

## Republican River Basin Study

**Contact Information:** Signe Snortland, NKAO, 701-221-1278; [jsnortland@usbr.gov](mailto:jsnortland@usbr.gov)

The Republican River Basin Study area covers the entire Republican River Basin in eastern Colorado, southern Nebraska, and northern Kansas down to the Clay Center gauging station in Kansas. Surface and groundwater resources in the basin serve 2.7 million acres of irrigated agriculture, municipalities, industry, recreation, and wildlife. Seven Reclamation storage reservoirs and one U.S. Army Corps of Engineers reservoir (Harlan County) supply water to agriculture. Most of the upper Basin is underlain by the Ogallala Aquifer, a significant underground resource with declining water levels in some parts of the aquifer.

The basin is subject to an interstate compact, the 1943 Republican River Compact, which allocates water among the States of Colorado, Nebraska, and Kansas. At present, the States are litigating compliance issues before the U.S. Supreme Court and its appointed Special Master.

The study evaluates the viability of water management strategies to optimize surface and groundwater use in consideration of meeting multiple demands and the potential effects of climate change. It will:

- Project future supply and demand in the Republican River Basin.
- Analyze how existing water operations and infrastructure will perform in the face of increasing water demands.
- Identify and evaluate options to improve operations and infrastructure to address future water supply needs.
- Recommend options (operations and infrastructure) to supply adequate water in the future.

The Republican River Basin Study is a collaborative effort among the States of Colorado, Nebraska and Kansas and the Bureau of Reclamation. Nearly \$850,000 has been committed with a federal contribution of 49% and a non-federal cost share of 51%.

