



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



SAN GABRIEL RIVER 7 LEVEE SYSTEM
LOS ANGELES COUNTY, CALIFORNIA
NLD ID # 3805010077

PERIODIC INSPECTION REPORT NO 1
GENERALIZED EXECUTIVE SUMMARY
SEPTEMBER 2012

FINAL RATING: MINIMALLY ACCEPTABLE
FINAL RATING DATE: 14 SEPTEMBER 2012

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

SUBMITTED: SEPTEMBER 2012
INSPECTED: 4-5 APRIL 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 the San Gabriel River 7 (SGR7) 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 SGR7 Levee System is located in the Cities of Azusa and Irwindale, in Los Angeles County, in the State of California. The National Levee Database (NLD) shows the SGR7 Levee System along the left (east) bank of the San Gabriel River, from approximate Station 176+15 (D126+60) near San Gabriel Canyon Road to approximate Station 80+25 (D28+50) located approximately 500 feet upstream of Drop Structure (DS) 1, for a total length of 9,590 feet (1.82 miles) (see figure). However, as-built plans for the SGR7 Levee System indicate that the levee continues just downstream of the Foothill Freeway (Interstate [I] 210), in the Santa Fe Dam Flood Control Basin to Station 8+40, for a total length of 16,775 feet (3.18 miles). This periodic inspection report covers the longer SGR7 Levee System represented by the as-built plans.

The SGR7 Levee System is a trapezoidal channel with a natural bottom and grouted rock-revetted riverside slopes. The SGR7 Levee System includes stone stabilizers, drop structures, bridge crossings, side-drainage structures, and a bicycle path on the crest.

The SGR7 Levee System was federally authorized under the general comprehensive plan for flood risk management (Flood Control Act of 22 June 1936, amended as of 18 October 1938) and subsequently constructed by the United States Army Corps of Engineers (USACE). Levee and stone stabilizer construction was completed in 1948; drop structures were completed in 1969. It is operated and maintained by the USACE.

1.3 Summary of Major Deficiencies Found

The SGR7 Levee System was inspected on 4 and 5 April 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:

- Boulder deposits and heavy vegetation growth in the channel invert may be impairing channel flow capacity.
- Levee encroachments include:
 - A pump house that appears to be related to the nearby spreading grounds.
 - Two side-drainage structures that do not appear on available as-built plans and a permit could not be located in USACE files.
 - A hole from a removed guard rail wood post extends more than 3.5 feet into the levee crest.
- Drop structure deficiencies include:
 - Only one row of subdrain outlet pipes was observed at two of the drop structures. The second row may be located below the concrete apron. This is not consistent with available design and as-built plans.
 - Some of the drop structure subdrain outlets are clogged with vegetation.
 - Up to 16 inches of scour and a void under the concrete extending up to 26 inches horizontally was observed at the downstream toe.
- Stone stabilizer deficiencies include:
 - Up to 10 feet of scour was observed on the downstream side of the stone stabilizers.
 - Vegetation growing in and adjacent to the grouted stone stabilizers.

1.4 Overall Rating

The Levee Safety Out-Brief Meeting was held on 8 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

 SGR7 Levee System (NLD)

0 0.2 0.4 Miles

Source: National Levee Database

SAN GABRIEL RIVER 7 (SGR7)
LEVEE SYSTEM

LOCATION MAP

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