GWINNETT COUNTY DWR GREEN STORMWATER INFRASTRUCTURE SERVICES

CLIENT
Gwinnett County Dept. of Water Resources

LOCATION
Gwinnett County, GA

LOCATION
$1 million annually

DURATION
3 Years

COMPLETED
Est. 2020

ROLE
Stormwater Consultant

Blue Cypress Consulting staff have provided professional services to support the implementation of the Gwinnett County Watershed Protection Plan. This includes specialized research, studies, feasibility assessments, and project concept development to protect and improve in-stream water quality and aquatic habitat. Tasks include smart stormwater design feasibility studies, watershed assessments, and design of stormwater low impact development/ green infrastructure facilities. Tasks performed within this category include public education and outreach, project evaluation and selection, hydraulic and hydrologic modeling, design, permitting, preparation of bid documents, construction management and administration support, and monitoring and inspections. These tasks will be performed on watershed improvement type projects including new and retrofit best management practice (BMP) design. Tasks to date include:

Shannon Way Stormwater BMP Replacement. Blue Cypress Consulting staff evaluated an underperforming existing stormwater BMP in order to provide the County with conceptual green infrastructure replacement BMP options which will address site erosion and instability while also providing water quality treatment for the upstream drainage area. Specific scope of services includes: desktop analysis, field assessment, H&H analysis, concept evaluation, geotechnical investigation, development of concept alternatives, and a technical memorandum to document the study and results. Blue Cypress Consulting staff provided an off-line submerged gravel wetland concept design to meet the County's design criteria and provide an opportunity for implementation of an innovative green infrastructure practice.

Shoal Creek Filter Plant Smart Stormwater Design Master Plan. To assist the County's Watershed Improvement Program (WIP) with their goal to become a leader in smart stormwater management and watershed protection, Blue Cypress Consulting staff developed a master plan to identify opportunities for implementation of innovative stormwater BMPs and improvements to existing stormwater infrastructure. Tasks include location and evaluation of potential BMP opportunities, development of conceptual BMP designs, a master plan report, QA/QC, and various client meetings.

Shoal Creek Pervious Concrete Parking Lot Design. Blue Cypress Consulting staff designed and provided construction oversight of a new 36-space pervious concrete parking lot demonstration project near the main administration building at the Shoal Creek Filter Plant. Task include development of concept design, H&H analysis, final construction documents including plans, engineer's cost estimate, and specification special provisions, and providing construction support services. The proposed design provided infiltration of the water quality storm and detention of the 2- through 25-year runoff event.

Tribble Creek Watershed Master Plan. Blue Cypress Consulting staff developed a comprehensive, systematic stormwater master plan process and applying that process to the 10 square mile Tribble Creek watershed as a pilot project for a green infrastructure focused watershed master plan. Specific services include development of a watershed characterization process document and development of a BMP selection, siting, and prioritization process document and tool. Blue Cypress Consulting staff provided a summary watershed master plan technical report for the Tribble

Creek watershed. The County will use the processes and tools developed in this study for future watershed master plans in order to ensure that watershed planning efforts are focused, effective, and efficient and therefore best managed nonpoint sources of water pollution.