



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



SAN GABRIEL RIVER 4 LEVEE SYSTEM

LOS ANGELES COUNTY, CALIFORNIA
NLD SYSTEM ID # 3805010051

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

FINAL SYSTEM RATING: UNACCEPTABLE

FINAL RATING DATE: 9 DEC 2014

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

SUBMITTED: OCTOBER 2014
INSPECTED: MARCH 22, 2012

EXECUTIVE SUMMARY

This Executive Summary provides an introduction to the San Gabriel River 4 (SGR4) Periodic Inspection No. 1, 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 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 SGR4 Levee System is located in the City of Industry, Avocado Heights, and an unincorporated area, within Los Angeles County, in the State of California. According to the National Levee Database (NLD), the SGR4 Levee System runs along the left (east) bank (looking downstream) of San Gabriel River (SGR), beginning at the confluence with the San Jose Creek (SJC) Diversion Channel at approximate Station 1230+80 (Station SJ 32+70) and terminating at the Whittier Narrows Dam Flood Control (F.C.) Basin at Station 1172+00. The levee system is composed of a single levee segment. Figure 1 shows the extent of the levee system and leveed area.

During the site inspection, the U.S. Army Corps of Engineers (USACE), Los Angeles District inspection team reported that the levee continued 445 feet further upstream along the SJC Diversion Channel to the Interstate 605 (I-605) bridge crossing at approximate Station SJ 37+15. The revised total length of the system is about 6,325 feet (1.20 miles).

The SGR4 Levee System is a natural (earthen) bottom, trapezoidal channel. The riverside slopes are protected by grouted stone revetment. There are 2 bridge crossings, 5 stone stabilizers, and 7 side-drainage structures through the levee.

The SGR4 Levee System was federally authorized under the general comprehensive plan for flood risk management (approved August 18, 1941 by an act of Congress, Public Law 228) and subsequently constructed between 1952 and 1953 by the USACE, Los Angeles District. USACE, Los Angeles District, Asset Management Division, Operations Branch has operation and maintenance (O&M) responsibilities.

1.3 Summary of Major Deficiencies Found and Subsequent Repairs

The levee system was inspected on March 22, 2012. During the periodic inspection of the system, several deficiencies were noted for which remedial actions are required. The following main deficiencies were noted during the periodic inspection of the project features:

- Levee Embankments:

- Non-Compliant Vegetation Growth – Large diameter trees and bushes were observed on the levee crest, landside slope, and riverside slopes within the Vegetation-Free Zone.
- Encroachments – Unauthorized/unpermitted structures observed during the site inspection include pedestrian/ horse trail ramps and side-drainage structures.
- Depressions/Rutting – Depressions and rutting up to 2 feet on the levee crest is primarily due to horse and pedestrian traffic.
- Animal Control - Small concentrations of animal burrows were observed on the landside of the levee slope. A few burrows extended up to 64 inches behind the riverside grouted slope.
- Interior Drainage System:
 - Vegetation and Obstructions - Sediment, vegetation, and/or debris were observed blocking a portion of several side-drainage structures.
 - Ponding Areas - Rancid water approximately 1 foot deep on the outlet structure prevented inspection of the culvert and flap gate.
 - Culverts/ Discharge Pipes – The condition of the pipes has not been verified using television camera videotaping or visual inspection methods within the past five years.
 - Flap Gates/Flap Valves/Pinch Valves – One flap gate is cracked.
- Flood Damage Reduction Channel:
 - Vegetation and Obstructions – Large trees were growing on the downstream side of the stone stabilizers.
 - Shoaling – Deposited sediment has formed heavily vegetated shoals.

1.4 Overall Rating

The Levee Safety Out-Brief Meeting was held on August 8, 2012. The Levee Safety Officer, Los Angeles District, has determined the overall system rating of San Gabriel River 4 Levee System 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. An engineering determination has concluded that the Unacceptable System Components identified seriously impair the functioning of the levee system, would prevent the system from performing as intended, and pose unacceptable risk to public safety.

The Asset Management Division has been notified of the overall rating of the levee system by memoranda with instructions to correct “Critically Unacceptable” rated items immediately, “Unacceptable” rated items as soon as possible, and to correct the “Minimally Acceptable” rated items within two years so that they do not deteriorate further and become “Unacceptable.” Because this levee system is rated as “Unacceptable”, a public notice will be prepared and coordinated between the Asset Management, Dam and Levee Safety Section, and Public Affairs Offices. Once the “Critically Unacceptable” deficiencies are corrected by Asset Management and verified by the Dam and Levee Safety Section, the system rating will be revised to “Minimally Acceptable.”

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