Susan E. Bailey

Research Civil Engineer

USACE Engineer Research and Development Center, CEERD-EP-E
3909 Halls Ferry Road, Vicksburg, MS 39180
Ph. 1-601-634-3932
Susan.E.Bailey@erdc.usace.army.mil

Ms. Susan Bailey is a research civil engineer at the U.S. Army Engineer Research and Development Center (ERDC), Environmental Laboratory in Vicksburg, Mississippi. She received her BS in Civil Engineering from the North Carolina State University, and a MS in Civil and Environmental Engineering from Louisiana State University. She also holds a professional engineering license for Civil Engineering in the State of Mississippi. She has over 15 years' experience working with applied engineering and research related to sediments and dredged material management. Her main focus, has been on contaminant and sediment transport and modeling to evaluate risk related to dredged material placement and management of contaminated sediments. She is also performing lab and field studies to examine the ability to model consolidation of dredged material placed for marsh restoration. More recently she has been applying her background in sediment transport to issues associated with dam removal.

S. Kyle McKay, Ph.D., P.E. , Ph.

Research Civil Engineer

26 Federal Plaza, Room 2146
New York, NY 10278
Cell: 601-415-7160; Office: 917-790-8717
Kyle.McKay@usace.army.mil

Dr. Kyle McKay is a research civil engineer with the U.S. Army Engineer Research and Development Center (ERDC) Environmental Laboratory (EL). He received a B.S. in Environmental Engineering from Colorado State University, an M.S. in Civil Engineering from University of Illinois Urbana-Champaign, and a Ph.D. at the University of Georgia's Odum School of Ecology. His research focuses broadly on examining ecological effects of water resources infrastructure with applications related to stream and watershed restoration, fish passage improvement, environmental flow management, and sustainability policy. He is stationed in the USACE New York District to facilitate cooperative research between the ERDC, the District, and other local partners.

Relevant Publications

- McKay S.K., Martin E., McIntyre P., Milt A., Moody A., and Neeson T. From tragedy to strategy: Alternative approaches for prioritizing instream connectivity barriers. Submitted to *Conservation Letters*.
- McKay S.K., Richards N., and Swannack T. *In press*. Aligning ecological model development with restoration project planning. ERDC TR-EMRRP. U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi.
- McKay S.K., Pruitt B.A., Zettle B.A., Hallberg N., Moody V., Annaert A., Ladart M., Hayden M., and McDonald J. *In press*. Proctor Creek Ecological Model (PCEM): Phase 2 benefits analysis. ERDC TR-EL. U.S. Army Engineer Research and Development Center.
- McKay S.K., Pruitt B.A., Zettle B., Hallberg N., Hughes C., Annaert A., Ladart M., and McDonald J. *In press*. Proctor Creek Ecological Model (PCEM): Phase 1 Site screening. ERDC TR-EL-##. U.S. Army Engineer Research and Development Center.
- McKay S.K., Cooper A., Diebel M., Elkins D., Oldford G., Roghair C., and Wieferich D. 2017. Informing watershed connectivity barrier prioritization decisions: A synthesis. *River Research and Applications*, 33 (6), 847-862.
- McKay S.K., Reif M., Conyngham J.N., and Kohtio D. 2017. Barrier prioritization in the tributaries of the Hudson-Raritan Estuary. ERDC TN-EMRRP-SR-82. U.S. Army Engineer Research and Development Center.
- Crawford B.A., Katz R.A., and McKay S.K. 2017. Engaging stakeholders in natural resource decision-making. *ERDC TN-EMRRP-83*. U.S. Army Engineer Research and Development Center.
- McKay S.K., Freeman M.C., and Covich A.P. 2016. Application of effective discharge analysis to environmental flow decision making. *Environmental Management*, 57 (6), 1153-1165.
- McKay S.K. 2015. Quantifying trade-offs associated with hydrologic environmental flow methods. *Journal of the American Water Resources Association*, 51 (6), 1508-1518.
- McKay S.K., Schramski J.R., Conyngham J.N., and Fischenich J.C. 2013. Assessing upstream fish passage connectivity with network analysis. *Ecological Applications*, 23 (6), 1396-1409.
- Conyngham J., McKay S.K., Fischenich C., and Artho D. 2011. Environmental benefits analysis of fish passage on the Truckee River, Nevada: A case study of multi-action-dependent benefits quantification. ERDC TN-EMRRP-EBA-06. U.S. Army Engineer Research and Development Center, Vicksburg, Mississippi.