US Army Corps of Engineers ®
Los Angeles District

COYOTE CREEK 3 LEVEE SYSTEM

LOS ANGELES COUNTY AND ORANGE COUNTY, CALIFORNIA

NLD ID # 3805010025

PERIODIC INSPECTION REPORT NO 1
GENERALIZED EXECUTIVE SUMMARY
SEPTEMBER 2012

FINAL RATING: MINIMALLY ACCEPTABLE
FINAL RATING DATE: 19 SEPTEMBER 2012

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

SUBMITTED: SEPTEMBER 2012
INSPECTED: 29 MARCH 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 3 Levee System is a section of Coyote Creek and is contained within the City of Cerritos and City of Lakewood, Los Angeles County, and City of Cypress and City of La Palma, Orange County, California. The levee system is a concrete-lined mainline levee and consists of 17,337 feet of the left embankment (looking downstream) of Coyote Creek between Valley View Street and Moody Creek (see figure). The National Levee Database (NLD) leveed area covers 3.01 mi^2 of residential, 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.

1.3 Summary of Significant Deficiencies Found

The Coyote Creek 3 Levee System was inspected on 29 March 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
    - Noncompliant Vegetation Growth: Large trees up to two foot diameter base within the right of way.
    - Encroachments: Encroachments within the channel right of way include a bicycle ramp to a pedestrian overpass bridge.

- Depressions/Rutting: Eleven incidences of erosion and/or bank caving on the crest and landside levee slope typically exceeding six inches deep with some up to three feet deep.

- Seepage: Small areas of active water ponding in the invert. Water actively flowing at the joint between adjacent monolith panels.

- Interior Drainage System

  - Vegetation and Obstructions: Significant sediment, vegetation, and debris obstructing the inlet side of interior drainage structures.

  - 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: Flap gates not operable due to sediment/debris buildup and a padlock. One flap gate is missing.

- Pump Stations – No documentation was available for the Garnet Avenue Pump Station. Criteria for pump stations which are "Unacceptable" as a result are:

  - Pump Stations Operating, Maintenance, Training, & Inspection Record

  - Pump Station Operations and Maintenance Equipment Manuals

  - Plant Building

  - Fencing and Gates

  - Pumps

  - Motors, Engines, Fans, Gear Reducers, Back Stop Devices, etc.: No documentation available.

  - Sumps /Wet well

  - Mechanical Operating Trash Rakes

  - Non-Mechanical Trash Racks

  - Fuel System for Pump Engines

  - Power Source

  - Electrical Systems

- Megger Testing on Pump Motors and Critical Power Cables
- Enclosures, Panels, Conduit and Ducts
- Intake and Discharge Pipelines
- Sluice/Slide Gates
- Flap Valves/Pinch Valves
- Cranes
- Other Metallic Items

