

References

- Abbaszadegan, M., M. LeChevallier, and C. Gerba. 2003. Occurrence of viruses in US groundwaters. *Journal of American Water Works Association*. 95:107-120.
- Bishop, P. K., et al. (1998), Impacts of sewers on groundwater quality, *Journal of the Chartered Institution of Water and Environmental Management*, 12, 216-223.
- Borchardt MA, Bradbury KR, Gotkowitz MB, Cherry JA, and Parker BL. 2007a. Human enteric viruses in groundwater from a confined bedrock aquifer. *Environmental Science and Technology* 41:6606-6612.
- Borchardt MA, Spencer SK, Harrington GW, Bertz PD, Volenec MJ, Kieke BA Jr., Lambertini E, and Loge FJ. 2007b. Inputs of viruses into municipal drinking water: contaminated groundwater versus distribution system intrusions. Poster presented at the American Society for Microbiology, Toronto, Ontario, May 21-25, 2007.
- Borchardt MA, Haas NL, Hunt RJ. 2004. Vulnerability of municipal wells in La Crosse, Wisconsin, to enteric virus contamination from surface water contributions. *Applied and Environmental Microbiology* 70: 5937-5946.
- Borchardt MA, Bertz PD, Spencer SK, Battigelli DA. 2003. Incidence of enteric viruses in groundwater from household wells in Wisconsin. *Applied and Environmental Microbiology* 69:1172-1180.
- Bradbury, K. R., S. K. Swanson, J. T. Krohelski, and A. K. Fritz. 1999. Hydrogeology of Dane County, Wisconsin. open-file report Open-File Report 1999-04, Wisconsin Geological and Natural History Survey, Madison, WI.
- Clark, I., and P. Fritz, 1997. *Environmental Isotopes in Hydrology*, CRC Press, Boca Raton, FL.
- Carducci A., Verani M., Battistini R., Pizzi F., Rovini E., Andreoli E., and Casini B. 2006. Epidemiological surveillance of human enteric viruses by monitoring of different environmental matrices. *Water Sci. technol.* 54:239-244.
- Fout, G.S., B.C. Martinson, M.W.N. Moyer, and D.R. Dahling. 2003. A multiplex reverse transcription-PCR method for detection of human enteric viruses in groundwater. *Appl. Environ. Microbiol.* 69:3158-3164.
- Hunt, R.A., T.B. Coplen, N.L. Haas, D.A. Saad, and M.A. Borchardt. 2005. Investigating surface water-well interaction using stable isotope ratios of water. *Journal of Hydrology*, 302 (2005). P 154-172.
- Hunt, R.J., and J.J. Steuer. 2000. Simulation of the recharge area for Frederick Springs, Dane County, Wisconsin. USGS Water-Resources Investigations Report 00-4172.
- John, D.E. and J.B. Rose. 2005. Review of factors affecting microbial survival in groundwater. *Environ. Sci. Tech.* 39:7345-7356.
- Kammerer, P.A. 1981. Ground-water-quality atlas of Wisconsin. Information Circular 39. Wisconsin Geological and Natural History Survey.
- Karklins, S. 1996. Groundwater sampling field manual. Wisconsin Department of Natural Resources. Publication PUBL-DG-038-96, 70 p.
- Keswick, B.H. and C.P. Gerba. 1980. Viruses in groundwater. *Environ. Sci. Tech.* 14:1290-1297.
- Kurtz, A. M., J.M. Bahr, Q.J. Carpenter, and R. J. Hunt. 2007. The importance of

- subsurface geology for water source and vegetation communities in Cherokee Marsh, Wisconsin. *Wetlands*, 27: 189-202.
- Lambertini E., Spencer S.K., Bertz P.D., Loge F.J., Kieke B.A. and Borchardt M.A. 2008. Concentration of enteroviruses, adenoviruses, and noroviruses from drinking water with glass wool filters. *Applied and Environmental Microbiology* 74:2990-2996.
- Leif Wolf, I. H., Matthias Eiswirthdagger, Heinz Hötzl, (2004), Impact of Leaky Sewers on Groundwater Quality, *Acta hydrochimica et hydrobiologica*, 32, 361-373.
- Madison Metropolitan Sewerage District (MMSD), 2008. Metro Interceptor (newsletter). Summer/Fall 2008 issue. p 4.
- National Primary Drinking Water Regulations - Ground Water Rule, Final Rule. Federal Register, 71, 224 (21 November 2006) p. 67427 – 65660.
- Osenbrück, K., et al. (2007), Sources and transport of selected organic micropollutants in urban groundwater underlying the city of Halle (Saale), Germany, *Water Research*, 41, 3259-3270.
- Robertson JB, Edberg SC. 1997. Natural protection of spring and well drinking water against surface microbial contamination. 1. Hydrogeological parameters. *Crit Rev Microbiol* 23:143-178, 1997.
- Rutsch, M., et al. (2008), Towards a better understanding of sewer exfiltration, *Water Research*, 42, 2385-2394.
- Schijven, J.F., J.H.C. Mülschlegel, S.M. Hassanizadeh, P.F.M. Teunis and A.M. de Roda Husman. 2006. Determination of protection zones for Dutch groundwater wells against virus contamination – uncertainty and sensitivity analysis. *J Water Health* 4:297-312.
- Sedmak, G., D. Bina, and J. MacDonald. 2003. Assessment of an enterovirus sewage surveillance system by comparison of clinical isolates with sewage isolates from Milwaukee, Wisconsin, collected August 1994 to December 2002. *Appl. Environ. Microbiol.* 69:7181-7187.
- Sedmak, G., Bina D., MacDonald J., and Couillard L. 2005. Nine-year study of the occurrence of culturable viruses in source water for two drinking water treatment plants and the influent and effluent of a wastewater treatment plant in Milwaukee, Wisconsin (August 1994 through July 2003). *Appl. Environ. Microbiol.* 71:1042-1050.
- Swanson, S.K. J.M Bahr, and K.W. Potter. 2006. A local meteoric water line for Madison, Wisconsin. Wisconsin Geological and Natural History Survey, Open-file Report 2006-01. 5 p.
- Trowsdale, S. A., and D. N. Lerner (2007), A modelling approach to determine the origin of urban ground water, *Journal of Contaminant Hydrology: Issues in urban hydrology: The emerging field of urban contaminant hydrology*, 91, 171-183.
- Yates, M. V., C. P. Gerba, and L. M. Kelly. 1985. Virus persistence in groundwater. *Appl. Environ. Microbiol.* 49:778-781.