

Selection and Implementation of a Comprehensive Stormwater Improvement Project

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Abstract. The City of Griffin, Georgia (City) is constructing a comprehensive watershed improvement project adjacent to a county park and a middle school. The Kelsey Avenue Ecosystem Restoration project includes 970 feet of stream restoration, a dry detention pond, a bioretention area, and the replacement of two undersized culverts within the stream restoration reach. The design includes native vegetation, floodplain benches, natural channel structures, and properly sized culverts. These discrete improvement projects are being designed and constructed as a single ecosystem restoration project so that the individual elements can be fully integrated into a well-functioning system. The project will improve failing infrastructure, reduce pollutant loads entering an impaired stream, stabilize banks and improve habitat along a degraded stream reach, facilitate fish passage, and provide an improved environment and educational resource for the middle school. The stream restoration, dry detention, and bioretention components are improvement projects recommended in the City's Cabin Creek Watershed Protection Plan (Tetra Tech 2012). They were recommended based on a watershed assessment that identified management needs, and a BMP modeling effort that identified the most cost effective BMP projects for reducing nutrient and TSS loads. The close proximity of these projects to each other and to planned DOT culvert replacements allowed the projects to be integrated to achieve multiple objectives and significant cost savings. The project, which received a 319 grant, supports other initiatives in the watershed, including community revitalization efforts and the City's Green Infrastructure practices.