

Welcome to the Sutter Basin Project & Feather River West Levee Project Environmental Scoping Meeting



Overview, Purpose, and Objectives

About the Sutter Basin Project

In 2000, the State of California and USACE entered into a cost-sharing agreement to initiate a feasibility study within the Sutter Basin. An amendment of the cost-sharing agreement was signed in July 2010 to include SBFCA as a non-Federal sponsor. The purpose of the feasibility study is to address flood risk management, ecosystem restoration, and recreation issues in the study area.

The Sutter Basin Project feasibility study evaluates approximately 285 square miles that are roughly bounded by the Feather River, Sutter Bypass, Wadsworth Canal, Sutter Buttes, and Cherokee Canal. The study area is essentially encircled by project levees and the high ground of the Sutter Buttes. Past flood events and geotechnical analysis show these levees have a higher probability of failure related to through-and under-seepage than levees designed to meet current standards. Additionally, the levees are at risk of overtopping from floods greater than they are designed to withstand.

As part of the Sutter Basin Project feasibility study, USACE is evaluating a variety of flood risk management measures that could include re-operation of reservoirs; improvements to existing levees; construction of new levees; other storage, conveyance, and non-structural options; and measures that could potentially restore the ecosystem within the study area and develop or expand recreation facilities.

This study will be the basis for a recommendation to Congress to address water resources and related issues within the study area.

Sutter Basin Project Area



Sutter Basin Project Funding and Timeline

Funding

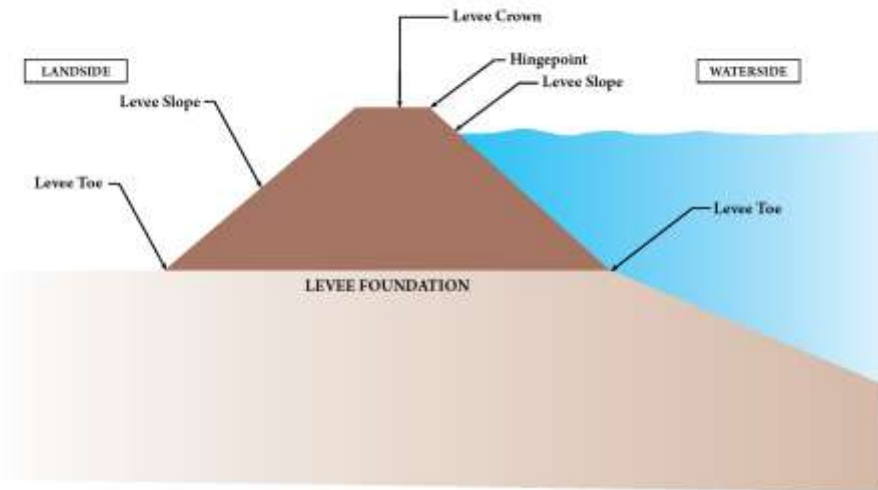
The feasibility study phase of this project is cost-shared; USACE will fund 50% and SRFCA and the State of California will fund the remaining 50% of the project.

Timeline

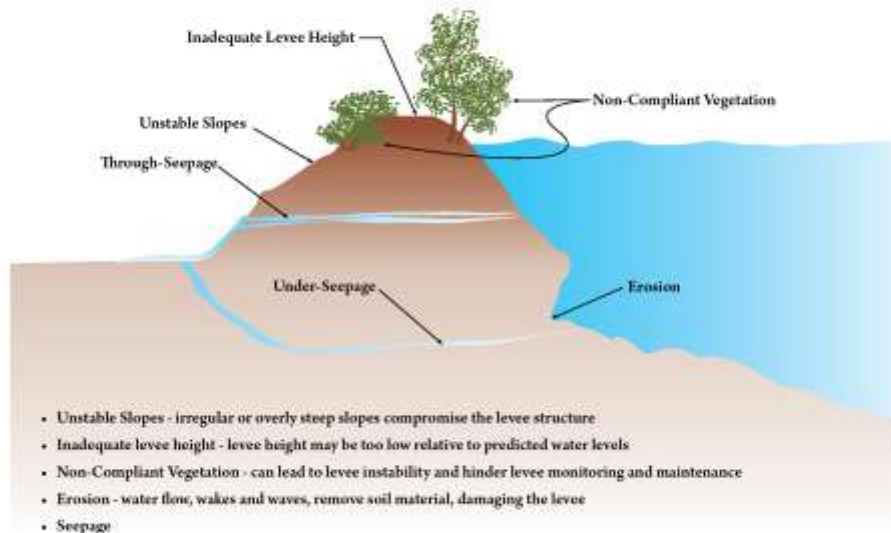
Below is the anticipated timeline related to the Sutter Basin Project EIS/EIR.



