



International Boundary and Water Commission United States Section

For immediate release
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DAM SAFETY INSPECTIONS FACT SHEET

The International Boundary and Water Commission, United States and Mexico (IBWC), jointly with its technical advisors, performs Safety of Dams Inspections every five years. The reports present the technical advisors' recommendations with respect to dam safety. In evaluating the dams, the technical advisors considered risk-based Dam Safety Action Classes (DSAC) used by the U.S. Army Corps of Engineers as follows:

DSAC I – URGENT AND COMPELLING (Unsafe) (no IBWC dams are in this category)

DSAC II – URGENT (Potentially Unsafe)

DSAC III – HIGH PRIORITY (Conditionally Unsafe)

DSAC IV – PRIORITY (Marginally Safe)

DSAC V – NORMAL (Safe)

The following is a summary of the most recent DSAC ratings and inspections for the IBWC dams:

Amistad Dam (DSAC II) – Located on the Rio Grande near Del Rio, Texas-Ciudad Acuña, Coahuila, the dam is used for water storage, flood control, and hydroelectric power. The most recent five-year inspection, conducted in July 2017, resulted in no change to the DSAC. The classification is based largely on naturally-occurring sinkholes, existing since the dam was constructed in the 1960s, as well as the risk in terms of potential loss of life and economic damages that is associated with large dams. The technical advisors concluded the dam appears in excellent visual condition and is generally well maintained. The 2017 inspection found the IBWC has made good progress in accomplishing recommendations from previous reports. The risk associated with Amistad Dam and alternatives to reduce unacceptable risk are currently being evaluated through a dam safety modification study. Gates 1 and 2 are not operational and require replacement of various parts. Despite this, the remaining electrical and mechanical equipment is capable of operating under normal as well as flood conditions since it has sufficient capacity to pass a high flow event.

Falcon Dam (DSAC III) – Located on the Rio Grande near Falcon Heights, Texas-Nueva Ciudad Guerrero, Tamaulipas, the dam is used for water storage, flood control, and hydroelectric power. The most recent five-year inspection, conducted in July 2017, resulted in no change in the DSAC. The classification is based on seepage and lack of current seepage and stability analyses. The technical advisors found the dam to be in good visual condition with some deficiencies including some woody growth and structural deficiencies of stop logs, which should be repaired. Numerous items related to the seepage collection and pressure relief systems need evaluation, redesign, and replacement. The spillway slab joints leak and there has been an increase in the spillway drainage system flow. The spillway needs to be further investigated; an assessment is scheduled for 2017. The electrical and mechanical equipment is fully operational; however, it has not been fully tested and maintained due to the inability to place the stop logs. The dam is able to operate during normal and flood operations.

Anzalduas Dam (DSAC IV) – Located on the Rio Grande near Mission, Texas-Reynosa, Tamaulipas, Anzalduas Dam diverts irrigation water into Mexico's canal and, during flood conditions, diverts Rio Grande water into the U.S. interior floodway system. The most recent five-year inspection, conducted in November 2016, resulted in no change in the DSAC. The technical advisors found the dam to be well maintained and capable of operating under normal and flood conditions. They noted concerns about whether the dam bridge can safely support the two 40-ton cranes used for regular operations and maintenance, given vertical cracks observed at various locations near the bridge bearings. A detailed bridge inspection to address this concern was completed and analysis for the load rating for the bridge is being performed.

Retamal Dam (DSAC III) – Located on the Rio Grande near Donna, Texas-Rio Bravo, Tamaulipas, Retamal Dam is used during flood operations to divert waters into Mexico's interior floodway and to limit Rio Grande flood flows at Brownsville, Texas-Matamoros, Tamaulipas. The latest inspection was conducted in November 2016 and resulted in no change to the DSAC. The technical advisors found the dam to be generally well maintained and capable of operating under normal as well as flood conditions. In accordance with the recommendations, the Commission has modified operating procedures due to center gate oscillation occurring during flood operations, and made interim repair to cracked motor pedestals until a permanent repair can be performed.

American Dam (DSAC III) – Located on the Rio Grande at El Paso, Texas-Ciudad Juarez, Chihuahua, American Dam is used to divert water into the U.S. irrigation canal and to release water downstream to Mexico. The dam was inspected in December 2016, with no change to the DSAC. Inspectors found the dam to be generally in good operating condition and able to function as designed. They also noted concerns about seepage under the dam, bank stability, and some deteriorated parts on the 78-year old dam.

International Dam (DSAC III) – Located on the Rio Grande at El Paso, Texas-Ciudad Juarez, Chihuahua, International Dam diverts Mexico’s share of Rio Grande water into its irrigation canal system. During the December 2016 inspection, there was no change to the DSAC. The technical advisors found the dam to be generally in good operating condition and able to function as designed. They also noted seepage concerns, possible bank instability, needed adjustment of the limit switches on the gates, and inoperability of the standby generator.

Morelos Dam (DSAC III) – Located on the Colorado River near Andrade, California-Los Algodones, Baja California, Morelos Dam diverts Mexico’s share of Colorado River water into its irrigation canal. The inspection conducted in November 2016 resulted in no change to the DSAC. Technical advisors concluded the dam is in good visual condition, is generally well maintained, and is capable of operating under normal as well as flood conditions. The technical advisors found two of the twenty river gates are not operational, the stop logs and gate strut arms should be replaced, and silt and vegetation removal should be undertaken to restore channel capacity.

Most of the IBWC dams are jointly operated and maintained by the U.S. and Mexican Sections of the Commission except for American and International Dams, which are operated and maintained by the U.S. Section, and Morelos Dam, which is operated and maintained by the Mexican Section. The inspection teams vary for each dam but all include the two Sections of the IBWC and the U.S. Army Corps of Engineers, with participation as needed from Mexico’s National Water Commission (CONAGUA) and Federal Electricity Commission (CFE). To address the recommendations, the United States Section of the IBWC has five-year plans for each of the Rio Grande dams.

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