

US Army Corps of Engineers ® Los Angeles District



RIO HONDO UPPER 3 LEVEE SYSTEM LOS ANGELES COUNTY, CALIFORNIA NLD SYSTEM ID # 3805010102

PERIODIC INSPECTION REPORT NO 1 GENERALIZED EXECUTIVE SUMMARY

FINAL SYSTEM RATING: MINIMALLY ACCEPTABLE FINAL RATING DATE: JANUARY 23, 2014

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

> SUBMITTED: OCTOBER 2013 INSPECTED: MARCH 13, 2012

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 this Periodic Inspection

The purpose of this 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

The Rio Hondo channels are a unit of the Los Angeles County Drainage Area project (LACDA). The RHU3 Levee System, shown in Figure 1, is a portion of the Rio Hondo channels and is contained within the Cities of El Monte and Rosemead, Los Angeles County, California. The length of the system is 6,469 feet (1.23 miles).

The RHU3 Levee System is a reinforced-concrete-lined trapezoidal channel and levee. The levee is located along the right embankment (looking downstream) of the Rio Hondo Upper Channel beginning downstream of the Union Pacific Railway bridge at Station 735+45 and extending down to the Eaton Wash confluence at Station 670+76. Features include a floodwall, side drainage structures, retaining walls, and bridge crossings.

The RHU3 Levee System was federally authorized under the general comprehensive plan for flood risk management (approved 18 August 1941 by an act of Congress, Public Law 228) and subsequently constructed by the United States Army Corps of Engineers (USACE). This levee system was constructed between January 1956 and June 1957. Operation and maintenance responsibilities were transferred to Los Angeles County Department of Public Works on 27 August 1957.

1.3 Field Inspection and Summary of Major Deficiencies Found

The field inspection for the RHU3 Levee System was conducted March 5, 2012. The Local Sponsors show an active response to operation and maintenance of the project; however, some deficiencies were noted and remedial actions are required. The main system deficiencies are:

Levee Embankments

- **Encroachments**: Several encroachments were encountered including a commercial building is encroaching on landside slope, a retaining wall on landside slope, and relocation of a bridge pier on the levee riverside slope.
- **Erosion/Bank Caving:** Erosion up to 3 feet deep on the landside slope has caused oversteepening of the bank.

Interior Drainage System

• **Culverts/Discharge Pipes:** The condition of pipes has not been verified using television camera videotaping or visual inspection methods within the past five years.

Flood Damage Reduction Channels

• **Concrete Surfaces:** Crack lengths ranged from small and localized to extending across the width of the invert. Crack widths ranged from hairline to a couple of inches. The location of the old pier is delineated by a cut out that has been patched. It appears the concrete patch was poorly placed and was not poured flush with the existing concrete revetment.

An out-brief concerning Periodic Inspection No. 1 was presented to the Los Angeles District Levee Safety Officer, reviewers of the draft report, and other interested USACE personnel. The USACE Los Angeles District has determined the overall system rating for the RHU3 Levee System as described in section 1.4 below.

1.4 Overall System Rating

The Levee Safety Officer, Los Angeles District, has determined the overall system rating of Rio Hondo Upper 3 Levee to be "Minimally Acceptable."

A Minimally Acceptable System is where one or more items are rated as 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.

The Local Sponsor will be notified of the overall rating of the levee system by letter with instructions to correct the "Unacceptable" rated items as soon as possible, and correct the "Minimally Acceptable" rated items within two years so that they do not deteriorate further and become "Unacceptable."



Figure 1. Rio Hondo Upper 3 Levee System