



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



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**COYOTE CREEK 4 LEVEE SYSTEM**  
**LOS ANGELES COUNTY, CALIFORNIA**  
**NLD ID # 3805010027**

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

**FINAL SYSTEM RATING: MINIMALLY ACCEPTABLE**  
**FINAL RATING DATE: SEPTEMBER 19, 2012**

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

SUBMITTED: SEPTEMBER 2012  
INSPECTED: FEBRUARY 14, 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 Periodic Inspections

The purpose of this levee system periodic inspection is to verify proper operation and maintenance; evaluate operational adequacy and structural stability; identify features to monitor over time; and improve the ability to communicate the overall condition. This periodic inspection is intended to observe and report specific levee conditions and deficiencies in order to identify future investigative actions and recommend repairs as appropriate.

This assessment of the levee system general condition is based on observations of field conditions and available data at the time of inspection. 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 Coyote Creek channels are a unit of the Los Angeles County Drainage Area (LACDA) project. The Coyote Creek 4 Levee System is a section of Coyote Creek and is wholly contained within the City of Cerritos, Los Angeles County, California. The Coyote Creek 4 Levee System is a concrete-lined mainline levee and consists of 2,183 feet (0.41 miles) of the right embankment (looking downstream) of Coyote Creek and 6,458 feet (1.22 miles) of the left embankment (looking downstream) of the North Fork Channel for a total distance of 8,641 feet (1.64 miles; see figure). The Coyote Creek 4 National Levee Database (NLD) leveed area covers 0.52 mi<sup>2</sup> of commercial, industrial, and public improvements. This project was approved 18 August 1941 by Act of Congress, Public Law 228, Seventy-seventh Congress, first session, as set forth in House Doc. 838, 76th Congress, 3d Session. The Los Angeles County Department of Public Works performs operations and maintenance.

The levee system was placed in the NLD during a nationwide initial survey of levees. The inspection results have determined this levee system does not meet the criteria of a levee, but rather is a flood control channel. In order to document the removal of this system from the NLD, this report was published and provided to the sponsor. With the exception of the land side vegetation growth, the check list applies to this channel, and all deficiencies and recommendations are valid for use to improve the condition of the channel. Although this flood reduction project has been determined to not be a levee, it is referred to as a "levee" in the report in accordance with the program guidance. Upon the signature of the Levee Safety Officer, the recommendation to remove this system from the NLD will take place. The channel will remain eligible for inspection under the Continuing Eligibility Inspection (CEI) Program.

### 1.3 Summary of Significant Deficiencies Found

The Coyote Creek 4 Levee System was inspected on 14 February 2012. During the periodic inspection of the system, several deficiencies were noted for which remedial actions are required. Each item of concern observed during the site inspection was rated "Unacceptable", "Minimally Acceptable", or "Acceptable." The following major deficiencies were noted during the periodic inspection of the project features:

