



**US Army Corps  
of Engineers** ®  
Los Angeles District



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# **LOS ANGELES RIVER 2 LEVEE SYSTEM**

## **LOS ANGELES COUNTY, CALIFORNIA**

### **NLD SYSTEM ID # 3805010053**

**PERIODIC INSPECTION REPORT NO 1**  
**GENERALIZED EXECUTIVE SUMMARY**

**FINAL SYSTEM RATING: MINIMALLY ACCEPTABLE**

**FINAL RATING DATE: 10 OCTOBER 2014**

PERIODIC INSPECTION REPORT PREPARED BY U.S. ARMY CORPS OF  
ENGINEERS, SAN FRANCISCO DISTRICT FOR THE U.S. ARMY CORPS OF  
ENGINEERS, LOS ANGELES DISTRICT

SUBMITTED: OCTOBER 2014  
INSPECTED: MARCH 4, 2014

## EXECUTIVE SUMMARY

This Executive Summary provides an introduction to the periodic inspection, an overview of the levee system, a summary of the major findings of the periodic inspection, and the overall rating for the system.

### 1.1 Scope and Purpose of Periodic Inspection.

The purpose of the Los Angeles River 2 Levee System (LAR2) periodic inspection is to identify deficiencies that pose hazards to human life or property. The inspection report summarizes the identified deficiencies in order to facilitate future studies and associated repairs, as appropriate.

This assessment of the general condition of the LAR2 System is based on available data and visual inspections. Detailed investigation and analysis involving hydrologic design, topographic mapping, subsurface investigations, testing, and detailed computational evaluations are beyond the scope of this LAR2 System periodic inspection.

### 1.2 System Summary.

The Los Angeles River 2 System is located along the right (west) bank looking downstream on the Los Angeles River. This system was inspected in March 2014. The river is lined with concrete along the invert and side slopes. There are vertical retaining walls along both banks. The system is centrally located in Los Angeles, California with an overall system length of 3,513 ft (0.67 miles) between Station 1202+77.55 to 1237+91.08 (Figure 1-1). Three bridge crossings intersect the LAR2 System; Main Street Bridge, Southern Pacific Railroad (SPRR) Bridge, and Union Pacific Railroad (UPRR) Bridge. The Main Street Bridge is located approximately 541 ft downstream from the upstream system limit. The surrounding land around the river is highly urbanized with a mixture of residential and commercial buildings with railroad tracks lining both sides of the river. The National Levee Database (NLD) reference number for this system is 3805010053. Figure 1 shows the extent of and leveed area for the LAR2 System.

After reviewing the documentation for the LAR2 System, it is the opinion of the inspection team that the LAR2 System contains no levees or floodwalls since there is no explicit or implied design of a levee in the project documents and excavated material consistent with sands and gravels were used as backfill material behind the channel walls. This type of backfill is intended to allow water to drain from behind the wall into the river through weepholes constructed at the toe of the concrete slope and at the base of the vertical walls. The walls are designed as retaining walls in the project documents. The elevation of the backfill behind the retaining walls and the top-of-wall elevation are the same (i.e. no stick up) except at two locations: (i.) Near Transmission Tower 321 between Station 1236+34 and 1236+85 (51 ft long); and (ii.) Beneath the Main Street Bridge crossing between Station 1232+27.44 and 1233+09.18 (81.7 ft long). At these two locations, the elevation difference between the backfill and top-of-wall is approximately 1.4 ft and 7.6 ft, respectively. Adjacent to the right bank, there is a set of elevated railroad tracks that look similar to a levee embankment. After reviewing the project documents, the railroad embankment was pre-existing infrastructure before the river was modified. During the construction of this reach, the railroad was temporarily realigned to construct the concrete

slope and retaining walls. When the channel modification was complete, the railroad tracks were reconstructed by other agencies since they were located outside the project right-of-way.

Since there is no levee or floodwall structure along this system, the LAR2 System will specifically reference this section of the Los Angeles River as a channel. Based on the periodic inspection findings, it is recommended that the LAR2 System be reclassified as a channel in the NLD.

### **1.3 Summary of Major Deficiencies Found.**

The periodic inspection of the LAR2 System was conducted on March 4, 2014 by the United States Army Corps of Engineers, San Francisco District (USACE SPN) along with staff from the USACE LAD. Overall, there are no significant levee safety issues in the LAR2 System. Sections of the concrete overlay along the invert have been damaged and are continuing to break away. These areas should be periodically monitored and all concrete joints could be filled to reduce further damage. In addition, concrete spalling, erosion, and joint separation were observed throughout the system.

