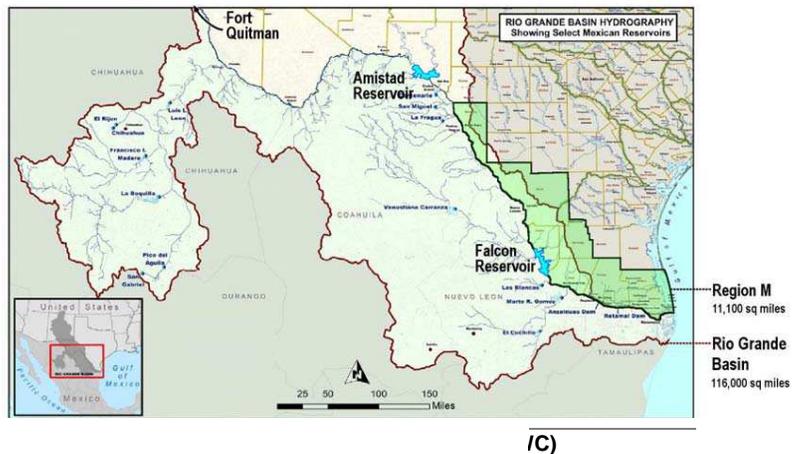


Lower Rio Grande Basin Study

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Reclamation and the Rio Grande Regional Water Authority (RGRWA) and its 53 member entities, in collaboration with the Texas Region M Planning Group, Texas Water Development Board, Texas Commission on Environmental Quality (TCEQ), and International Boundary and Water Commission, are conducting a basin study to evaluate the impacts of climate variability and change on water supply imbalances within an eight county region along the U.S./Mexico border in south Texas (Cameron, Willacy, Hidalgo, Starr, Zapata, Jim Hogg, Webb and Maverick Counties; Figure 1).



The magnitude and frequency of water supply shortages within the study area are severe. The Region M Water Plan states that the population in the eight county region is expected to grow from 1.7 million in 2010 to 4 million in 2060. The water supply shortage is expected to reach a staggering 592,084 af/yr by 2060, which would result in 35 percent of water demands being unmet.

The supply issues facing the Lower Rio Grande River basin are extremely complex, ranging from a multi-national to local scale. First, because the study area is shared by both the U.S. and Mexico, numerous issues are presented both politically and technically. Flows within the Lower Rio Grande River are dependent upon reservoir operations and run-off emanating from both the U.S. and Mexico, which is complicated by issues relating to required reservoir releases pursuant to stipulations set forth in the 1944 U.S.-Mexico Water Treaty.

This basin study will:

- Perform hydrologic projections of water supply and demand in the face of the changing climate.
- Evaluate how existing water and power infrastructure will perform in the face of changing water realities.
- Formulate a range of alternative regional water management options to meet water needs in 2060.
- Evaluate and screen alternatives based on several factors including cost/benefits, public acceptance, and various political, institutional, regulatory, and environmental constraints.
- Recommend a preferred alternative plan to meet planning objectives.

The study is expected to cost \$412,798 (52 percent RGWRA; 48 percent Federal cost share) and take 24 months to complete.