



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



SAN GABRIEL RIVER 6 LEVEE SYSTEM
LOS ANGELES COUNTY, CALIFORNIA
NLD SYSTEM ID # 3805010061

PERIODIC INSPECTION REPORT NO 1
GENERALIZED EXECUTIVE SUMMARY

FINAL SYSTEM RATING: MINIMALLY ACCEPTABLE
FINAL RATING DATE: MAY 31, 2013

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

SUBMITTED: AUGUST 2012
INSPECTED: JANUARY 10-11, 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

The San Gabriel River 6 (SGR6) Levee System, shown on Figure 1, is located in the County of Los Angeles, California, and is part of the Los Angeles County Drainage Area (LACDA). The SGR6 Levee System comprises one levee segment, the San Gabriel River 6 Levee Segment (SGR6 Levee Segment).

The SGR6 Levee System is 4.42 miles long and runs along the left bank of the San Gabriel River downstream of the Santa Fe Dam to the San Gabriel River/Walnut Creek confluence, and along the right bank of Walnut Creek from a point about 630 feet downstream of Interstate 605 to the San Gabriel River/Walnut Creek confluence (a distance of about 750 feet on Walnut Creek).

The San Gabriel River channel from Santa Fe Dam to the Whittier Narrows Flood Control Basin, which includes the SGR6 Levee System, was improved under the general comprehensive plan for flood control and other purposes in the basins of the Los Angeles and San Gabriel Rivers and Ballona Creek, as set forth in House Document 838, 76th Congress, third session. The comprehensive plan was approved August 18, 1941 by act of Congress, Public Law 228, 77th Congress, first session.

The USACE Los Angeles District and the Los Angeles County Flood Control District (LACFCD) entered into a Project Cooperation Agreement on August 7, 1995. As required by Public Law 99-622, the LACFCD is responsible for operating and maintaining all the non-federal features of the LACDA. The Los Angeles County Department of Public Works (LACDPW) has assumed the functions of the LACFCD. The LACDPW is the Local Sponsor for the entire SGR6 Levee System.

1.3 Field Inspection and Summary of Major Deficiencies Found

The field inspection of the SGR6 Levee System was conducted on January 10 and 11, 2011. The Local Sponsor representative met with the inspection team on January 10, 2011. The Local

Sponsor shows an active response to operation and maintenance of the project; however, some deficiencies were noted and remedial actions are required. The main system deficiencies are:

Levee Embankments

- **Non-compliant Vegetation Growth:** Non-compliant vegetation on the riverside and landside slopes of the levee embankment within the vegetation-free zone.
- **Encroachments:** The encroachment of side drains, nurseries, stream gauging stations, utilities, poles, irrigation lines and encampments on the landside slope and near the crown of the levee. The Levee Embankments checklist was used to record (1) any side drain that was shown on available as-built drawings but was not found during the field inspection and for which no approved permit for removal was found and (2) any side drain that was found during the field inspection but is not shown on the as-built drawings nor permitted by the USACE (this may include side drains where changes have occurred, such as change in pipe material, change in diameter/size, or fewer or more pipes/conduits). Side drain encroachments are important because they may have been removed or installed using unacceptable methods that could cause seepage and erosion along the pipe/conduit or leakage of water and backfill into the pipe/conduit. A total of nine side drain encroachments were identified.
- **Erosion/Bank Caving:** Erosion on the landside and riverside slopes and crown, typically caused by irrigation or drainage runoff from the crown.
- **Depressions/Rutting:** Depressions and ruts on the landside and riverside slopes.
- **Animal Control:** Animal burrows occurring on the landside and riverside slope, crown and river channel bottom.
- **Culverts/Discharge Pipes:** See Culverts/Discharge Pipes under the Interior Drainage System heading for details.
- **Riprap Revetments & Bank Protection:** Displaced riprap revetment on the riverside slope.

Interior Drainage System

- **Vegetation and Obstructions:** Vegetation and debris obstructing drainage structures.
- **Culverts/Discharge Pipes:** Documentation of the interior condition of the pipes (via video or visual inspection methods) was not provided.
- **Flap Gates/Flap Valves/Pinch Valves:** Missing, inoperable and propped-open flap gates. Due to inaccessibility of some flap gates, their operability could not be verified.