### **1.4 Overall Rating.**

A Levee Safety Officer (LSO) out-brief meeting was held on May 28, 2014. Based on the design criteria review and observations documented during the field inspection, it is anticipated that the system will perform as intended during the next significant runoff event. At the conclusion of the out-brief meeting, the LSO determined the overall system rating to be “Minimally Acceptable.” A “Minimally Acceptable” system rating is defined as, “One or more items are Minimally Acceptable or one or more items are rated as Unacceptable and an engineering determination concludes that the Unacceptable items would not prevent the segment/system from performing as intended during the next significant runoff event.” Meeting minutes from the LSO out-brief meeting are documented in Appendix IX.

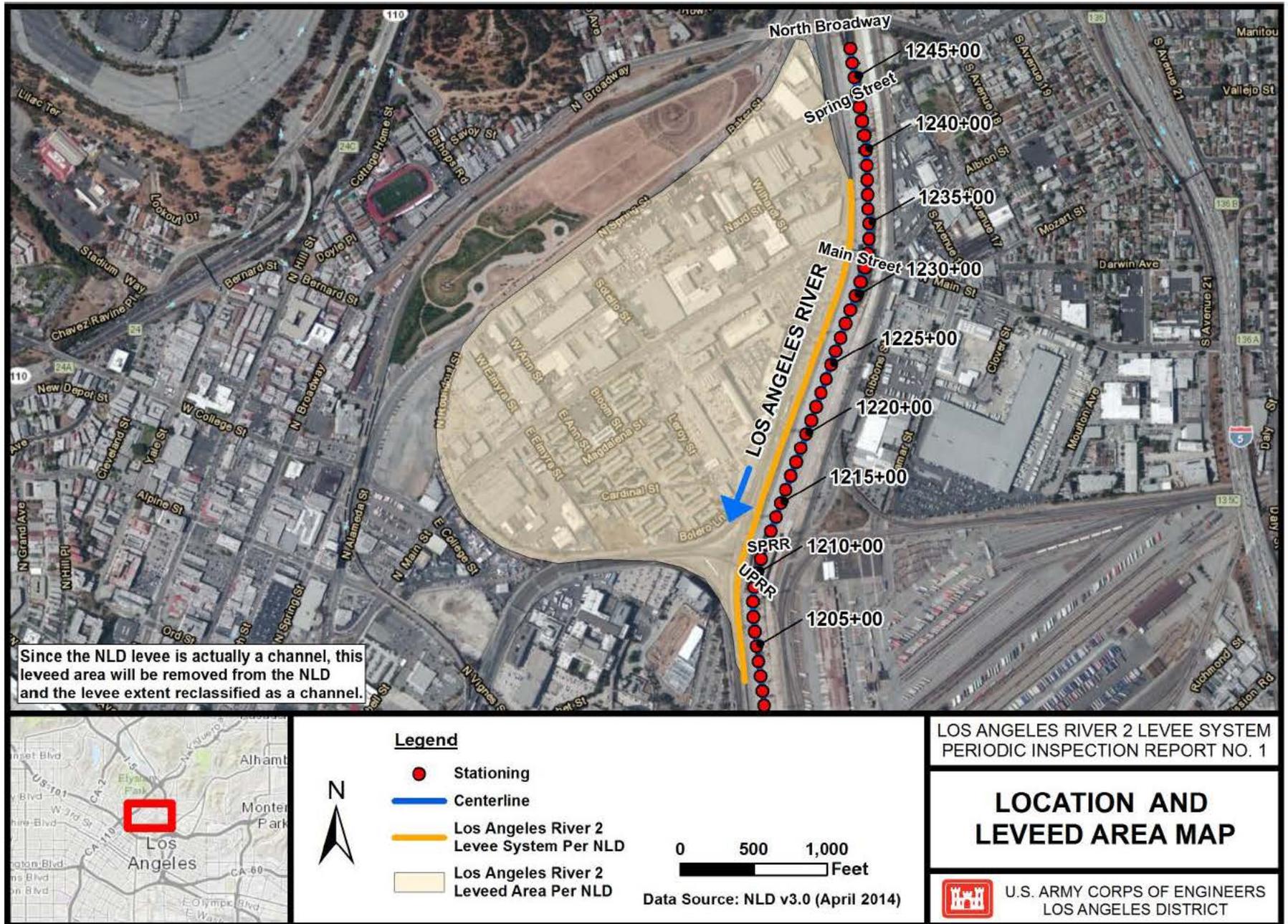


Figure 1-1: Los Angeles River 2 Levee System