



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



DEMENS DEBRIS BASIN COLLECTION LEVEE SYSTEM

**SAN BERNARDINO COUNTY, CALIFORNIA
NLD SYSTEM ID # 3805010080**

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

**FINAL SYSTEM RATING: MINIMALLY ACCEPTABLE
FINAL RATING DATE: SEPTEMBER 17, 2013**

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

SUBMITTED: JANUARY 2013
INSPECTED: JULY 28, 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 this Periodic Inspection

The purpose of the 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

Demens Debris Basin Collection Levee System is located in the City of Rancho Cucamonga, in the County of San Bernardino, in the State of California. Demens Debris Collection Basin Levee System is a collector levee located along the left/east bank (looking downstream) of Demens Creek that conveys floodwaters along Demens Creek into the Demens Debris Collection Basin. Demens Debris Collection Basin Levee System extends a distance of 2,976 feet. The inspection limits were later redefined to extend the downstream limit of the system an additional 400 feet. This extended the length of the system from 2,976 feet to 3,376 feet. The updated Demens Debris Collection Basin Levee System inspection limits are shown on Figure 1. Demens Debris Collection Basin Levee System was federally authorized and subsequently constructed by the United States Army Corps of Engineers (USACE). It is now entirely operated and maintained by the San Bernardino County Flood Control District (hereinafter the "County"). The National Levee Database (NLD) System ID Number for Demens Debris Collection Basin Levee System is 3805010080.

1.3 Field Inspection and Summary of Major Deficiencies Found

A periodic inspection of the Demens Debris Basin Collection Levee System was conducted on July 28, 2011. The local sponsor representative met with the inspection team and assisted with granting access along the length of the levee. During the inspection of the system, several deficiencies were noted for which remedial actions are required. The following main deficiencies of the project features were noted during the periodic inspection:

Levee Embankments

- **Non-compliant Vegetation Growth:** Significant vegetation growth (brush, tall grass, and trees with trunks greater than 2 inches in diameter) 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.

- **Encroachments:** As observed during the periodic inspection, major modifications have been made to the levee system since its original construction that could inhibit operations and maintenance or emergency operations, and/or could have a negative impact on the overall integrity of the levee system. No permits are available to show that these modifications have been permitted by the USACE.
- **Erosion/Bank Caving:** Due to the concentration of local runoff, significant erosion gullies (i.e., greater than 6 inches in depth) have formed.

Interior Drainage System

- **Culverts/ Discharge Pipes:** The condition of side-drainage structure has not been verified using videotaping by television camera or another visual-inspection method within the past five years.

TetraTech presented an out-brief concerning Periodic Inspection No. 1 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 Demens Debris Basin Collection 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 Demens Debris Basin Collection Levee System 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.”

1.5 Leveed Area Revision

On September 23, 2013, the leveed area was revised per signature of the Levee Safety Officer and is shown on Figure 1. This leveed area supersedes the leveed area in the Periodic Inspection Report No. 1.

DEMENS DEBRIS BASIN COLLECTION LEVEE SYSTEM
 FINAL PERIODIC INSPECTION REPORT NO. 1



Figure 1: Demens Debris Basin Collection Levee System

Note: This NLD Leveed Area supersedes the leveed area shown in the PI Report.