Flood Damage Reduction Channels

- **Vegetation and Obstructions:** Non-compliant vegetation within the channel obstructing flow in the channel.
- **Flap Gates/Flap Valves/Pinch Valves:** See Flap Gates/Flap Valves/Pinch Valves under the Interior Drainage System heading for further details.

URS 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 SGR6 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 San Gabriel River 6 Levee System to be “Minimally Acceptable.” A “Minimally Acceptable” system rating is defined as:

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 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, and correct the “Minimally Acceptable” rated items within two years so that they do not deteriorate further and become “Unacceptable.”

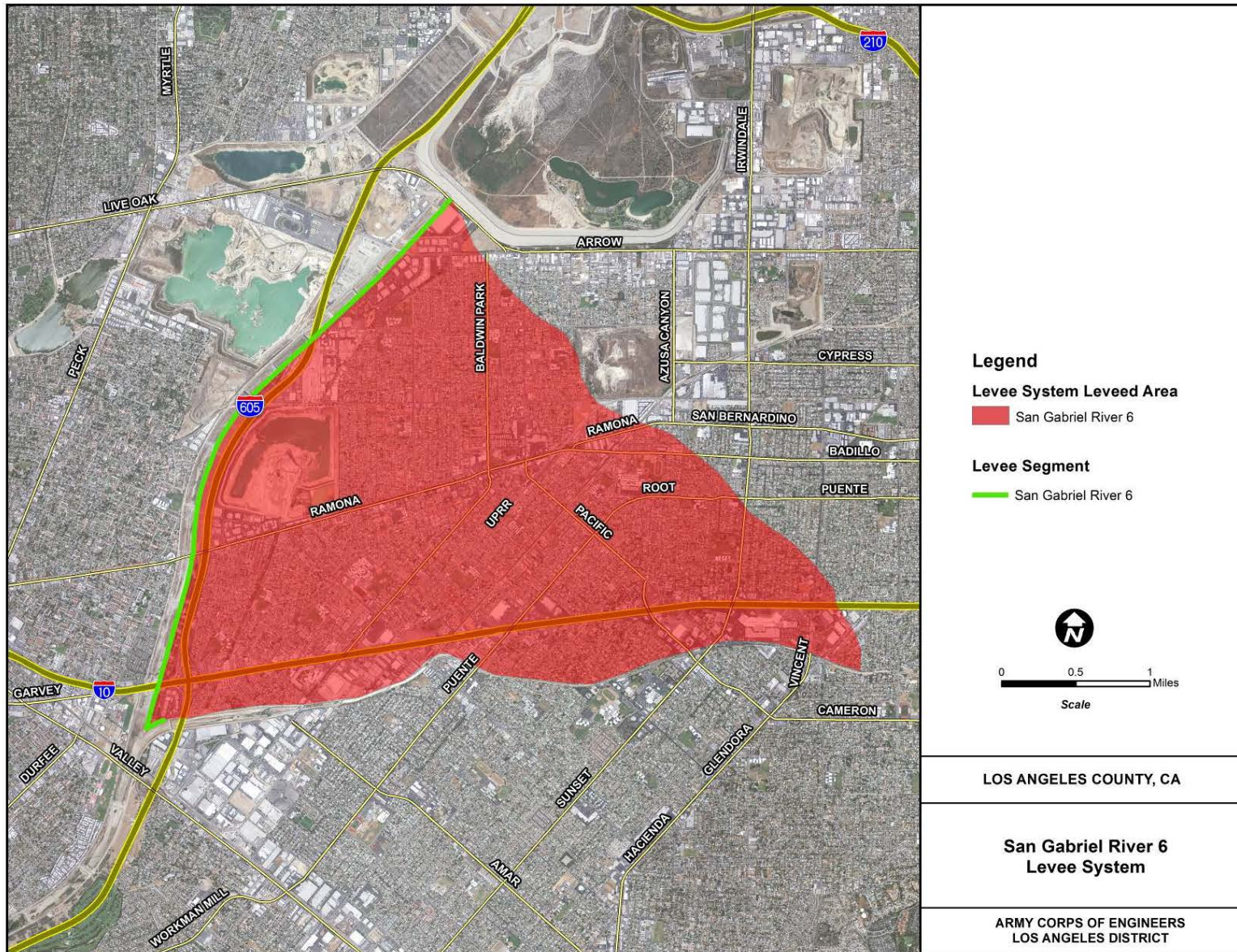


Figure 1. San Gabriel River 6 Levee System