



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



SANTA MARIA RIVER 2 LEVEE SYSTEM
SANTA BARBARA COUNTY, CALIFORNIA
NLD SYSTEM ID # 3805010092

PERIODIC INSPECTION REPORT NO 1
GENERALIZED EXECUTIVE SUMMARY

FINAL SYSTEM RATING: MINIMALLY ACCEPTABLE
FINAL RATING DATE: MAY 26, 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: FEBRUARY 2015
INSPECTED: MARCH 12-13, 2014

EXECUTIVE SUMMARY

The Executive Summary provides an introduction to the periodic inspection, an overview of the Santa Maria River 2 (SMR2) Levee System, a summary of the major findings of the periodic inspection, and the overall system rating.

1.1 Scope and Purpose of Periodic Inspections

The purpose of this periodic inspection is to identify deficiencies in the SMR2 Levee System that pose hazards to human life or property and to determine design adequacy relative to present day criteria. The inspection is intended to identify these issues to facilitate future studies and associated repairs as appropriate.

This assessment of the general condition of the SMR2 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 SMR2 Levee System periodic inspection.

1.2 System Summary

The SMR2 Levee System is part of a comprehensive project providing flood control for the Santa Maria Valley. SMR2 Levee System is located near Santa Maria in Santa Barbara County, California. SMR2 Levee System was constructed in 1963 and consists of a 6.8-mile levee along the left (south) bank of the Santa Maria River from the California Hwy 1 Bridge to Blosser Road. The extents of the system are from project Station 287+82.11 (downstream) to Station 647+80 (upstream) as shown on Figure 1-1. Modifications to the SMR2 Levee System were completed in 1984, adding a total of 23 rock groins, 9 scour gages, and a training fence along the waterside levee slope between Station 304+00 and 365+60. The SMR2 Levee System was federally authorized and subsequently constructed by the United States Army Corps of Engineers, Los Angeles District (USACE LAD) and the Santa Barbara County Flood Control and Water Conservation District (SBCFCWCD). The local sponsor for the project is the SBCFCWCD.

1.3 Summary of Major Deficiencies Found and Subsequent Repairs

The periodic inspection of the SMR2 Levee System was conducted on March 12-13, 2014 by the United States Army Corps of Engineers, San Francisco District (USACE SPN) along with staff from the USACE LAD. A summary of deficiencies is discussed in detail in Section 6.5 of this report. The most significant deficiencies observed include vegetation, animal control, levee embankment erosion, and culvert/discharge pipes. Other deficiencies existed throughout the system with varying levels of significance.

1.3.1 Non-Compliant Vegetation Growth

Dense vegetation growth (mostly willow trees) was present on the waterside levee toe within the protected 15 ft vegetation-free zone. Tree trunk sizes ranged between 1 and 12 in diameter at breast height.

1.3.2 Animal Control

A significant amount of densely spaced animal burrows were observed over the entire levee system with the majority located on the landside slope (average size, depth and spacing of animal burrow clusters were 12 in. in diameter, 2 ft in depth, and 5 ft apart). On the waterside slope,

burrowing sites were less frequent than what was observed on the landside slope. Waterside burrowing activity was observed in smaller groups through the larger riprap. In several cases, loose soil was visible from the levee and covered the existing riprap. The sponsor has an active animal control program but expressed several limitations using poisons and live traps due to local and state regulation. After the inspection, the sponsor addressed several significant locations and will continually address this issue prior to each rainy season.

