

LOS ANGELES COUNTY DRAINAGE AREA, CA

Operations & Maintenance

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

LOCATION AND DESCRIPTION:

HANSEN DAM

Located 4 miles E of the city of San Fernando. Project Elements: Dam and Appurtenances (97-feet-high; 10,475-feet-long; 51,000-acre-feet cap at spillway crest - 1983). Recreation Area, No. of visitors to Recreation Area in FY 2018 was approximately 2 million.

Initially Operational/ Fully Operational FY 1940/FY 1949.

LOPEZ DAM

Located 2.2 miles NE of the city of San Fernando. Project Elements: Dam and Appurtenances (50 feet-high; 1,330-feet-long; 1,248-acre-feet cap at spillway crest - 1979)

Initially Operational/Fully Operational: 1954/1955.

SANTA FE DAM

Located 15 miles NE of the City of Los Angeles. Project elements: Dam and Appurtenances (92 feet-high; 23,800 feet-long; 32,109 acre-feet cap at spillway crest 1983). Recreation Area, No. of visitors to Recreation Area in 2018 – 500,000. Initially Operational/Fully Operational: 1949/1949.

SEPULVEDA DAM

Located 25 miles NW of the City of Los Angeles. Project elements: Dam & Appurtenances (57 fthigh; 15,444 ft-long; 17,425 acre-ft cap at spillway crest 1982). Recreation Area, No. of visitors to Recreation Area in 2018: 3,500,000

Initially Operational/Fully Operational: 1949/1949.

Legend District Grant General Country Country

As	of	8	Feb	21

FINANCIAL SUMMARY:	<u>O&M</u>	
Estimated Federal Cost	\$18,073,000	
Estimated Non-Federal Cost	0	
Total Estimated Project Cost	\$18,073,000	
Allocation thru FY20	\$15,452,073	
Allocation for FY21	\$17,892,270	
President's Budget for FY22	\$18,073,000	
House Report for FY22	TBD	
Senate Report for FY22	TBD	
Balance to Complete After FY22	N/A	

WHITTIER NARROWS DAM

Located 10 miles east of the City of Los Angeles. Project elements: Dam and Appurtenances (56 feet-high; 19,960 ft-long; 49,143 acre-feet cap at spillway crest 1982). Recreation Area, No. of visitors to Recreation Area in 2013: 1,500,000.

Initially Operational/Fully Operational 1957/1957.

LOS ANGELES COUNTY DRAINAGE AREA CHANNELS

Consists of 517 miles of channel, of which 45 miles are maintained by the Corps with the remainder maintained by LA County Department of Public Works.

AUTHORIZATION:

Flood Control Act of 1944.

ACTIVITIES FOR FY 2021:

OPERATIONS - Table top exercises at Sepulveda, Santa Fe, and Hansen Dams; Updating of the LACDA emergency action plan; Development of a Sepulveda Basin Operations and Maintenance Plan; O&M manual reviews for Lopez, Sepulveda, Hansen, Whittier Narrows and Santa Fe Dams; Development of a Whittier Narrows Communication Plan; Periodic Inspection at Lopez Dam; Cultural Survey Work and Programmatic Agreements for future work; Planning efforts for flood season; endangered species surveys; flood control channel sub-drain system inspection; Review of Water Conservation Operations and other outreach and coordination.

MAINTENANCE - Construction support for Whittier Narrows Interim Risk Reduction Measures and electrical modernization efforts that will include addition of lighting and rehabilitation of limit switches; re-establishment of power at Hansen Dam; electrical modernization at Sepulveda Dam and Hansen Dam; installation of geofencing measures; repair failing concrete overlay LA River; non-native rhizome/vegetation removal in the soft bottom section of LA River; sediment removal of Haines Canyon Debris Basin, Lopez Dam, Santa Fe Dam; fencing along LA River, San Gabriel River and tributaries; channel maintenance and debris removal; Compton Creek sediment removal; infrastructure rehab; screening of levee systems throughout the project; San Gabriel River levee vegetation clearing and maintenance; hydraulic system flush and filtration at projects; concrete invert and channel wall repair; sediment removal from burned areas at Hansen Dam; repair/replace fencing and access gates at projects; asphalt paving of access roads and dam crests; installation of security camera poles at Hansen and Whittier Narrows control houses; herbicide and vegetation control along channels and levees; and pest control and borrowing animal removal at projects.

FY 2022 PLANNED ACCOMPLISHMENTS WITH OPTIMAL FUNDING:

OPERATIONS - Evaluation of structural integrity of the Los Angeles River channels and levees in areas maintained by the Corps; updating of water control manuals; periodic inspection of Hansen Dam; structural inspection of bridges for Sepulveda, Hansen and Whittier Narrows Dams; hydraulic steel structures inspection at Hansen and Santa Fe Dam; cultural resources and e improved instrumentation plans; side and sub-drain video inspections and maintenance; coordination for expired outgrant renewals; and additional staffing to increase Park Ranger staff to reduce the risk for establishment of homeless encampments, improve signage, and secure borders.

MAINTENANCE - Large scale dredging of sediment in the Los Angeles River and San Gabriel River; Repair of deteriorated San Gabriel Levee; removal of non-native vegetation in LACDA basins; upgrades to existing fencing; paving of LACDA channel access roads; concrete repair/replacement to improve resiliency of LAR channels; Sepulveda Saddle Dike rehabilitation and repair; EAP update and tabletop exercises at Whittier Narrows Dam; annual inspections and maintenance of mechanical equipment; and robust effort to address encroachments in levee areas to improve inspection capability and address risks to structural integrity.

