



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



BALLONA CREEK 3 LEVEE SYSTEM

LOS ANGELES COUNTY, CALIFORNIA

NLD SYSTEM ID # 3805010032

PERIODIC INSPECTION REPORT NO 1

GENERALIZED EXECUTIVE SUMMARY

FINAL SYSTEM RATING: MINIMALLY ACCEPTABLE

FINAL RATING DATE: 09 DECEMBER 2014

PERIODIC INSPECTION REPORT PREPARED BY THE
U.S. ARMY CORPS OF ENGINEERS, SAN FRANCISCO DISTRICT

SUBMITTED: NOVEMBER 2013
INSPECTED: MARCH 19-21, 2013

EXECUTIVE SUMMARY

This Executive Summary provides an introduction to the Ballona Creek 3 (BC3) Levee System Periodic Inspection Report 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 BC3 Levee System is located in the Playa Del Rey and Playa Vista districts of the City of Los Angeles in Los Angeles County, California. The total length of the system is approximately 2.00 miles, not including the jetty downstream of Station 12+25. Figure 1 below shows the extent of the BC3 Levee System.

The BC3 Levee System runs along the left bank of Ballona Creek between Station 12+25, and Centinela Creek confluence at Station 118+10.16. The BC3 Levee System is divided into two segments, the Ballona Creek 3a (BC3a) Segment and the Ballona Creek 3b (BC3b) Segment. The BC3a Segment is operated and maintained by the U.S. Army Corps of Engineers (USACE) and the BC3b Segment is operated and maintained by the Los Angeles County Department of Public Works (LACDPW). The BC3a Segment begins at Station 12+25 and ends at Station 23+46.99, for a length of about 1,122 feet (0.21 miles). The BC3b Segment continues upstream from Station 23+46.99 to the Centinela Creek confluence at Station 118+10.16, for a length of approximately 9,463 feet (1.79 miles).

The BC3 Levee System consists of a “soft” or earthen bottom trapezoidal channel with stone-revetted and concrete-revetted banks. According to as-built plans, the BC3 Levee System includes 5 side drainage structures and 3 bridge crossings.

The BC3 Levee System, along with other similar works in the Los Angeles County Drainage Area (LACDA), was authorized initially by the Emergency Relief Act of 1935 to provide drainage and flood control. On 30 June 1937 it was transferred to the more comprehensive project adopted in the Flood Control Act of 22 June 1936. The Flood Control Acts approved 22 June 1936 and 15 May 1937, authorized the construction of reservoirs and channel improvements on the Los Angeles and San Gabriel rivers and Ballona Creek, and tributaries thereof. The Flood Control Act approved 18 August 1941, approved the general comprehensive plan for flood control and other purposes in the basins of these streams.

1.3 Summary of Major Deficiencies Found and Subsequent Repairs

The levee system was inspected on 19 through 21 March 2013. During the periodic inspection of the system, several deficiencies were noted for which remedial actions are required. The condition of the reinforced concrete revetment on the waterside levee slope was critically unacceptable. The Los Angeles County Department of Public Works (LACDPW) has since made repairs where significant cracking, spalling, and uplift were observed. Photos and e-mail documenting completion of the repairs were provided by 11 September 2013.

Other major deficiencies that have yet to be corrected are:

- vegetation within the vegetation-free zone;
- project datum. The levee crest elevations could not be directly compared to the as-built elevations to assess settlement and capacity (with respect to top of system elevation);
- deterioration of the 72-inch diameter corrugated metal pipe (CMP) along the BC3a Segment;
- missing stone around the outlet of the 72-inch diameter CMP along the BC3a Segment;
- encroachments that may negatively impact the integrity of the levee (e.g. culvert penetrations, retaining wall);
- unknown condition of the culvert penetrations (i.e. thorough internal inspection has not been performed); and
- erosion along the top of the landside levee slope along the BC3b Segment.

1.4 Overall Rating

The Levee Safety Out-Brief Meeting was held 23 July 2013. The BC3 Levee System is tentatively rated M, Minimally Acceptable, until further review from USACE Los Angeles District (herein referred to as USACE unless noted otherwise).

