



# Facts about Water and Stormwater Management in SEDGWICK COUNTY

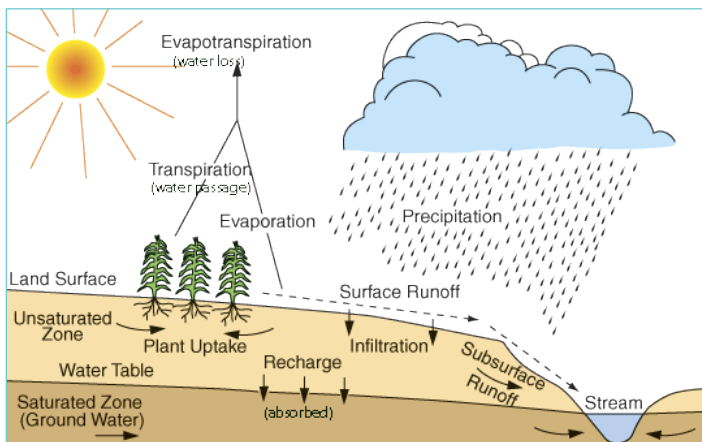
*Sedgwick County is 2,000 square miles in size with a population of close to 500,000 people. The County crosses eight watersheds within the Lower Arkansas and Walnut River Basins with the most notable rivers being the Arkansas and Little Arkansas Rivers. Drainage throughout the County is by way of the Arkansas River and its tributaries including Big Slough, Cowskin Creek, and the Ninnescah.*

## Where Does Your Water Come From?

Precipitation (rain and snow) is the primary source of water for recharging groundwater. Groundwater provides water to creeks and rivers like the Arkansas, Little Arkansas, and the Ninnescah and the Cheney Reservoir all of which are surface waters. The Reservoir provides at least 50% of the surface water available for public use. The State determines the amount of surface and groundwater that can be used (appropriated) without impacting flows in the rivers.

The amount of surface water available annually from the Little Arkansas, Ninnescah, and the Cheney Reservoir is approximately 572,000 acre-feet. An acre-foot is one foot deep water over one acre of area.

Water rights in the county and the state are generally several times greater than the average rate of use for public water supplies. Average public water use in Sedgwick County is 55% (134,200 acre-feet/year) of the total appropriated surface and ground water rights available.



Water Use Category	Volume of Water Appropriated (acre-feet/year)	Estimated Volume of Water Use (acre-feet/year)
Municipal	126,100	57,000
Irrigation	69,700	53,500
Industrial	48,500	18,900
Rural Homes	-	4,800
<b>Total</b>	<b>244,300</b>	<b>134,200</b>

Source: Kansas Geological Survey.

Cities, rural water districts, and one utility provide water service for 90% of the county's population.



Sedgwick County...  
working for you



## History of Flooding in Sedgwick County

Sedgwick County has a history of large flooding events that stretches all the way back into the late 19th Century. The largest flood on the Lower Arkansas River occurred on May 18, 1877. Water levels in the river at Wichita reached a stage of 21 feet, which was nine feet above flood stage (National Weather Service Records).

The second largest flood on record occurred on July 8, 1904, submerging approximately 30% of the land area in the City of Wichita, resulting in significant damage and costs.

Significant flood events of record in the twentieth century included 1944, 1945, 1951, 1957, 1962, 1979, 1993, and 1998. These flood events have resulted in hundreds of millions of dollars in damage.

The U.S. Army Corps of Engineers, Sedgwick County, and the City of Wichita completed the Wichita-Valley Center Floodway project between 1948 and 1958. The primary goal of this project was to control large-scale floods that historically caused damage to the City of Wichita's core areas.

Excessive rainfall resulted in major flooding events along the Arkansas River and many of its tributaries during the Halloween Flood of 1998. This event was recorded as having flooded a larger area in Kansas than the 1993 floods.

Flooding continues to be a major concern within the County with the most recent flood of 2008 having caused millions in property damage. The City of Wichita and Sedgwick County currently spend approximately \$1.9 million annually to maintain the Wichita-Valley Center Flood Control project.

## Sedgwick County Stormwater Management

In 2007, the Sedgwick County Commission created the Stormwater Management Advisory Board (SMAB) with the mission to protect lives and property within Sedgwick County by promoting better stormwater management and providing financial, technical, and other assistance to all entities within Sedgwick County that are concerned with stormwater management.

The focus of the County's Stormwater Management Program isn't just flood control. Specific goals include:

- Minimize threats to life, property, and infrastructure from flooding.
- Make investments to avoid future taxpayer liability. Build public support for actions, activities, and behaviors that lead to the protection of water resources.
- Foster high quality economic development.
- Enhance quality of life for citizens throughout Sedgwick County, not just those directly impacted by flooding.
- Protect environmental quality.