



# 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-foot-high; 10,475-foot-long; 51,000-acre-foot 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-foot-long; 1,248-acre-foot 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-foot 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

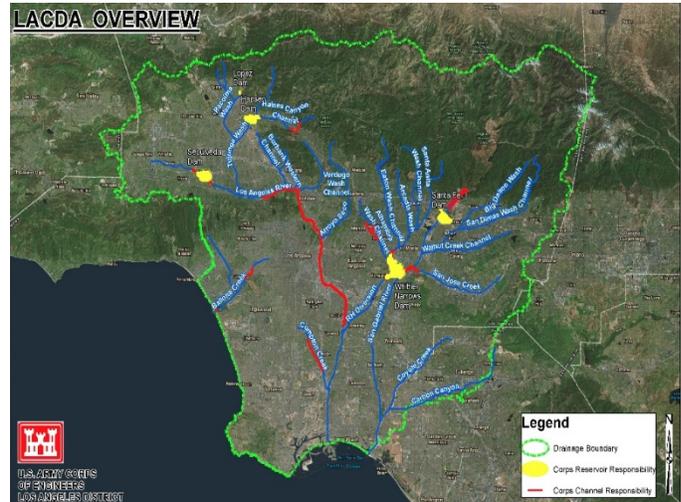
Located 25 miles NW of the City of Los Angeles. Project elements: Dam & Appurtenances (57 ft-high; 15,444 ft-long; 17,425 acre-ft cap at spillway crest 1982). Recreation Area, No. of visitors to Recreation Area in 2018: 3,500,000 Initially Operational/Fully Operational: 1949/1949.

#### 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-foot 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.



As of 5 Feb 20

#### FINANCIAL SUMMARY:

#### O&M

|                                |              |
|--------------------------------|--------------|
| Estimated Federal Cost         | \$22,406,670 |
| Estimated Non-Federal Cost     | 0            |
| Total Estimated Project Cost   | \$22,406,670 |
| Allocation thru FY19           | \$22,406,670 |
| Allocation for FY20            | \$15,476,920 |
| President's Budget for FY21    | \$18,073,000 |
| House Report for FY21          | TBD          |
| Senate Report for FY21         | TBD          |
| Balance to Complete After FY21 | N/A          |

U.S. ARMY CORPS OF ENGINEERS – LOS ANGELES DISTRICT

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**AUTHORIZATION:**

Flood Control Act of 1944.

**ACTIVITIES FOR FY 2020:**

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; installation of geofencing measures; repair failing concrete overlay LA River; rehab stairwell guard rails; 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; herbicide and vegetation control along channels and levees; and pest control and borrowing animal removal at projects.

**FY 2021 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; improved instrumentation plans; 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; 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; 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.

**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).