



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



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# **SAN GABRIEL RIVER 3 LEVEE SYSTEM**

**LOS ANGELES COUNTY, CALIFORNIA**  
**NLD ID # 3805010074**

**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: 3 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 3 (SGR3) 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 SGR3 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) depicts the SGR3 Levee System along the right (west) bank of the San Gabriel River, from approximate Station 114+10 (located about 340 feet upstream of the intersection of Van Tassel Mountainway and Fish Canyon Road) to approximate Station 81+95 (located about 490 feet upstream of the intersection of Royal Oaks Drive and Encanto Parkway), for a total length of 3,215 feet (0.61 miles) (see figure). However, the 1948 as-built plans for the SGR3 Levee System indicates that the actual levee limits extend from the right bank of the San Gabriel River, from about Station 117+85 (located 800 feet upstream of Van Tassel Mountainway), to Station 0+00 (located about 1,000 feet downstream of the Foothill Freeway (Interstate [I] 210) in the Santa Fe Dam Flood Control Basin), for a total length of 11,785 feet (2.23 miles). This periodic inspection report covers the longer SGR3 Levee System represented by the as-built plans.

The SGR3 Levee System is a trapezoidal channel with a natural bottom and grouted rock-revetted riverside slopes. The SGR3 Levee System includes stone stabilizers, drop structures, bridge crossings, and side-drainage structures.

The SGR3 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. The system is operated and maintained by the USACE.

### **1.3 Summary of Major Deficiencies Found**

The SGR3 Levee System was inspected on 3 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.
- Large trees are growing out of the grouted stone revetment.
- Levee encroachments:
  - The upstream end of the SGR3 levee (upstream of where Fish Canyon Road crosses the levee) no longer exists due to grading by a private ranch.
- Drop structure deficiencies:
  - 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 26 inches horizontally was observed at the downstream toe.
  - A drop structure does not join the levee. There is a gap about 30-feet-wide between the drop structure dike and SGR3 levee.
- Stone stabilizer deficiencies:
  - Up to 10 feet of scour was observed on the downstream side of the stone stabilizers.
  - Vegetation is growing in and adjacent to the grouted stone stabilizers.
  - Holes or separations may extend through the grouted stone of the stabilizer.

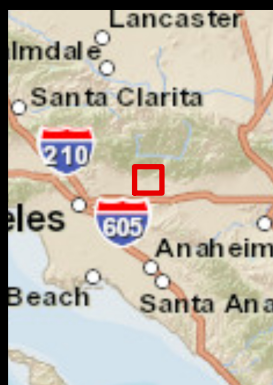
#### **1.4 Overall Rating**

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

— San Gabriel River 3 Levee System

0 0.1 0.2 Miles

Source: National Levee Database

### SAN GABRIEL RIVER 3 LEVEE SYSTEM

### LOCATION MAP



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