

## Goetz Ditch Improvement Project

project description | stormwater

**location**

Owensboro, Kentucky

**client**

City of Owensboro

**completion date**

Ongoing

**budget**

\$4,200,000



CDP Engineers, Inc. is working with the City of Owensboro to alleviate flooding in the Goetz Ditch watershed. With very flat terrain and channel slopes (on the order of 0.01%), backwater flooding is a serious problem in Owensboro, simply because the water does not have a place to drain to quickly. Goetz Ditch is especially affected by flooding because the entire upstream watershed is fully developed with a very high amount of impervious area. Other concerns included standing water near residential areas, which could be habitat for mosquitoes, and that flood improvements to the channel should not degrade water quality and be NPDES Phase II compliant.

In order to meet the many objectives of the project, CDP Engineers and the City of Owensboro developed an innovative solution to reduce flooding, maintain and improve water quality, and reduce mosquito habitat near residential areas. The solution consists of storm sewer upgrades in the urban area of town, channel improvements through the suburbs, and the construction of a large detention basin/wetlands downstream of town. The detention basin effectively will serve as a large drain that allows the water upstream a place to drain into.

**project components**

- Field survey of the existing storm sewer system.
- Development of a detailed SWMM model of the existing system and proposed improvements.
- Construction drawings of the proposed storm water improvements in the Goetz Ditch watershed, designed to be constructed in three phases
- Construction administration services.