



San Antonio Dam Update

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San Antonio Dam Update

- 1. FY 2026 Approved Budget
 - ❖ Fund 116
 - ❖ SB104
- 2. Regulatory Compliance
 - Dam Status/Rating
 - Inspections
 - Annual Reporting Activities
 - Emergency Action Plan (EAP)
- 3. Existing Projects
 - Spillway Replacement Project
 - 12" Horizontal Drain Repair
- 4. Upcoming Projects



San Antonio Dam Regulatory Compliance

1. DWR DSOD - Extremely High Hazard Dam

Downstream Hazard

The downstream hazard is based solely on potential downstream impacts to life and property should the dam fail when operating with a full reservoir. This hazard is not related to the condition of the dam or its appurtenant structures. The definitions for downstream hazard are borrowed from the Federal Guidelines for Inundation Mapping of Flood Risks Associated with Dam Incidents and Failures (FEMA P-946, July 2013). FEMA categorizes the downstream hazard potential into three categories in increasing severity: Low, Significant, and High. DSOD adds a fourth category of "Extremely High."

Downstream Hazard Potential Classification	Potential Downstream Impacts to Life and Property						
Low	No probable loss of human life and low economic and environmental losses. Losses are expected to be principally limited to the owner's property.						
Significant	No probable loss of human life but can cause economic loss, environmental damage, impacts to critical facilities, or other significant impacts.						
High	Expected to cause loss of at least one human life.						
Extremely High	Expected to cause considerable loss of human life or would result in an inundation area with a population of 1,000 or more.						



2. DWR DSOD Rating - "Fair"

Fair	No existing dam safety deficiencies are recognized for normal operating conditions. Rare or
	extreme hydrologic and/or seismic events may result in a dam safety deficiency. Risk may be in
	the range to take further action. Note: Rare or extreme event is defined by the regulatory
	agency based on their minimum applicable state or federal criteria.

Other Circumstances:

- Lack of maintenance requires attention to prevent developing safety concerns.
- Maintenance conditions may exist that require remedial action greater than routine work and/or secondary studies or investigations.
- Interim or permanent risk reduction measures may be under consideration.



San Antonio Dam Regulatory Compliance

- 1. CA Department of Water Resources Division of Safety of Dams (DSOD)
 - a) Annual Inspection
 - i. 2025 Inspection Report Received (Inspection Date: 6/2025)
 - ii. 2026 Inspection In Field, November 4th 2025
 - b) Annual Instrumentation Performance Report
 - i. Inspection date November 13, 2025
 - ii. Settlement Survey March 2026
 - iii. Bi-Monthly Piezometer and Drain Data ongoing
 - iv. Final Report May 2026
- 2. California Office of Emergency Services (CalOES)
 - a) Emergency Action Plan (EAP)
 - i. DRAFT comments received: Resubmittal anticipated February 2026



Dam Safety Projects San Antonio



San Antonio Dam Safety Projects

Project Schedule		 Total Subproject Costs, 2023 Dollars		Total Subproject Costs, 2025 Dollars		Covered by Grants		nfunded Need (2025)
San Ant	tonio Subpojects							
1	Spillway Replacement	\$ 76,776,780	\$	82,384,434	\$	3,800,000	\$	78,584,434
2	Butterfly Valve Hydraulic Operator Upgrade	\$ 745,790	\$	800,261	\$	414,500	\$	385,761
3	Replace Intake Structure Bulkhead Gate	\$ 409,810	\$	439,742	\$	448,000	\$	-
4	Low Level Discharge Valve Maintenance	\$ 279,270	\$	299,667	\$	305,000	\$	-
5	Replace Combination Air Release Vacuum Valves	\$ 241,820	\$	259,482	\$	219,200	\$	40,282
6	Install Access Hatch in Low Level Outlet Works Conduit	\$ 780,030	\$	837,002	\$	348,600	\$	488,402
7	Replace Intake Structure Trash Racks	\$ 1,002,590	\$	1,075,818	\$	278,750	\$	797,068
8	Interior and Exterior Paint of Low-Level Outlet Works Conduit	\$ 4,579,600	\$	4,914,087	\$	<u>~</u>	\$	4,914,087
9	Horizontal Drain Repair	\$ 544,630	\$	584,409	\$	606,000	\$	(=
10	Toe Drain Repair	\$ 272,850	\$	292,779	\$	•	\$	292,779
11	Abutment Drain Repair	\$ 680,520	\$	730,224	\$	H .	\$	730,224
12	New Piezometers	\$ 1,898,180	\$	2,036,820	\$		\$	2,036,820
13	Road Pavement Repair	\$ 680,520	\$	730,224	\$	-	\$	730,224
14	New Access Road	\$ 3,787,800	\$	4,064,455	\$	-	\$	4,064,455
15	Install Boat Barrier Buoy Line and Replace Spillway Log Boom	\$ 544,630	\$	584,409	\$	Ξ.	\$	584,409
San Ant	tonio Total	\$ 93,224,820	\$	100,033,813	\$	6,420,050	\$	93,648,944

SB104

(DWR Grant Agreement – San Antonio ONLY)
Not total cost of the project as the grant will
expire prior to project completion.



San Antonio Spillway Replacement Project

- Project completion extension granted to December 2031
- Currently finalizing the
 Probable Maximum Flood
 (PMF) & Alternatives Analysis
 Report
- 3. Environmental analysis initiated 2025
- 4. Begin 30% March 2026

NOTE: Estimate \$77 million





San Antonio Spillway Project Timeline



- "Project Construction" includes project float
- Subject to DSOD review & approval
- Subject to permitting
- Subject to construction funding
- Schedule as of 11/12/25



San Antonio Dam Low Level Outlet Works (LLOW)

- Boat Barrier Buoy Line Installation
- Intake Structure Bulkhead Gate Replacement
- 3. Penstock Access Hatch
- 4. Butterfly Hydraulic Operator Upgrade
- 5. Intake Structure Trash Rack Replacement
- 6. Combination Air Release Vacuum Valves(6) replacements
- 7. Low Level Discharge Valve Assessment and Servicing
- 8. Penstock Recoating (downstream of BV)

NOTE: LLOW Combined Estimate \$8 million





San Antonio Dam Safety Projects

New Piezometers & Drains (Toe and Abutment):

SA contains all original monitoring instrumentation. Annually, the Agency is required to report bi-monthly readings of all instrumentation to DSOD for submission and review via the Annual Instrumentation Performance Report. Some piezometers have been requested to be investigated and repaired by DSOD. The costs associated with these projects includes condition assessments and repairs/replacements.

Note: Estimate \$1.9 million







San Antonio Dam Safety Projects

12" Horizontal Drain Repair

A 130 foot 12" CMP horizontal drain runs adjacent to the LLOW tunnel at the toe of the dam. The original pipe is deteriorated and is in need of repair/replacement. The repair will include inserting a smaller diameter pipe and backfilling the annular space with slurry. Design is 90% Complete. Primary remaining costs are for construction funding.

Note: Estimate \$600,000





