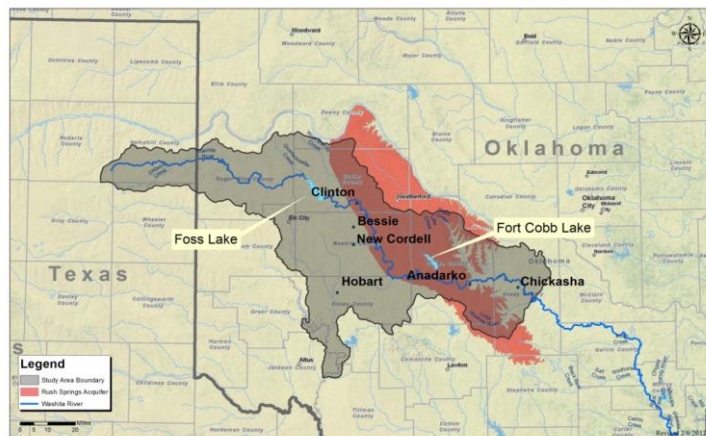


## Upper Washita Basin Study

**Contact Information:** Collins Balcombe, OTA0, 512-899-4162; [cbalcombe@usbr.gov](mailto:cbalcombe@usbr.gov)

The Upper Washita River Basin is comprised of over 5,000 square miles of drainage area in west central Oklahoma, along with the Texas panhandle. It includes the Rush Springs aquifer, a critical agricultural supply source that supplies many springs and streams and provides unique environmental, recreational, and cultural values to the area. The Bureau of Reclamation's Washita Basin Project, comprised of both Foss and Fort Cobb Reservoirs, provides 90 percent of the surface water supplies in the study area, including municipal water to 40,000 people and two power generation facilities. Both reservoirs are currently experiencing challenges due to aging, inefficient, and/or undersized infrastructure.



According to the recently completed 2012 Oklahoma Comprehensive Water Plan, demands are projected to increase substantively by 2060 for all uses in the study area. Under current permitting procedures, depletions in the Rush Springs aquifer are forecast throughout much of the study area by 2020. These depletions may reduce flows of Cobb Creek, which contributes to Fort Cobb reservoir's firm yield, and therefore threaten the reliability of Fort Cobb reservoir as a supply source.

This study will:

- Perform projections of how climate change and variability may impact future water needs;
- Characterize and quantify surface and groundwater resources;
- Develop a groundwater flow model on the Rush Springs aquifer to accurately determine the amount of groundwater available for future appropriations;
- Develop a surface water allocation model to evaluate various water management options, including protecting the future water supply capabilities of Foss and Fort Cobb reservoirs;
- Assess operational and infrastructure constraints associated with Foss and Fort Cobb reservoirs; and
- Evaluate alternatives to address infrastructure and water supply issues facing the study area, both now and in the future.

Stakeholders, including the direct beneficiaries of both Foss and Fort Cobb reservoirs, along with the tribal, agricultural, municipal, industrial, and domestic users of surface and groundwater supplies, will be engaged throughout the study.

The total estimated study cost is \$700,000. Reclamation is providing \$250,000 (36 percent) and the non-Federal partners are providing \$450,000 (64 percent) of the total study cost.

