



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



**RIVERSIDE 2 LEVEE SYSTEM
SAN BERNARDINO AND RIVERSIDE COUNTIES,
CALIFORNIA
NLD SYSTEM ID # 3805010050**

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

**FINAL SYSTEM RATING: UNACCEPTABLE
FINAL RATING DATE: JANUARY 18, 2013**

PERIODIC INSPECTION REPORT PREPARED BY TETRA TECH, INC.
FOR THE U.S. ARMY CORPS OF ENGINEERS, LOS ANGELES DISTRICT

SUBMITTED: DECEMBER 2012
INSPECTED: APRIL 4, 2011

EXECUTIVE SUMMARY

This Executive Summary provides an introduction to the periodic inspection, an overview of the 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 Inspections

The purpose of the Riverside 2 Levee System periodic inspection is to identify deficiencies that pose hazards to human life or property. The inspection is intended to identify the issues in order to facilitate future studies and associated repairs, as appropriate.

This assessment of the general condition of the levee 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 is beyond the scope of this levee system inspection.

1.2 System Summary

Riverside 2 Levee System is located in the Cities of Colton and Riverside; in the Counties of San Bernardino and Riverside, respectively; in the State of California. Riverside 2 Levee System forms the east/left bank levee (looking downstream) of the Santa Ana River. Riverside 2 Levee System is composed of two levee segments (see Figure 1). These segments are referred to as Segments 2a and Segment 2b. Segment 2a was constructed by Riverside County is not part of the United States Army Corps of Engineers (USACE) Rehabilitation and Inspection Program (RIP), and therefore not under the authority of USACE. It starts approximately 4,573 feet upstream of Main Street (Station 399+75), and extends downstream to Station 339+00. Segment 2b was constructed by the USACE. It starts at Station 339+00, and extends to approximately 483 feet downstream of Mission Boulevard (Station 200+30). Riverside 2 Levee System is entirely operated and maintained by the Riverside County Flood Control and Water Conservation District (RCFC & WCD). The National Levee Database (NLD) System ID Number for Riverside 2 Levee System is 3805010050.

The RCFC & WCD is the Local Sponsor for the Riverside 2 Levee System.

1.3 Summary of Major Deficiencies Found

The levee system was inspected on April 4, 2011. During the periodic inspection of the system, several deficiencies were noted for which remedial actions are required. Specifically, severe bank erosion from the December 2010 storm flows was found and is currently under the USACE RIP process for repair. The following main deficiencies were noted during the periodic inspection of the project features:

- Levee Embankments
 - Segments 2a and 2b: Significant vegetation growth (brush and tall grass) was present within the vegetation-free zone. The vegetation-free zone extends 15 feet outward from both the landward and riverward toes of the levee prism.
 - Segments 2a and 2b: Unpermitted encroachments, which could negatively impact the integrity of the levee, were observed along both segments.

- Segments 2a and 2b: Significant erosion has occurred along the toe of the riverward slope, and could compromise the stability of the levee. It is understood that USACE RIP is in the process of repairing Segment 2b from erosion on the riverside of the levee.
- Segments 2a and 2b: Due to concentration of local runoff, significant erosion gullies have formed on both the riverward and landward slopes of the levee.
- Segment 2b: There are no maintenance records which indicate that the weep holes associated with the concrete slope paving have been regularly cleaned.
- Interior Drainage System
 - Segment 2b: The inlets and outlets of some of the side-drainage structures were obstructed by debris.
 - Segment 2b: Within the past five years, the condition of each side-drainage structure has not been verified using either videotaping by television camera or other visual-inspection method.

1.4 Overall Rating

The Levee Safety Officer, Los Angeles District, has determined the overall system rating of Riverside 2 Levee to be “Unacceptable.” An “Unacceptable” system rating is defined as:

The Periodic Inspection has identified one (or more) System Components which are rated Unacceptable and require immediate correction. The deficiency (or deficiencies) identified have resulted in an Unacceptable System rating and seriously impair the functioning of the flood protection system and pose unacceptable risk to public safety.

