BACKGROUND
Once housing a flourishing agricultural community, Crowley County is today characterized by vacant homesteads, dry or drying lands, and shuttered businesses. Tumbleweeds have become a health and safety hazard. Scholars have attributed the decline of irrigated agriculture in Crowley County, Colorado to a variety of factors. Among these are: the region's mid-latitude steppe climate characterized by overall aridity and weather extremes; booster misrepresentations; a utilitarian growth ethic that commodified natural resources; and neglected the requirements for their sustainable stewardship; variable and often inadequate water supply; minor water rights in the county relative to the more senior rights of nearby counties; adverse environmental consequences of irrigation for water infrastructure and soils; international market fluctuations for sugar and other commodities; and expanding urbanization in the Front Range.

ARKANSAS RIVER DISCHARGE VARIABILITY
Irrigated agriculture in Crowley County depends on Arkansas River discharge, which can be highly variable from year to year, making farming a precarious undertaking.

GEOGRAPHIC SETTING
Crowley County is situated in southeastern Colorado on the Great Plains at a distance of about 160 miles from Denver and 50 miles east of the city of Pueblo. Its population attained its height in the early part of the twentieth century when irrigated sugar beets could be highly profitable. The population declined throughout most of the century as agriculture became more and more untenable. The county now houses two prisons. According to the U.S. Census, its height in 1920, Crowley had a population of about 4600. Today its population is approximately 5800, of which about 2000 are prison inmates.

CLIMATE VARIABILITY
Crowley County has a midlatitude, continental location and is in the rain-shadow of the Rocky Mountains. Farmers have continually faced extreme weather. As is typical of the midlatitude steppe environment, the county experiences a wide range of daily and annual temperatures, which can be problematic for farmers. In July, the average daytime temperature is 94.6 degrees F, which makes the county one of the hottest places in the state. Precipitation is both limited and erratic. Annual precipitation ranges from eleven to twelve inches a year. Monthly moisture also varies widely from year to year. The frost-free season extends for 164 days. Winds in February and March can result in crop damage. Great Plains weather hazards such as blizzards, hail, lightning, and flooding occur with some frequency. Most prominently, drought occurs cyclically and can last for years. Deforestation in the upper reaches of the Arkansas Basin has accelerated spring discharges and proportionately decreased summer flows. Summer flows, of course, are crucial for crops.

WATER SUPPLY
As the graph above illustrates, Arkansas River discharge can be extremely variable from year to year. Thus, Crowley County irrigators were beset with sometimes gut-wrenching uncertainty from one year to the next. In addition, problems with evaporation, with canal seepage, and with the requirements for carriage water reduced the flow through the region and onto farms. Depostination presented another problem. Depostination in the upper reaches of the Arkansas Basin accelerated spring discharges and proportionately decreased summer flows. Summer flows, of course, are crucial for crops.

WATER LAW
Colorado is a prior appropriation state, meaning that irrigators with senior water rights receive their full share of water before farmers with junior water rights. Those with junior rights get the water that remains if there is any. "First in time, first in right."