

U.S. ARMY CORPS OF ENGINEERS

DAM SAFETY OVERVIEW

BUILDING STRONG



- All dams are operated for flood risk management; two dams have hydropower and one is operated for agricultural irrigation; authorized purposes also include navigation, water supply, water quality, recreation and fish & wildlife
- Instrumentation has over 1,100 standpipe piezometers, including additional vibrating wire, pneumatic devices and pressure gages in grouting galleries
- Instrumentation program data maintenance in WINIDP (Corps' instrumentation database) since 2007
- The Kansas City District has in-house drill crew with 9 members and 4 field geologists with experience drilling embankment dams, installing instrumentation and maintaining relief wells and gallery drains; in-house hired labor crew with experience with repairs of riprap and drains; and in-house survey crew with experience in high precision surveys of monuments
- All relief wells are rejuvenated on regular intervals of 3 4 years; the district has 172 relief wells located at 7 dams
- Periodic dam assessment reports were fully implemented in 2011
- Tuttle Creek foundation modification project for seismic adequacy was completed in 2010 for total project cost of about \$170 million
- Harry S. Truman spillway repair included underwater concrete placement in about 50 feet of water
- Stilling Basin concrete (or epoxy overlays) were completed at Tuttle Creek, Milford, Perry, Pomona, Pomme de Terre and Rathbun dams
- Refurbishments include bearing replacement for 18 Tainter gates at Tuttle Creek Dam and ongoing repairs at 18 Tainter gates at Harlan County Dam

MISSION STATEMENT: Manage portions of the operations and maintenance program for reservoirs within the Kansas City District to provide safe dams. This includes routine monitoring and surveillance, field maintenance, repairs and rehabilitation, continuing inspections and evaluations, emergency action planning, internal communication with colleagues, and external communication with stakeholders.

VISION STATEMENT: The Dam Safety Program will protect life, property, and the environment by ensuring that dams have been designed and constructed, and continue to be operated and maintained as safely and effectively as is reasonably practicable. Engineering products correctly identify high risk problems, ensure efficient asset management, provide accurate and convincing justifications for budgeting, provide transparent messages for public safety, and engineering evaluations and design documentation have high technical competency with respected peer reviews.

Key Messages	Facts & Figures
 Full Service Staff of Professionals Maintains a highly motivated, high performing workforce that includes active engagement by Engineering, Operations and Construction Divisions The Kansas City District has maintained a strong and lasting commitment to dam safety 	 The Kansas City District operates 18 lake projects (9 in Kansas, 7 in Missouri, 1 in Nebraska and 1 in Iowa)
	 First dam construction was completed in 1948 and the last dam was completed in 1988
	 Total normal storage of all 18 lakes is 4.8 million acre-feet with maximum storage of 15.8 million acre-feet
	 Average dam height is 121 feet

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