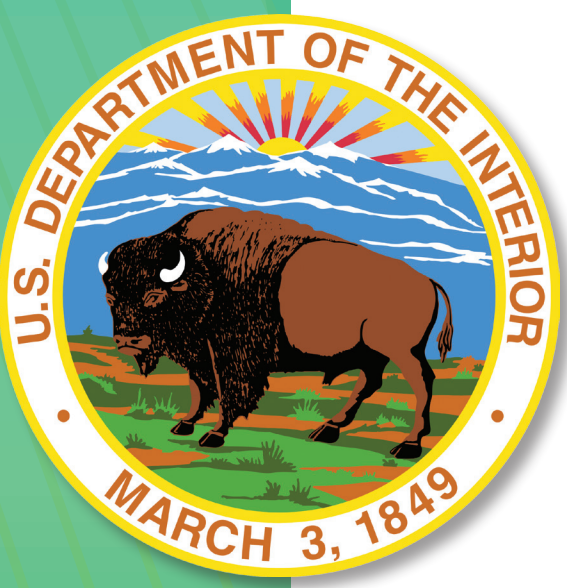


# Federal Energy and Water Management AWARDS 2014

Oklahoma-Texas Area Office Facility  
Operations Team



**James Allard, Nicholas Garmon, Darion Mayhorn,  
Matt P. Warren**

**U.S. Department of the Interior  
Bureau of Reclamation/Oklahoma-Texas Area Office  
Oklahoma City, Oklahoma**

In FY 2013, efforts of the Bureau of Reclamation's Oklahoma-Texas Area Office to conserve water in the region resulted in savings of 1.14 billion gallons—a 37% reduction from the prior year. In 2009, the office designed and created a drought forecast model to verify and update Tom Steed Reservoir yields. On a monthly basis, the model simulates the lake volume and elevation based on historical inflow and predicted losses and releases from the reservoir.

In light of growing concerns about reservoir depletion during ongoing extreme drought conditions, in FY 2013 Oklahoma-Texas Area Office management identified the opportunity to provide

drought assistance to their operating partner, the Mountain Park Master Conservancy District. Use of the model resulted in increased understanding and awareness of the impacts of the ongoing drought, and led to the implementation of significant and often mandatory water conservation measures throughout the region.

Along with the tremendous water savings, ancillary benefits included cost energy savings of about \$40,000 from reduced pumping requirements, about \$10,000 in operation and maintenance savings and avoided water treatment costs, and improved recreation and fish and wildlife conditions due to higher reservoir levels.