

WATER RESOURCES ENGINEERING

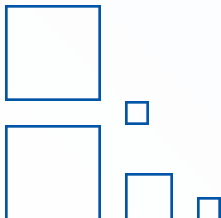
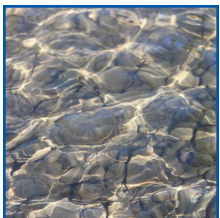
STREAM RESTORATION SERVICES

Flooding, storm water, land use changes, and urbanization can all change the hydrology (stream flow) and morphology (stream pattern) of a stream. As landowners move toward a more natural way of working with the land, stream restoration can rehabilitate a stream segment or entire watershed by working with nature instead of against it. Gress staff can conduct Rosgen Geomorphic surveys; conduct cross-sectional and profile surveys and pebble counts; sketch stream segments; determine dimension, pattern and profile of streams; classify streams according to Rosgen categories; and calculate average bankfull velocities and flows. Gress has designed Best Management Practices to minimize streambank erosion, increase fish habitat, and allow for a stable natural stream flow through the watershed. Projects have ranged from design only up through design/build, with Gress staff overseeing the in-stream construction.

Gress Engineering, PC staff has experience in computer modeling, evaluating modeling scenarios, evaluating the effectiveness of Best Management Practice (BMP) alternatives, and developing implementation scenarios with appropriate BMPs. Our staff can conduct public meetings, compile all results in final documents, and create and present PowerPoint presentations.

STORM WATER SERVICES

Storm water issues are common in any urban area. Curb and gutter systems that transport storm water directly to streams are no longer the norm. As more of the smaller municipalities are required to apply for MS4 permits, a knowledge of storm water, its' properties and transport, is essential. Gress staff is familiar with storm water management issues and MS4s, including BMP selection and retrofits. Staff can design BMPs that work with the issues within a watershed in order to create and preserve natural stream channels.



RESTORATION TRAINING
1 - Level 4 (Paul M.)
1 - Level 2 (Megan M.)
1 - RC101, 201, 302 (Paul M.)
1 - RC101, 161, 201 (Mark C.)
2 - RC101, 201 (George S.)
ROSGEN/NC STATE