An "Inside" Look at a Levee



Typical Levee Deficiencies



About the Feather River West Levee Project

Communities in both Butte and Sutter Counties have an unfortunate historical knowledge of devastating flood events within the region. Sutter Butte Flood Control Agency (SBFCA) is planning the Feather River West Levee Project (FRWLP) to address levee deficiencies found along 44 miles of the west levee of the Feather River from the Thermalito Afterbay south to the Sutter Bypass. Measures are being evaluated to meet Federal, state, and local flood protection criteria and goals. The FRWLP is expected to:

- Increase public safety by providing 200-year flood protection from Yuba City north to the Thermalito Afterbay, and the appropriate level of flood protection south of Yuba City (in conjunction with repairs to the Sutter Bypass, which are the responsibility of the state).
- Save property owners millions of dollars annually in flood insurance costs by delaying, preventing, or cutting short FEMA floodplain mapping.
- Allow cities and counties to implement general plans, which will soon be restricted for any urban or urbanizing community without 200-year flood protection. This would not apply to areas with fewer than 10,000 residents.
- Sustain and grow the local economy by creating construction jobs, protecting property values, and allowing for responsible development.

Feather River West Levee Project Area



Feather River West Levee Project Funding and Timeline

Funding

The FRWLP is estimated at \$250 million for construction. A local assessment district enacted in 2010 will pay 29% of the project cost and the State of California is expected to pay the remaining share.

Timeline

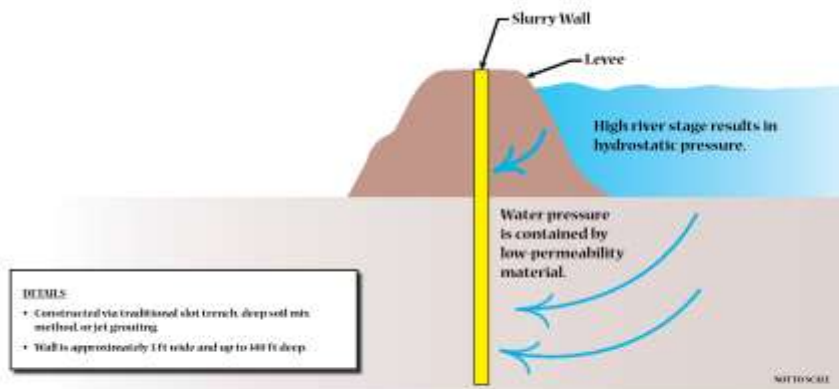
Environmental specialists are currently analyzing the effects the FRWLP could have if implemented, to comply with the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). This analysis will help engineers finalize the project design, and request Federal and state permits. The goal is to construct the FRWLP as quickly as possible in advance of and compatible with the Sutter Basin Project, potentially beginning construction in 2013.



Potential Measures

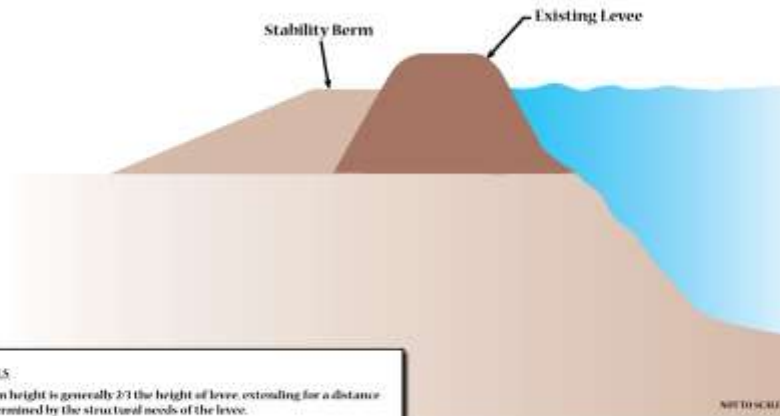
Slurry Cut-off Wall

Concept:
Under-seepage and through-seepage are controlled by a low-permeability wall constructed within the levee cross section.



