

Appendix C: Selection of Water Monitoring Research Published During the 2018 NRS Reporting Period

- Arenas Amado, A., Schilling, K. E., Jones, C. S., Thomas, N., & Weber, L. J. (2017). Estimation of tile drainage contribution to streamflow and nutrient loads at the watershed scale based on continuously monitored data. *Environmental Monitoring and Assessment*, 189(9), 426. <https://doi.org/10.1007/s10661-017-6139-4>
- Beck, W., Isenhardt, T., Moore, P., Schilling, K., Schultz, R., & Tomer, M. (2018). Streambank alluvial unit contributions to suspended sediment and total phosphorus loads, Walnut Creek, Iowa, USA. *Water (Switzerland)*, 10(2). <https://doi.org/10.3390/w10020111>
- Jones, C. S., Davis, C. A., Drake, C. W., Schilling, K. E., Debionne, S. H. P., Gilles, D. W., ... Weber, L. J. (2018). Iowa Statewide Stream Nitrate Load Calculated Using In Situ Sensor Network. *Journal of the American Water Resources Association*, 54(2), 471–486. <https://doi.org/10.1111/1752-1688.12618>
- Jones, C. S., Kim, S. won, Wilton, T. F., Schilling, K. E., & Davis, C. A. (2018). Nitrate uptake in an agricultural stream estimated from high-frequency, in-situ sensors. *Environmental Monitoring and Assessment*, 190(4), 226. <https://doi.org/10.1007/s10661-018-6599-1>
- Jones, C. S., Nielsen, J. K., Schilling, K. E., & Weber, L. J. (2018). Iowa stream nitrate and the Gulf of Mexico. *PLoS ONE*, 13(4), e0195930. <https://doi.org/10.1371/journal.pone.0195930>
- Jones, C. S., Schilling, K. E., Simpson, I. M., & Wolter, C. F. (2018, October 31). Iowa Stream Nitrate, Discharge and Precipitation: 30-Year Perspective. *Environmental Management*, pp. 1–12. <https://doi.org/10.1007/s00267-018-1074-x>
- Schilling, K. E., Jones, C. S., Wolter, C. F., Liang, X., Zhang, Y.-K., Seeman, A., ... Skopec, M. (2017). Variability of nitrate-nitrogen load estimation results will make quantifying load reduction strategies difficult in Iowa. *Journal of Soil and Water Conservation*, 72(4), 317–325. <https://doi.org/10.2489/jswc.72.4.317>
- Schilling, K. E., Kim, S.-W., Jones, C. S., & Wolter, C. F. (2017). Orthophosphorus Contributions to Total Phosphorus Concentrations and Loads in Agricultural Watersheds. *Journal of Environment Quality*, 46(4), 828. <https://doi.org/10.2134/jeq2017.01.0015>
- Schilling, K. E., & Streeter, M. T. (2018). Groundwater Nutrient Concentrations and Mass Loading Rates at Iowa Golf Courses. *Journal of the American Water Resources Association*, 54(1), 211–224. <https://doi.org/10.1111/1752-1688.12604>
- Schilling, K. E., Streeter, M. T., Bettis, E. A., Wilson, C. G., & Papanicolaou, A. N. (2018). Groundwater monitoring at the watershed scale: An evaluation of recharge and nonpoint source pollutant loading in the Clear Creek Watershed, Iowa. *Hydrological Processes*, 32(4), 562–575. <https://doi.org/10.1002/hyp.11440>

Schilling, K. E., Streeter, M. T., Isenhardt, T. M., Beck, W. J., Tomer, M. D., Cole, K. J., & Kovar, J. L. (2018). Distribution and mass of groundwater orthophosphorus in an agricultural watershed. *Science of the Total Environment*, 625, 1330–1340. <https://doi.org/10.1016/j.scitotenv.2018.01.035>

Streeter, M. T., & Schilling, K. E. (2018). Effects of golf course management on subsurface soil properties in Iowa. *SOIL*, 4(2), 93–100. <https://doi.org/10.5194/soil-4-93-2018>