The Local Sponsor will be notified of the overall rating of the levee system by letter with instructions to correct the “Unacceptable” rated items not related to the RIP repair as soon as possible. A public notification will be made regarding this levee system and the periodic inspection rating.

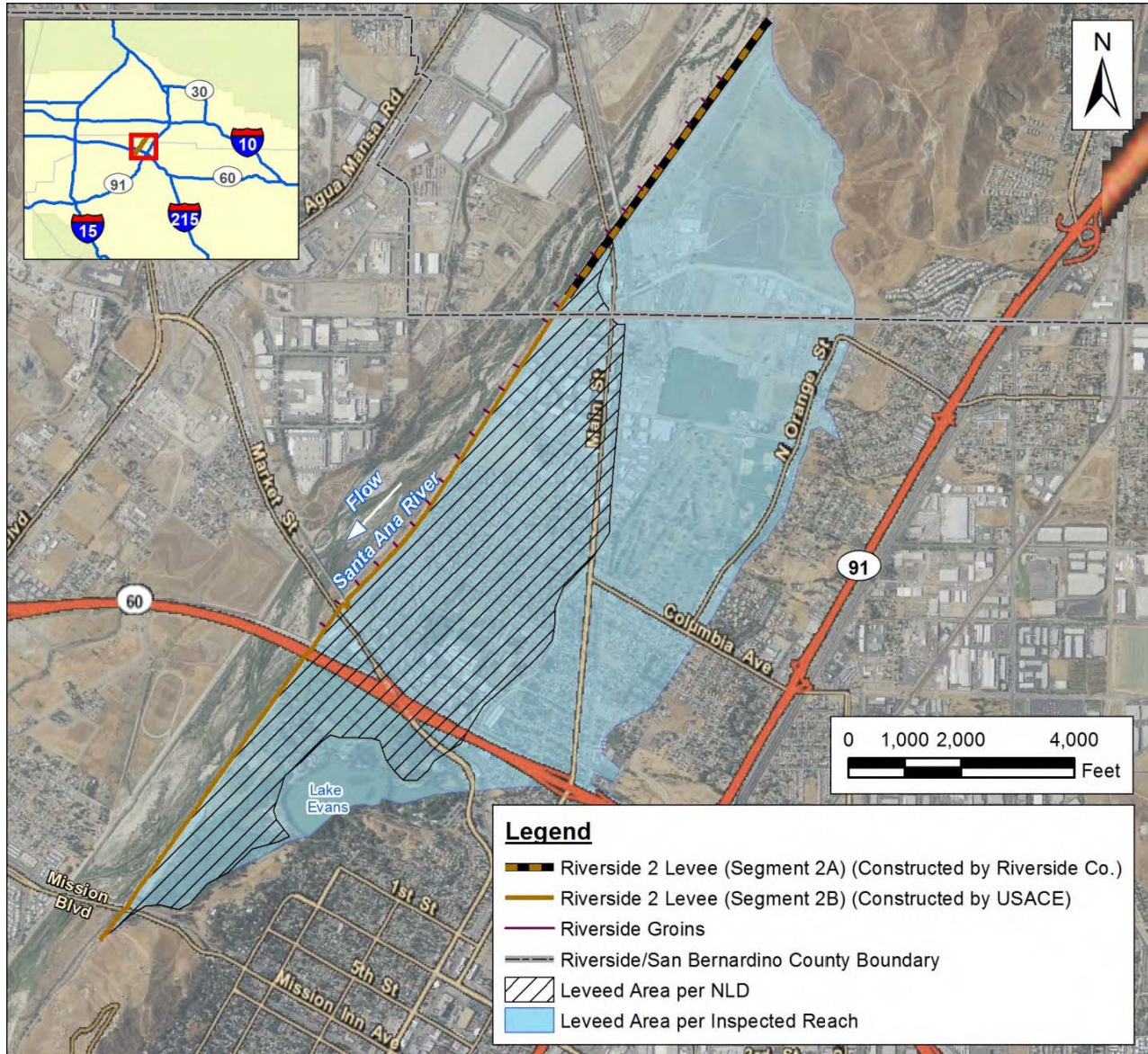


Figure 1. Riverside 2 Levee System