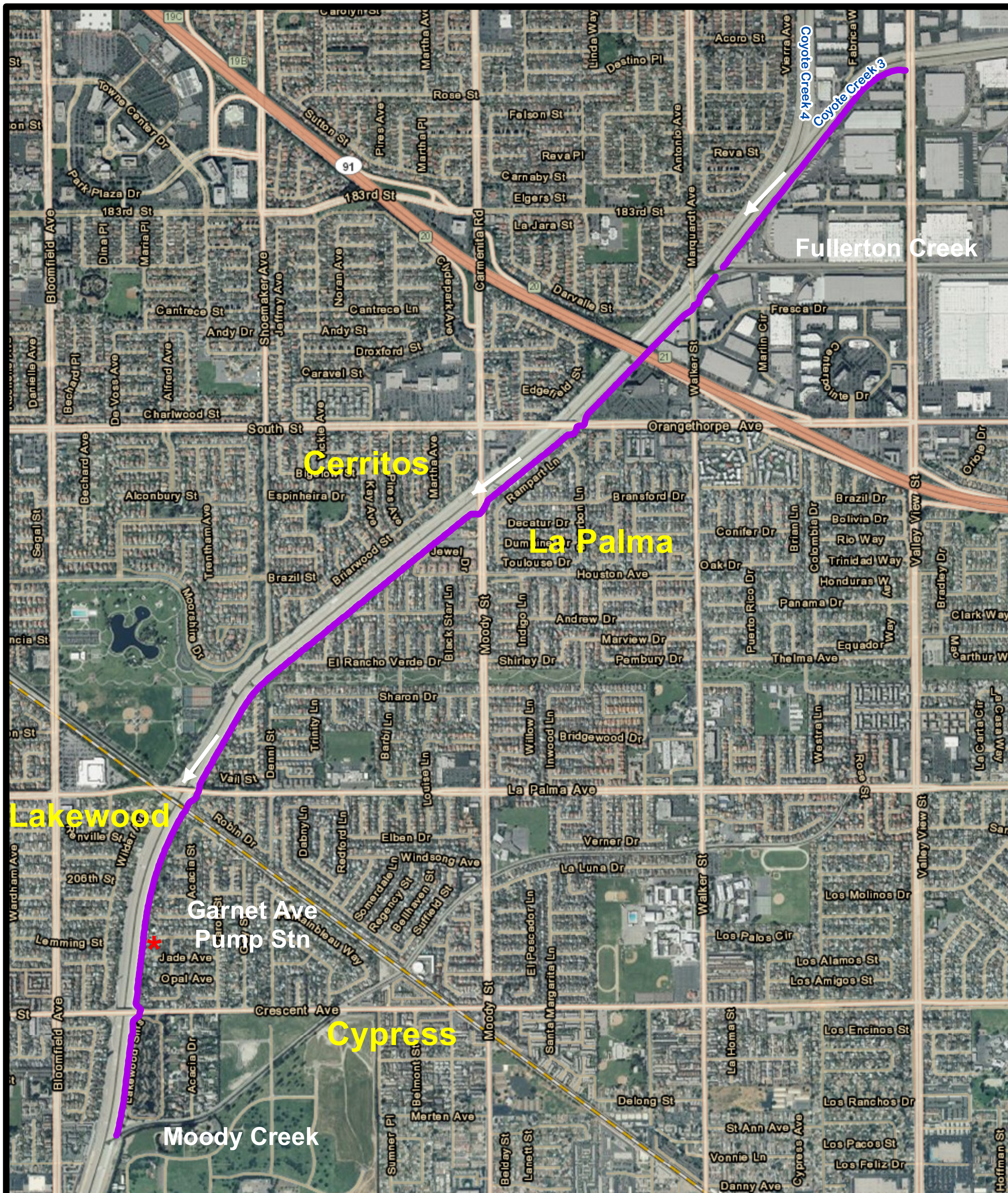
- Flood Damage Reduction Channels
  - Concrete Surfaces: Cracking and/or spalling in the concrete-lined invert or on the concrete-lined levee side slope. Small shrinkage cracks on the side slope and invert panels throughout the entire extent of the levee system.
  - Tilting, Sliding or Settlement of Concrete Structures: Differential settlement/uplifting of the surrounding concrete panel at an interior drainage structure outlet.
  - Slab and Monolith Joints: Cracking and spalling at joints between the concrete slabs and monoliths; various stages of severity.

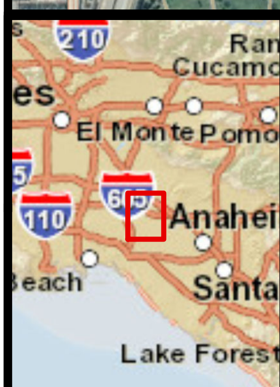
1.4 Overall Rating

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."





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Legend

Coyote Creek 3 Levee System

0 0.25 0.5 Miles

Source: National Levee Database

COYOTE CREEK 3 (CC3)
LEVEE SYSTEM

LOCATION MAP

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