



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



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**LITTLE COLORADO RIVER 2  
LEVEE SYSTEM  
CITY OF HOLBROOK, NAVAJO COUNTY, ARIZONA  
NLD SYSTEM ID # 3805020011**

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

**FINAL SYSTEM RATING: MINIMALLY ACCEPTABLE  
FINAL RATING DATE: APRIL 21, 2015**

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

SUBMITTED: DECEMBER 2014  
INSPECTED: APRIL 08, 2014

## EXECUTIVE SUMMARY

This Executive Summary provides the scope and purpose of the periodic inspection, an overview of the Little Colorado River 2 (LCR2) Levee System, a summary of major findings of the periodic inspection, and the overall levee rating.

### 1.1 Scope and Purpose of Periodic Inspection

The purpose of the LCR2 Levee System periodic inspection is to identify deficiencies that pose hazards to human life or property and to determine design adequacy relative to present day criteria. 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 LCR2 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 are beyond the scope of this LCR2 Levee System periodic inspection.

### 1.2 System Summary

The Holbrook Levee Project consists of two levee systems constructed along the Little Colorado River in the City of Holbrook, Arizona (Figure 1-1). The left/north bank of the Little Colorado River is the LCR2 Levee System and is also known as the North Levee. The levee on the right/south bank of the Little Colorado River is the Little Colorado River 1 (LCR1) Levee System and is also known as the McLaws Levee. Both levee systems were inspected on April 8, 2014. A separate Periodic Inspection Report No. 1 has been developed for the LCR1 Levee System.

The LCR2 Levee System was federally authorized and subsequently constructed by the US Army Corps of Engineers, Los Angeles District (USACE SPL). Construction was completed in August 1996. The LCR2 Levee System is now operated and maintained by the City of Holbrook. The National Levee Database (NLD) number for the LCR2 Levee System is 3805020011.

The LCR2 Levee System has an earthen embankment, side-drain structures, a stop log closure structure, utility crossings, access ramps, a ponding area and levee, and one bridge crossing. The LCR2 Levee System is south of, and parallel to the Burlington Northern Santa Fe (BNSF) Railroad. The LCR2 Levee system begins at Station 497+75 and ends at Station 302+53.61. The LCR2 Levee System is approximately 19,521 feet (3.7 miles) in length.

### 1.3 Summary of Key Deficiencies Found

The periodic inspection of the LCR2 Levee System was conducted on April 8, 2014. The inspection team met with the City of Holbrook City Manager, Mr. Ray Alley. During the periodic inspection, deficiencies were noted for which remedial actions are required. The following key deficiencies of the project features were noted during the periodic inspection:

Levee Embankment:

- Erosion rills were observed on the landside slope.

- Rodent holes were observed at several locations on the landside slope.
- Holes were observed in the access road adjacent to the water side toe.

Interior Drainage System:

- Sedimentation that is likely to impair flow was observed in the reinforced concrete pipes near the Apache Railroad crossing.

#### **1.4 Overall Rating**

On June 25, 2014, a Levee Safety Officer (LSO) out-brief meeting was held between USACE SPL, the City of Holbrook, and USACE SPN. An overall system rating of “Minimally Acceptable” was determined for the LCR2 Levee System by the USACE SPL LSO. A “Minimally Acceptable” system rating is defined as the following: “One or more items are rated Minimally Acceptable or one or more items are rated 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.”