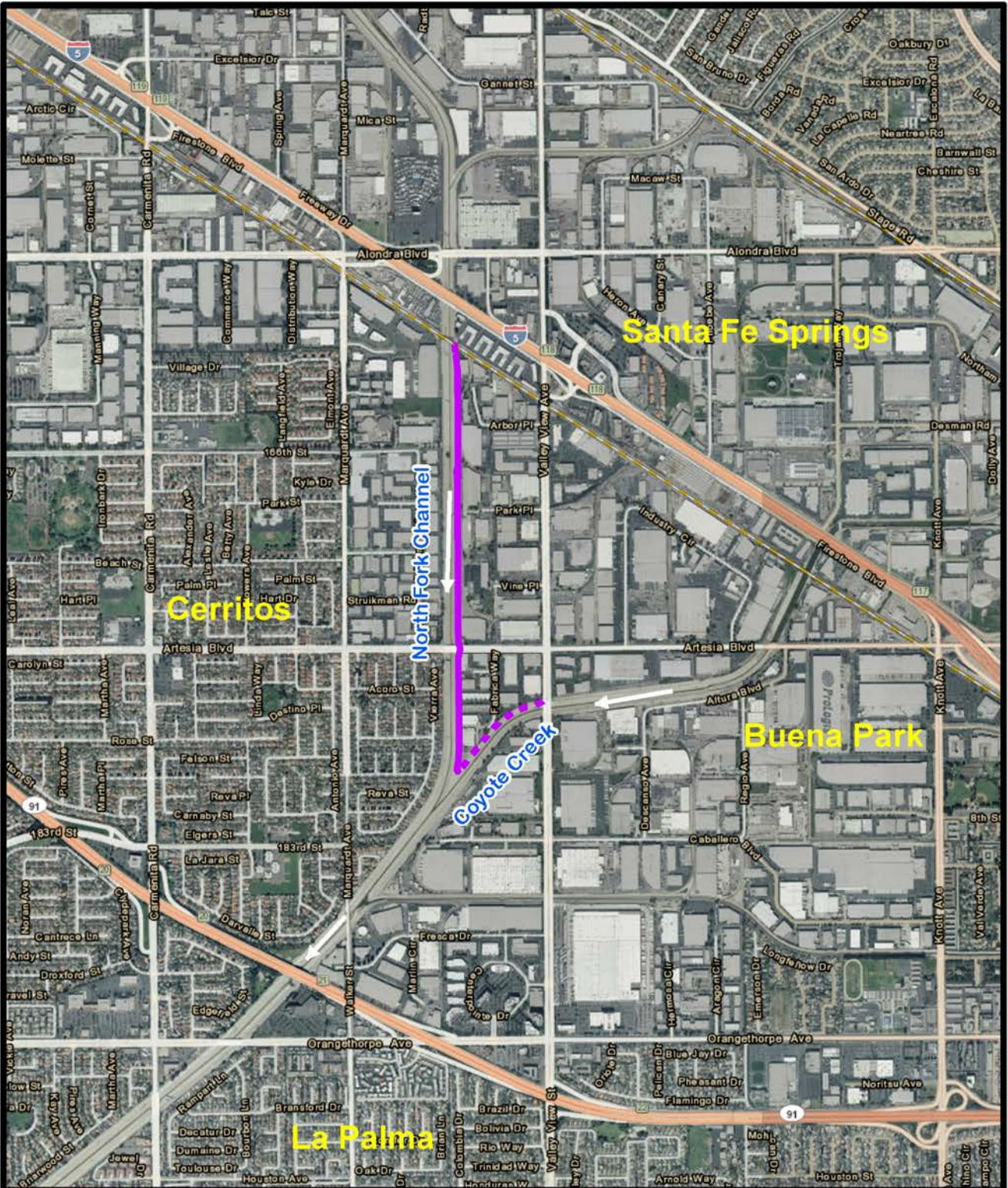
- Levee Embankments
  - Encroachments: Encroachments include an abandoned 36 inch CMP culvert; a saw cut portion of the crest asphalt; an abandoned two inch PVC drain outlet; and several unpermitted interior drainage structures.
  - Erosion/ Bank Caving: Several incidences of erosion and/or bank caving on the crest and landside levee side slope typically consisted of holes in the crest asphalt cover and loss of supporting embankment material.
  - Depressions/ Rutting: Three incidences of erosion and/or bank caving on the crest and landside levee side slope typically consisted of holes, depressions, and caving in the crest asphalt cover and loss of supporting embankment material.
  - Animal Control: Animal burrows typically 2 inches in diameter and 4-6 inches deep including disturbed and loose soil indicating recent construction.
- Interior Drainage System
  - Culverts/ Discharge Pipes: The pipe condition has not been verified using television camera videotaping or visual inspection methods within the past five years.
  - Flap Gates/ Flap Valves/ Pinch Valves: Missing and broken flap gates.
- Flood Damage Reduction Channels
  - Vegetation and Obstructions: Vegetation exceeding 2 inch diameter present between concrete joints.
  - Encroachments: Unpermitted stream gage in channel invert.
  - Tilting, Sliding or Settlement of Concrete Structures: six inch vertical heaving of the concrete surface over an approximately 100 foot length with resultant longitudinal and transverse cracking of the concrete.
  - Slab and Monolith Joints: Joint deterioration along the levee side slope concrete slabs has initiated spalling and cracking and damage of the waterstop.

#### **1.4 Overall Rating**

The Levee Safety Out-Brief Meeting was held on 7 August 2012. An engineering determination has concluded that the observed deficiencies would not prevent the system from performing as intended during the next flood event. Therefore, the Levee Safety Officer, Los Angeles District, has determined the overall system rating to be “Minimally Acceptable (M).”

A “Minimally Acceptable” system rating is defined as: “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 flood 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, not to exceed two years, and to correct the “Minimally Acceptable” rated items so that they do not deteriorate further and become “Unacceptable.”



**Legend**


- North Fork Channel Segment
- - - Coyote Creek Segment

0 0.225 0.45 Miles

Source: National Levee Database

COYOTE CREEK 4 (CC4)  
LEVEE SYSTEM

**LOCATION MAP**

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