



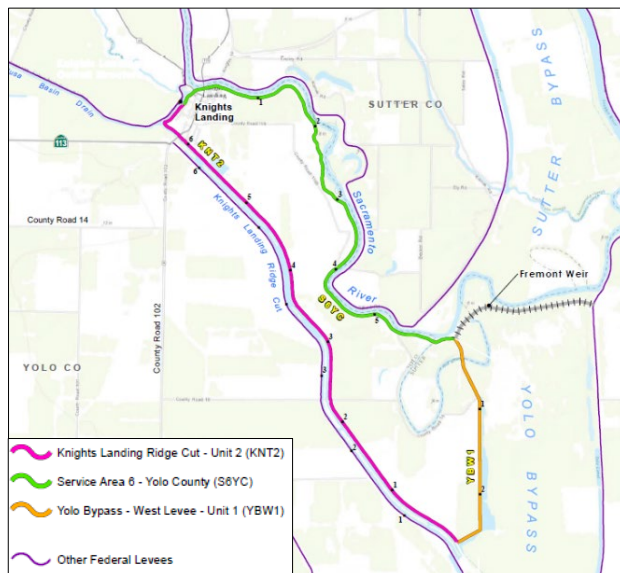
KNOW YOUR RISK

LEVEE INSPECTION RESULTS GUIDE FLOOD RISK PRIORITIES

UNDERSTANDING YOUR RISK

What Was Inspected?

The map to the right shows the 15.2-mile-long levee system named Knights Landing Unit 2 – Yolo Bypass – Service Area 6. This levee system is a portion of the Sacramento River Flood Control Project, a large-scale flood risk management project authorized by Congress. The levee system reduces the risk of flooding to the town of Knights Landing and adjacent agricultural lands from flood waters in the Sacramento River, Sycamore Slough, Knights Landing Ridge Cut, and Yolo Bypass. The levee system was inspected in September 2020 by the US Army Corps of Engineers (USACE). Visit the National Levee Database at <https://levees.sec.usace.army.mil/> for more information about this levee system, and other levee systems in the region.



What Did We Look For?

Any conditions that may negatively impact the levee integrity, inhibit operations and maintenance, or prevent emergency response personnel from conducting their operations (such as flood fighting) was noted during inspection of the levee system. Flood risk and levee condition are dynamic. Levees change over time: banks erode, closures rust, animals burrow, and pipes wear out. Ongoing vigilance is needed to reduce the risk associated with flooding.

Levee Inspection Findings

During the inspection, USACE identified unacceptable conditions that could impact levee performance in future flood events. The most critical conditions impacting levee performance were observed under the following categories: encroachments, slope stability, erosion/bank caving, animal control, vegetation growth, sod cover, settlement, and depression/rutting related. The system remains eligible for federal rehabilitation assistance following flood events because the Central Valley Flood Protection Board and the local maintaining agencies (LMAs), which perform operation and maintenance of the levee system, have developed an improvement plan and are making progress in correcting unacceptable conditions.

Example Inspection Observations



Unpermitted Encroachments on the Levee:
Unpermitted encroachments, such as the brick steps shown above, have not been evaluated to determine the potential impact to the levee.



Animal Burrows:
Animals burrowing into the levee slope may allow a preferred path for floodwater. An effective animal control program can help reduce the risk associated with burrows.

Example Inspection Observations—Continued



Erosion of Levee Slopes:

The waterside earthen levee slope has eroded because of river flows. Repair of the slope and placement of slope protection, such as riprap (rock), may protect the slope from future erosion.



Unprotected Slopes:

The earthen levee slope has experienced surface erosion due to lack of grass cover. Grass roots hold the surface soil together preventing water from eroding the surface, as shown above.

REDUCING YOUR RISK

Corrective Actions Underway

Three LMAs perform operation and maintenance activities for the Knights Landing Unit 2 – Yolo Bypass – Service Area 6 levee system. These agencies include California Department of Water Resources for the Yolo Bypass levee, Knights Landing Ridge Drainage District for the Knights Landing Ridge Cut levee, and Yolo County Service Area 6 for the Sacramento River levee. Together these LMAs have developed a Systemwide Improvement Framework Plan which outlines how levee repairs and improvements are being prioritized. Since the last USACE levee inspection (2013), improvements have been made in many maintenance categories. In addition to routine maintenance, major improvement projects have been completed to remedy issues with levee slope stability and additional projects are underway to address seepage and erosion concerns. Several through-levee pipes have been upgraded, while others have been video inspected to assess their structural integrity. Some abandoned through-levee pipes have been removed. Over the last 9 years, the LMAs have leveraged over \$25M in local funding and State grants to perform the maintenance, construct levee rehabilitation projects and improve flood emergency preparedness. The LMAs are committed to continue working together to maintain and improve the levee system.

Challenges

While great progress has been made, challenges lay ahead. LMAs continue to need landowner support to help with levee encroachment compliance and project implementation. Additional grant funding is needed to continue the progress made over the last 9 years with enhanced maintenance and levee improvements and to complete improvements identified in the State Small Communities Flood Risk Reduction (SCFRR) Feasibility Study. Changes in climate will make flood frequencies and flood volumes even more unpredictable.

What You Can Do

Understanding your risk is important. But it's also important to know that when you live behind a levee there will always be flood risk. Here are some tips to help you prepare for a potential emergency.

- Prepare an emergency action plan for your family
- Build an emergency supply kit
- Visit [Ready.gov](https://www.ready.gov) for more ideas and resources

Visit Yolo County's Office of Emergency Services webpage to find important local resources and tips for preparing for an emergency

