

# Wastewater Collection & Treatment

Engineering | Planning | Environmental



BREC has the expertise and innovative approach needed to meet the challenges associated wastewater management. We have experience in preliminary engineering design, evaluation, rehabilitation, permitting and construction administration of many wastewater collection systems and treatment facilities. We construct communities with a wide range of wastewater engineering projects, from small, rural and private wastewater management systems, up to large municipal wastewater treatment systems.

We are intimately familiar with the North Carolina regulatory environment, which allows us to easily find the right solution for your site. We have extensive experience with large on-site wastewater systems, utilizing a wide range of pre-treatment systems and innovative disposal types (lagoons, spray irrigation, drip irrigation).

Our wastewater planning engineering technologies are continuously improving to stay current with ever-changing regulatory and financial concerns. Furthermore, our team designs flexibility and longevity into every project to avoid unnecessary future costs associated with operation and maintenance of wastewater facilities.

## Our areas of focus in the wastewater industry generally include the following:

- Wastewater Treatment Plant/Facilities Design
- Treatment System Efficiency Analysis
- Regulatory Compliance Evaluation
- Sewer System infiltration/Inflow Studies
- Facilities Planning
- Residuals Management Systems
- Wastewater Pretreatment Planning/Permitting
- On-Site Wastewater Disposal Systems
- Wastewater Lift Station Design
- Wastewater Treatment Plant Start-up and Training
- Vacuum Sewer System Design
- Sewer Rate Studies
- Bridge/Stream Crossings
- Constructor Study
- Wastewater Treatment Plant Operations/Maintenance Manuals
- Instrumentation Process Monitoring (SCADA)
- NPDES Permitting Services
- DRIP Sewer System
- Emergency Response Plans
- Disinfection Systems Evaluation/Design
- Sanitary Sewer System Planning/Design
- Low-Pressure Sewer Collection Systems
- Sewer Systems Mapping/GIS
- Constructed Wetlands
- Sludge Dewatering and Odor Control Systems
- Spray Irrigation Systems
- Residential and Community Subsurface Systems