. Wass, F.A. Amalfi, J. Friel, A.M. Stewart, J. Tabor, and J. Zauderer. 2004. Constructed Wetland Technology and Mosquito Populations in Arizona. *Journal of Arid Environments* 56: 681-707.
- Bjolseth, I.M., D.M. Quanrud, M.M. Karpiscak, W.P. Ela, K.E. Lansey, and R.G. Arnold. 2003. Fate of Estrogenic Activity During Wetland Treatment of Wastewater Effluent and Stormwater Runoff. In: *Proceedings, 11<sup>th</sup> Biannual Symposium on Groundwater Recharge*, Phoenix, AZ, June 5-7, 2003.
- Quanrud, D.M., K. Quast, O. Conroy, M. Karpiscak, C. Gerba, K. Lansey, W. Ela, and R. Arnold. 2003. Estrogenic Activity and Volume Fraction of Wastewater Origin in Monitoring Wells Along the Santa Cruz River, Arizona. In: *Proceedings, 11<sup>th</sup> Biannual Symposium on Groundwater Recharge*, Phoenix, AZ, June 5-7, 2003.

- Quanrud, D.M., J. Hafer, M.M. Karpiscak, J. Zhang, K.E. Lansey and R.G. Arnold. 2003. Fate of Organics During Soil-Aquifer Treatment: Sustainability of Removals in the Field. *Water Research* 37(14):3401-3411. Also in *Virtual Journal of Environmental Sustainability*. see <http://www.elsevier.com/vj/sustainability>.
- Falabi, J.A., C.P. Gerba and M.M. Karpiscak. 2002. *Giardia* and *Cryptosporidium* Removal from Wastewater by a Duckweed (*Lemna gibba* L.) Covered Pond. *Letters in Applied Microbiology* 34:384-387.
- Quanrud, D.M., J. Hafer, M.M. Karpiscak, J. Zhang, K.E. Lansey and R.G. Arnold. 2002. Fate of Organics during Soil Aquifer Treatment: Sustainability of Removals in the Field. *Water Research*. In press.
- Nokes, R.L., C.P. Gerba and M.M. Karpiscak. 2001. Microbial Water Quality Improvement During Combined Septic Tank and Subsurface Wetland Treatment. Accepted by *Journal of Environmental Health*.
- Karpiscak, M.M., G.W. France, K.J. DeCook, R.G. Brittain, K.E. Foster and S.B. Hopf. 2001. Casa del Agua: Water Conservation Demonstration House—1986 Through 1998. *Journal of American Water Resources Association* 37(5):1237-1248.
- Casanova, L.M., C.P. Gerba and M.M. Karpiscak. 2001. Chemical and Microbial Characterization of Household Graywater. *J. Environ. Sci. Health A36(4)*:395-401.
- Quiñónez, M. de J., M.M. Karpiscak, Eric D. Ellman and C.P. Gerba. 2001. Removal of Pathogenic and Indicator Microorganisms by a Constructed Wetland Receiving Untreated Domestic Wastewater. *J. Environ. Sci. Health A36(7)*: 1311-1320.
- Shamir, E., T.L. Thompson, M.M. Karpiscak, R.J. Freitas and J. Zauderer. 2001. Nitrogen Accumulation in a Constructed Wetland for Dairy Wastewater Treatment. *Journal of the American Water Resources Association*. 37(2):315-325.
- Karpiscak, M.M., L.R. Whiteaker, J.F. Artiola and K.E. Foster. 2001. Nutrient and heavy metal uptake and storage in constructed wetland systems in Arizona. *Journal of Water Science and Technology* 44(11-12):455-462.
- Karpiscak, M.M., L.R. Sanchez, R.J. Freitas and C. P. Gerba. 2001. Removal of bacterial indicators and pathogens from dairy wastewater by a treatment system. *Journal of Water Science and Technology* 44(11-12):183-190.
- Quanrud, D.M., M.M. Karpiscak, K.E. Lansey and R.G. Arnold. 2001. Behavior of organic carbon during subsurface wetland treatment in the Sonoran Desert. *Journal of Water Science and Technology* 44(11-12):267-272.
- Thurston, J.A., C.P. Gerba, K.E. Foster and M.M. Karpiscak. 2001. Fate of Indicator Microorganisms, *Giardia* and *Cryptosporidium* in Subsurface Flow Constructed Wetlands. *Water Research* 35(6):1547-1551.
- Gerba, C.P., J.A. Thurston, J.A. Falabi, P.M. Watt, and M.M. Karpiscak. 1999. Optimization of Artificial Wetland Design for Removal of Indicator Microorganisms and Pathogenic Protozoa. *Water Science and Technology* 40(4-5):363-368.
- Karpiscak, M.M., R.J. Freitas, C.P. Gerba, L.R. Sanchez, and E. Shamir. 1999. Management of Dairy Waste in the Sonoran Desert Using Constructed Wetland Technology. *Water Science and Technology* 40(3):57-65.
- Karpiscak, M.M., T.M. Babcock, G.W. France, J. Zauderer, S.B. Hopf, and K.E. Foster. 1998. Evaporative Cooler Water Use Within the City of Phoenix. *Journal of American Water Works Association* 90:121-130.
- Karpiscak, M.M., C.P. Gerba, P.M. Watt, K.E. Foster, and J.A. Falabi. 1996. Multi-species Plant Systems for Wastewater Quality Improvement and Habitat Enhancement. International Association on Water Quality. *Water Science and Technology* 33(10-11):231-236.
- Gerba, C.P., T.M. Straub, J.B. Rose, M.M. Karpiscak, K.E. Foster, and R.G. Brittain. 1995. Water Quality Study of Graywater Treatment Systems. *Water Resources Bulletin* 31:109-116.