



South Non-Urban Levee Evaluations Project

Stockton Diverting Canal/Mormon Slough Study Area Summary

The California Department of Water Resources (DWR) Division of Flood Management conducted a levee evaluations program to assess the existing conditions of levees in California's Central Valley from 2008 to 2015. The Urban Levee Evaluations (ULE) Project addressed approximately 350 miles of Project¹ and non-Project² levees protecting populations of 10,000 people or more. The Non-Urban Levee Evaluations (NULE) Project provides a non-urban level of investigation to the remaining Project levees (over 1,200 miles) protecting populations of fewer than 10,000 people. Non-Project levees for the northern and southern areas of the Central Valley (about 275 miles) are considered appurtenant and are included under NULE when these levees protect part of a basin partially protected by Project levees, or when non-Project levees may impact the performance of Project levees.

The primary objective of the evaluation was to assess if the levees meet geotechnical criteria. For the Stockton Diverting Canal/Mormon Slough Study Area the assessment water surface elevation (AWSE) used for analyses was the ULE 100-Year WSE. The levees were divided into reaches/sub-reaches for evaluation within the southern central valley. For reaches/sub-reaches not meeting geotechnical criteria, conceptual remedial alternatives and screening-level cost estimates were prepared.

The Study Area

The Stockton Diverting Canal/Mormon Slough Study Area levees are located in the eastern portion of the city of Stockton in San Joaquin County, California. There are a total of 6.9 miles of levee within the study area. The levee was divided into one reach/sub-reach for screening-level static analyses.

The Scenarios

Levees in each reach/sub-reach were analyzed for five static NULE criteria at the AWSE: freeboard, through seepage, underseepage, landside slope stability, and waterside slope stability. No seismic analyses were performed.



**Stockton Diverting Canal/
Mormon Slough Study Area Levees**

The Results

For the Stockton Diverting Canal/Mormon Slough Study Area, approximately 6.9 miles of levee met all static NULE criteria at the AWSE. The reach/sub-reach met static NULE criteria; therefore no further evaluation was needed to identify conceptual remedial alternatives.

Screening-level Class 4 cost estimates were not prepared due to the reach meeting NULE criteria.

References:

Geotechnical Overview Report Volume 1, Existing Conditions – Stockton Diverting Canal/Mormon Slough Study Area, Non-Urban Levee Evaluations Project. Kleinfelder, September 2014.

Footnotes:

- 1 Project Levee – A levee or flood wall that is a facility of the State Plan of Flood Control as defined in *Public Resources Code Section 5096.805*.
- 2 Non-Project Levee – A levee or flood wall that is not a project levee as defined above.

Reference sources for this document are available at <http://www.dwr-lep.com/auth>
For further general DWR information or to obtain copies of DWR publications,
please contact DWR Public Affairs (916) 651-7512 or <http://www.water.ca.gov/publicaffairs.cfm/>

