

Sewage Overflows from the 1,000-Year Rain Event and Their Impacts on the Cycling of Carbon and Toxic Metals in the Congaree River Watershed

The 1000-year rain event in Columbia, S.C. resulted in the release of untreated sewage into the Congaree River watershed due to flooded wastewater treatment plants and sewage overflows. Increased dissolved organic carbon will impact the transport of toxic metals and nanoparticles, and the biogeochemical cycling of mercury. In collaboration with the [Congaree Riverkeeper](#), samples will be collected for six months at strategic locations to determine the carbon budget, concentrations of metals, and nanoparticle and nanoparticle-metal interactions. Our aims are to characterize the impacts of sewage inputs on the export of nanoparticles and trace metals to downstream watersheds, and mercury methylation.

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