

2012 Lytle Creek Watershed Illicit Discharge Detection Elimination

October 22-24, 2012

Including Town Creek, and Spring Branch



MURFREESBORO
STORMWATER
PROGRAM
improving the quality of local streams

Introduction

The city of Murfreesboro is required to have an Illicit Discharge Detection Elimination program as described in rule 4.2.3 of the Small MS4 General NPDES Permit. The city of Murfreesboro maintains a GIS database containing all stormwater infrastructure including outfalls in order to comply with this rule as well as assist in dry weather screening and illicit discharge detection. During the month of October of 2012 staff members of the Stormwater Program screened 30 outfalls within the Lytle Creek Watershed as well inspected the surface and recharge basins of an existing illicit discharge to Lytle Creek. The screening took place on October 21st-24th with last recorded precipitation occurring on October 18th which exceeded the required 72 hours of dry weather specified. The goal of this screening was to detect and eliminate any illicit discharges but also photograph and document the condition of the screened outfalls.

About the watershed

The Lytle Creek watershed contains several tributaries within the Murfreesboro urban growth boundary as well as many large springs which drain a large subterranean recharge basin as seen by dye tracing. Many of these segments are impaired or have TMDL's. One goal of this screening is to locate possible sources contributing to the below impairments. There are roughly **30** outfalls discharging into Lytle Creek or to one of its tributaries from large stormwater networks.

Stream	Impairment	TMDL?
Lytle Creek	Sediment Escherichia coli Alteration in stream-side or littoral vegetative covers	Yes
Town Creek	Dissolved Oxygen Escherichia coli	Yes

Findings

During the 2012 IDDE dry weather screening approximately **30** outfalls were screened and an estimated **3.16 miles** of Lytle were walked. In addition **5** junction boxes were screened in the basin of a previous existing illicit discharge. This discharge was being investigated at the time of this report by MWSD's operation and maintenance department. It was also noted that the segment of Lytle Creek from S Church St to Old Salem Hwy was inundated with all sizes of trash including various appliances.

Outfall ID	Flow Type	Investigation
204a06_03	light	Seep comes up in concrete swale
204a07_09	light	Possible water leak .05mg/l
204a07_20	light	Draining wetland
204a05_11C	heavy	Possible spring
204a05_08	Light flow	Possible spring

