

City of Clayton **Sewer System Evaluation Utilizing Smoke Testing** *Rabun County, Georgia*

Services Provided:

Manhole Inspection

Flow Monitoring

Digital Mapping

Interagency Coordination
Local Police Department
Local Fire Department
Georgia Rural Water Assoc.

Smoke Testing

Dye Flood Testing

Project Data:

Project Completion Date:
December 2004

429 Manholes

130,555 LF of Sewer Line

Total Project Cost:
\$120,000.00

Contact:

City Manager

City of Clayton

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Clayton, GA 30525

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The City of Clayton was experiencing problems with extraneous water leaking into the wastewater collection system. The City contracted with EMI for services related to a thorough analysis of the sewer system to identify all of the inflow sources, and to recommend a method for making repairs. The analysis included manhole inspection, flow monitoring, digital mapping and smoke testing.

Smoke testing is used to detect inflow sources such as storm sewer cross-connections and point source inflow leaks in drainage paths; ponding areas; roof leaders; cellar, yard, and area drains; fountain drains; abandoned building sewers; and faulty service connections. The tests require the use of liquid smoke which is non-toxic, odorless, and non-staining.

Communication with the public and local safety agencies is another essential component to the smoke testing process. Public notification via newspaper ads, radio ads and distribution of "Notice to Residents" handouts was coordinated prior to testing. Once testing began, daily communication with the local fire and police departments was conducted to ensure a successful and safe project.

Leaks determined by the smoke testing were further examined with dye flooding the sewer system cross connections.

The final result of the sewer system evaluation conducted by EMI included documenting the exact locations where the leaks were occurring, and a proposed plan of action to make the necessary repairs.