LOCATION AND DESCRIPTION:
Located 25 miles North of Wenden, AZ and 120 miles NW of Phoenix, AZ. Placed in full operation, July 1968. Project condition is good and has a dam safety action class rating of IV. Project elements being operated and maintained include: Dam (earthfill: 283-ft high; 975-ft long) Outlet Works Spillway Service Roads Reservoir (1,045,300 acre-ft cap, spillway crest - 1977) One Recreation Area with 48,783 visitors in 2013.

AUTHORIZATION:
Flood Control Act of 1944.

ACTIVITIES FOR FY 2020:
Funds will be used for Legal or policy mandated minimum level Operational activities, including periodic inspection of dam and associated facilities; design of the new bulkhead gate; design and execution of the sill repairs, examination of the low flow bypass, water control, and management, including data analysis and review of potential modifications to operations; environmental stewardship activities and recreation management. Legal or policy mandated Maintenance activities, including highest priority electrical rehabilitation and structural needs for elevators and dam facilities.

FY 2021 PLANNED ACCOMPLISHMENTS:
Optimal funds could be used for: Construction of the new bulkhead gate, design, and construction of the replacement bulkhead gate installation system, completion of the 20 year delayed upper conduit inspection, completion of an ARC-Flash survey, water control, and management, including data analysis and review of potential modifications to operations; environmental stewardship activities and recreation management. Legal or policy mandated Maintenance activities, including highest priority upper conduit inspection, electrical rehabilitation, and structural needs for elevators and dam facilities.

ISSUES AND OTHER INFORMATION:
The latest studies indicate that during a probable maximum flood event, the spillway could be incapable of handling the discharge, resulting in overtopping and possible failure of the Dam. Several protected species occur within the vicinity of Alamo Dam, including the endangered southwestern willow flycatcher, the threatened yellow-billed cuckoo, and the northern Mexican garter snake. The Bill Williams River Corridor Steering Committee, consisting of stakeholder agencies concerned with operations of Alamo Dam, has made operational recommendations proposing to modify the 2003 water control manual. The Corps supports some of these recommendations and also desires to alter the water control manual for more efficient flood risk management purposes. After 50 years, there is a need to rehabilitate the dam operator compound structures as well as significant dam components to reduce the risk of structural and component failure. Efforts are underway to complete an inspection of the upper outlet works, which has not been inspected in more than 20 years and cannot be inspected until the bulkhead gate and sill are repaired or replaced. A review of the structural integrity of the bulkhead gate has been completed.
The study recommended replacing with a new gate that can withstand the head of the lake’s target elevation. The current method used to install the bulkhead gate is no longer structurally up to par and is exceptionally challenging and unsafe to use in its current submerged condition. The installation system needs to be re-designed and replaced.

An inspection of the damage to the sill was completed, and repairs are currently being designed. The sill is located at a depth of around 120 feet (dependent on lake elevation) and entirely enclosed by the trash rack, which makes for an extremely hazardous and challenging work environment. Once the bulkhead gate, bulkhead gate installation system, and sill are in the condition required to safely place the bulkhead gate, the upper outlet works will be inspected. It is highly likely the upper outlet works will require repair/rehabilitation.

The ventilation system for the control house needs to be redesigned and modified to provide adequate capacity and to discharge H2S gases away from the entrance to the tower. The stream-gage downstream from the dam cannot provide accurate flow measurements because the control weir was installed too low when it was rebuilt in the 1990s, and it must be modified to become serviceable again. Electronic communication can be unreliable between the LA District office and operators at the Dam, particularly during inclement weather events.

**CONGRESSIONAL INTEREST:**
Congressman Paul Gosar (AZ-4).