A "Minimally Acceptable" system rating 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 sponsors 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."

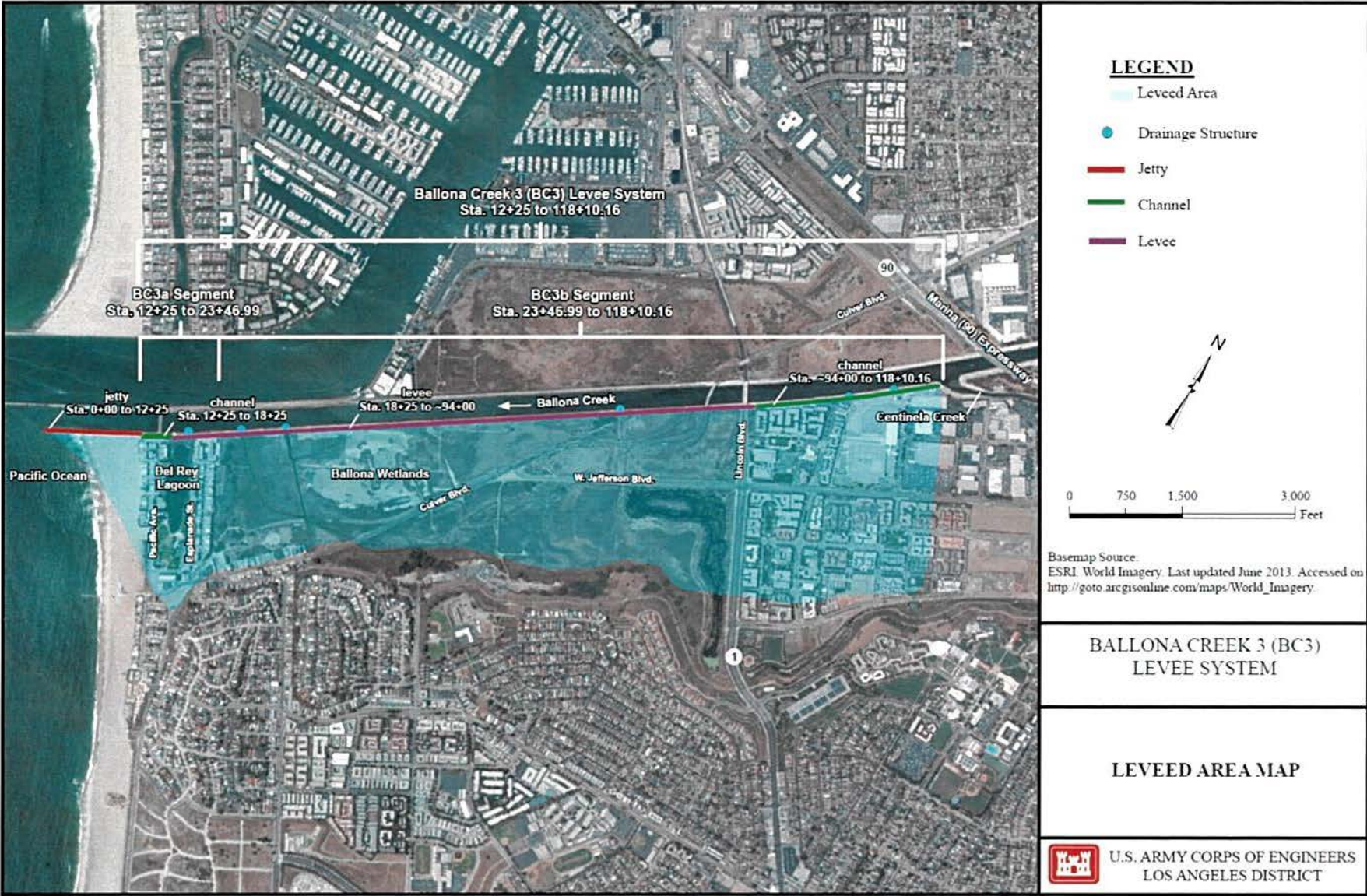


Figure 1: Ballona Creek 3 Levee System