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**Collaboration to establish a dry weather screening program in southwest Ohio**

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**Abstract Text:**

To fulfill the requirements of the National Pollutant Discharge Elimination System Phase II permit, the Butler County Storm Water District (BCSWD) has teamed up with the Institute of Environmental Sciences (IES) at Miami University to perform the annual dry weather outfall stream screening in Butler County, Ohio. The mission of BCSWD is to safeguard public health and protect the environment of this fast growing area in Ohio. Outfall stream mapping and screening is part of the illicit discharge detection and elimination minimum control measures and is part of the process required to reduce the discharge of pollutants and protect water quality.

In southwest Ohio, eight townships in Butler County are being inventoried to detect illicit and/or inappropriate connections to the storm drainage system. Under a service contract with BCSWD, IES inventoried and inspected 400 outfalls and 200 stream sampling locations in 2007. Discharge points, including flowing or non-flowing closed pipes or open drainage channels to a blue-line stream were inspected. If flow was present under "dry weather" conditions (period of no rainfall for at least 48-hours), a sample was collected and analyzed for nitrate, phosphate, ammonia, copper, chlorine, conductivity, pH, temperature, and hardness.

With the partnership already formed between BCSWD and IES for the Butler County Stream Team, a volunteer stream monitoring program, the dry weather screening project became an extension of the Butler County stream monitoring program. IES conducts the field assessments and data input, and provides laboratory equipment and technical expertise for chemical analyses, while BCSWD provides funding, outreach coordination, and input on regulatory requirements. The dry weather screening program results in students benefiting from practical and service learning experience, and information gathered from outfall locations and dry weather flow pollutant levels allows BCSWD to detect, locate, and eliminate illicit discharges from the Butler County storm drain system.

**Impact Statement:**

The dry weather screening program provides assistance to BCSWD to detect illicit and/or inappropriate connections to the storm drainage system. It provides a foundation for the reduction of discharge of pollutants and increased water quality protection.