



**Monroe and Pike County Conservation Districts'
2020 NPDES Workshop
LandStudies Presenter Information**

Presenter:

Justin Spangler, P.E.
Water Resources Engineer | Project Manager

Bio:

Justin Spangler is a Professional Engineer and Project Manager specializing in the design and implementation of Floodplain Restoration projects. His design philosophy employs the application of historical and geomorphic evidence to identify impairments which is used to return aquatic resources to their maximum ecological potential. He manages cutting edge restoration projects that challenge the traditional expectations of ecological restoration and their use as Post Construction Stormwater Management (PCSM) Best Management Practices (BMPs).

Abstract:

Legacy Sediment is an impairment that is ubiquitous to areas with a long history of water-powered milling operation, leading to widespread water quality degradation in many watersheds across the United States. The presence of Legacy Sediment in our floodplains impairs many basic watershed functions by increasing peak flow rates during storm events while decreasing groundwater recharge and water quality. This presentation will focus on case studies where Legacy Sediment removal projects have been incorporated into land development projects, providing quantifiable benefits to the ecosystem, the development, the municipality and the watershed.