ISSUES AND OTHER INFORMATION:

STATUS - Project condition of Dams is **UNSAFE to CONDITIONALLY UNSAFE**. All of the dams within the system have a DSAC II or DSAC III rating with the exception of Whittier Narrows dam which has a DSAC I rating. The Whittier Narrows dam has been downgraded and re-classified as a dam safety action class (DSAC) 1 (from a DSAC 2) dam meaning that the dam is critically near failure or extreme high risk. A Dam Safety Modification Study is underway that will address failure modes including potential for seepage and piping at the west and central embankments, and the potential for overtopping of the dam. The Interim Risk Reduction Measure (IRRM) contract was awarded August 31, 2018 to address the premature spillway gate failure mode, which was a major driver for the DSAC 1 classification.

DSAC I dams are classified as critically near failure or extreme high risk. DSAC II dams are classified as

potentially unsafe. DSAC III dams are classified as significantly inadequate, moderate to high risk, high priority, conditionally unsafe. Project condition of channels and levees is poor and requires extensive rehabilitation and repair. A failure of any of the dams within the system would cause large economic loss and catastrophic loss of life within Los Angeles County and the surrounding Cities. Screening Portfolio Risk Assessments (SPRA) have been completed for all dams within the LACDA system resulting in the following

Dam Safety Action Classification (DSAC) ratings: DSAC I: Whittier Narrows Dam; DSAC II: Lopez Dam and Santa Fe; DSAC III: Sepulveda Dam, Hansen Dam, and Haines Canyon Debris Basin. Interim Risk Reduction Measures Plans (IRRMP) are required for all DSAC I, II, & III dams. IRRMP's were finalized in FY12.

The six (6) District flood control projects within the LACDA system are reaching over 65 years of service and are in need of rehabilitation of dam component repair, such as hydraulic systems, motors, gates, and generators, prior to component failure at projects. Component failures have already started to occur. The concrete lined portions of the Los Angeles River flood control channel invert has begun to erode away resulting in large pieces of the channel invert being lifted and transferred downstream during large rain events. The LA River concrete invert overlays require repair and replacement. The levee systems throughout the LACDA system are in need of extensive maintenance and repair as a result of the FY2011-2013 levee inspections.

Current project funding received through the O&M program does not meet growing deferred maintenance requirements for the six flood risk management projects and 45 miles of flood risk management channels and levees within the flood control system. The project is currently funded at 25% of O&M capability; causing a continued increase in deferred maintenance, repairs, and inspections needed to properly O&M the LACDA system.

Homeless Population Challenges

Each of the Los Angeles County Drainage Area Dams contains thousands of open acres used for flood risk mitigation. Basins hold water during the flood season from November to April but water levels return to normal during the spring, summer and fall months. This open acreage provides exceptional habitat for homeless personnel living in tents and temporary constructed shelters. A gathering of six shelters and tents is considered an encampment. A survey was conducted of homeless encampments along the San Gabriel River within Whittier Narrows in 2019 and found 53 homeless encampments. Sepulveda Dam has several locations and areas that are perfect homeless habitat which contain numerous homeless encampments. The San Gabriel River and the San Gabriel Dam Spillway also contains many homeless encampments. Every Flood Risk Mitigation Basin and many miles of the Los Angeles River and channels are home to thousands of homeless personnel.

Because mental illness is a major factor of homelessness, many individuals collect discarded items and debris found along highways, in dumpsters and around the community. Their collection of items are strewn about their tent areas and encampments creating large debris piles within the waterways. During heavy rains and flooding, these items become floatable debris and are carried away and lodged in vegetation, trash racks or embankments along the river. Large quantities of floatable debris can cause blockage under bridges and overpasses reducing the flow and creating a dam effect at certain locations.

In addition, drug addiction is a large cause for homelessness. It is estimated that 90% of homeless individuals have a severe drug addiction. The acreage, remoteness and vegetative cover of the riparian areas provide a perfect habitat and location for drug usage. The paraphernalia of drug use, (i.e. syringes, needles, bowls, etc.) are discarded in the river and migrate downstream to get caught in vegetation or soft bottom reaches of the river. This bio-hazardous debris causes major health and injury concerns for pedestrians and persons recreating along the river.

Vandalism and criminal activity are a regular challenge at all of the LACDA projects. Hansen Dam has had several burglaries and thefts this year. Two large vehicle batteries were stolen this year at a cost of approximately 300 dollars. A Los Angeles County tenant of Santa Fe Dam has had seven break-ins this year and the Corps Base Yard has had a number of automobiles broken into this year. This is an ongoing and continuous concern at all of the LACDA projects which has caused the Division to contract for security at the Base Yard. The vandalism and criminal activity increases as the homeless encampments increase.

Homeless clean-up is an extremely expensive and time consuming endeavor and must be coordinated with local law enforcement, sanitation districts and city and county officials.

At current funding levels, LACDA is severely underfunded to continue maintenance requirements directly related to homeless activity in the river, replace stolen or damaged property and to coordinate and participate in community based clean-up efforts. Keeping these areas cleared of homeless would require additional law enforcement patrols and continuous maintenance.

CONGRESSIONAL INTEREST:

Congresspersons Schiff (CA-28), Cardenas (CA-29), Sherman (CA-30), Napolitano (CA-32), Bass (CA-37), Sanchez (CA-38), Roybal-Allard (CA-40), and Barragan (CA-44).