1.3.3 Erosion

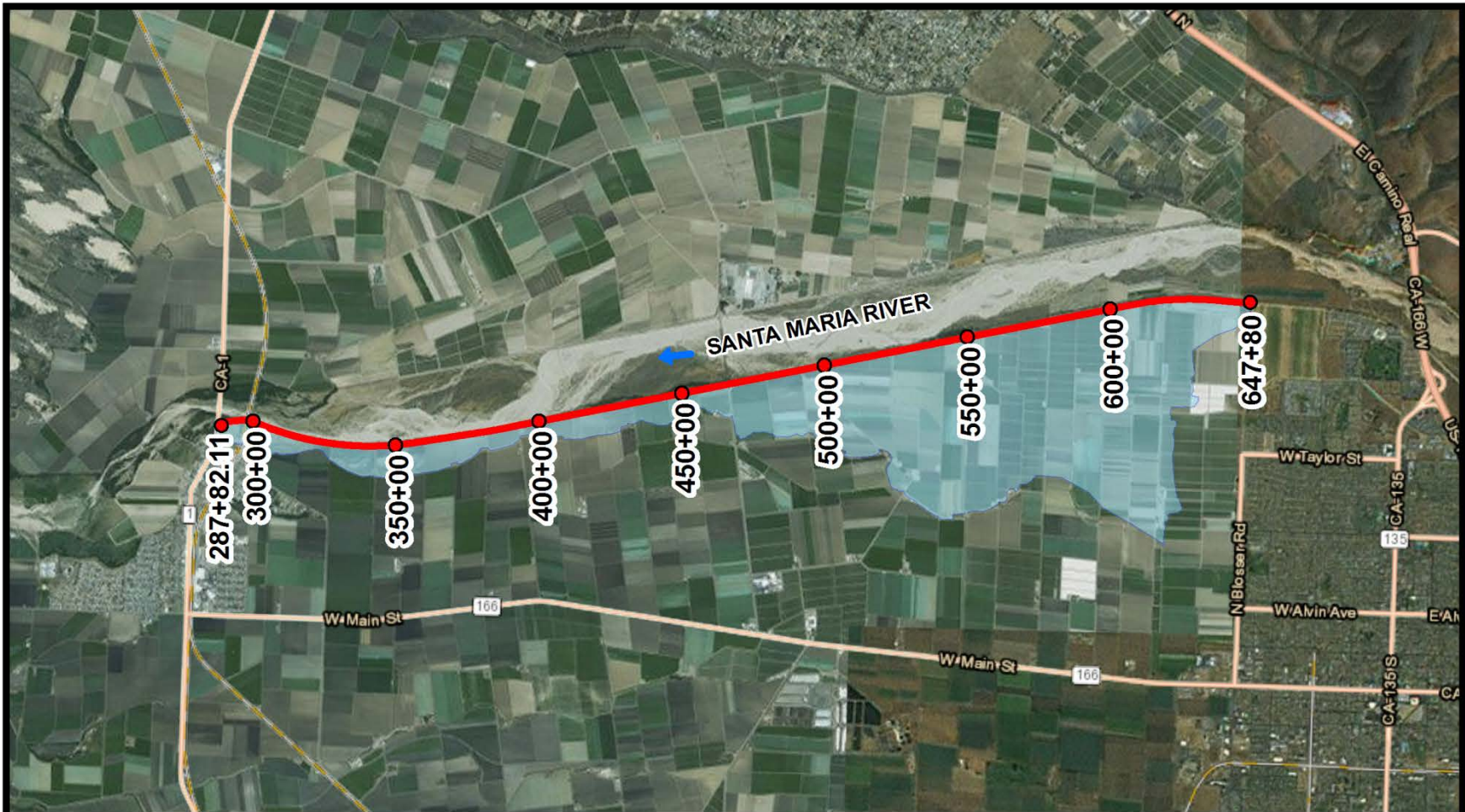
Past performance has indicated that erosion from impinging flows is an ongoing issue for the SMR2 Levee System, particularly in areas where the low flow channel of the river runs adjacent to the levee toe. Rock groins have been added in certain areas to limit the rate of continued erosion. A large area upstream from the rock groins remains vulnerable to erosion. The low flow channel of the river was also observed within 5 ft of the waterside levee toe in this area.

1.3.4 Culvert/Discharge Pipes

All culverts observed in the field inspection appeared in good condition. It is required that the local sponsor inspects all culverts by video or visually every 5 years and that they provide inspection records for each individual drainage structure. The local sponsor indicated that routine visual inspections do take place, however, no documentation was provided to support this.

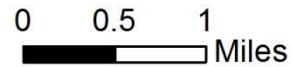
1.4 Overall Rating

On June 18, 2014, a Levee Safety Officer (LSO) out-brief meeting was held between USACE LAD, SBCFCWCD, and USACE SPN. An overall system rating of “Minimally Acceptable” was determined for the SMR2 Levee System by the USACE LAD LSO. A “Minimally Acceptable” system rating is defined as the following: “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.”



Legend

- Stationing
- Centerline
- Santa Maria River 2 Leveed Area



Data Source: NLD v3.0 (August 2014)

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**LOCATION AND
LEVEED AREA MAP**



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Figure 1-1