## RURAL-URBAN WATERSHED PARTNERSHIP



FOR WATER QUALITY REQUIREMENTS

# WATERSHED benefits

The offsite program is designed to benefit water quality in the Arkansas River by removing at least twice the amount of sediment as would be achieved by onsite Best Management Practices (BMPs). By using the offsite BMP program, developers realize significant economic benefits because they can avoid expensive urban installations for sediment reduction, such as hydrodynamic separators (HDS) or other onsite BMPs. Developers save more than just upfront costs as well: the estimated lifecycle cost of an HDS is \$1,100 for maintenance, inspections, and replacement. In comparison, by choosing to participate in the offsite program, developers have the option to pay an annual fee of \$19/acre in lieu of HDS installation. These annual fees help incentivize area farmers to convert their acres to no-till, which reduces significantly more sediment upstream, and for a fraction of the cost of on-site methods.

## **OUTCOME-BASED**

Since the first permits were issued in September 2016, the offsite BMP program substitutes the use of on-farm solutions that reduces significantly more sediment upstream for a fraction of the cost of urban solutions.

## **INNOVATIVE**

This program is the first of its kind and provides an option to meet postconstruction water quality requirements while improving water quality in the watershed and lowering costs for development and business owners.

### **TEAM-BUILT**

The City of Wichita's Stormwater Advisory Board, the City Council, Kansas State University and the Kansas Department of Health and Environment collaborated to create a partnership of private developers, farmers and government regulators.

## **IMPACT SNAPSHOT**

\$6.28 million

in upfront cost savings for private development

1201

development acres enrolled

835

offsite acres converted to no-till

2672

tons of offsite sediment reduced annually due to cropland BMPs

\$460,900

in annual savings for private development and businesses

## **PROGRAM**

success

Part of this program's success is due to farmer support in the Little Arkansas River Watershed. To date, a reported total of 299 developments (1201 acres) are participating in the Offsite BMP program, and these acres would produce an estimated 480 tons of sediment. To offset this, 835 acres of upstream farmland has been converted to no-till through incentives and education. As a result of this program, annual offsite sediment load has been reduced by an estimated 2672 tons, developers and businesses in Wichita have been able to save more than \$6.2 million in upfront costs, and the city reports \$460,900 in ongoing annual savings for private businesses.

## **EYES ON THE**



The offsite BMP program in Wichita will continue to grow and evolve, and its continued success will help to establish a model for a regional approach to water quality management. As the Offsite BMP Program forges ahead, careful monitoring and accurate reporting is necessary to establish actual costs and savings for all involved. Local engagement and detailed accounting of sediment removal and other water quality impacts such as atrazine use is a key requirement for city, state, and federal regulators. Ensuring that water quality benefits from the offsite practices continue in perpetuity remains the fundamental key to this program's long-term success. Progress hinges on participation by farmers in the Little Arkansas watershed, located upstream from the City of Wichita.

## PROGRAM CONTACTS

#### **RON GRABER**

KCARE Watershed Specialist K-State Resesarch and Extension rgraber@ksu.edu

## MARK A. HALL

Program Manager, City of Wichita Mahall@wichita.gov

### TRISHA MOORE

Associate Professor, Biological and Agricultural Engineering Kansas State University tlcmoore@ksu.edu