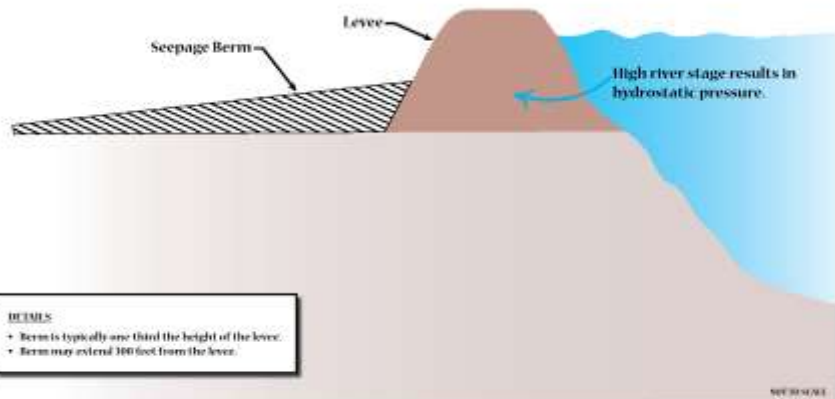
Stability Berm

Concept:
Provides additional support to levee to increase strength.



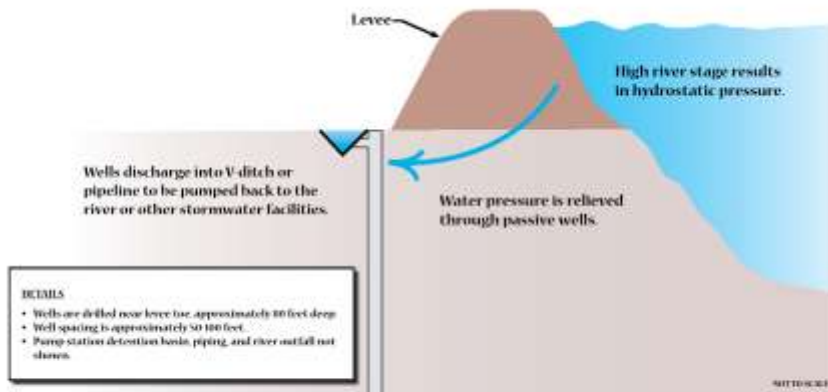
Seepage Berm

Concept:
Water pressure is contained and dispersed by a thickened soil layer.



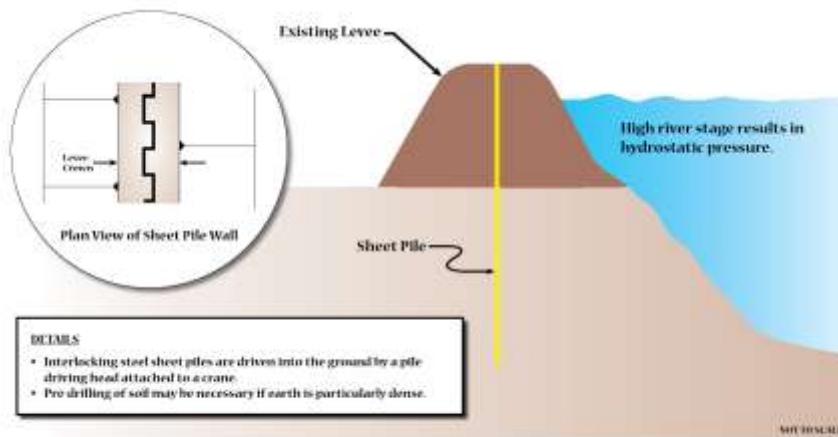
Relief Well

Concept:
Water pressure is relieved via passive wells, which direct water discharge into a collection system.



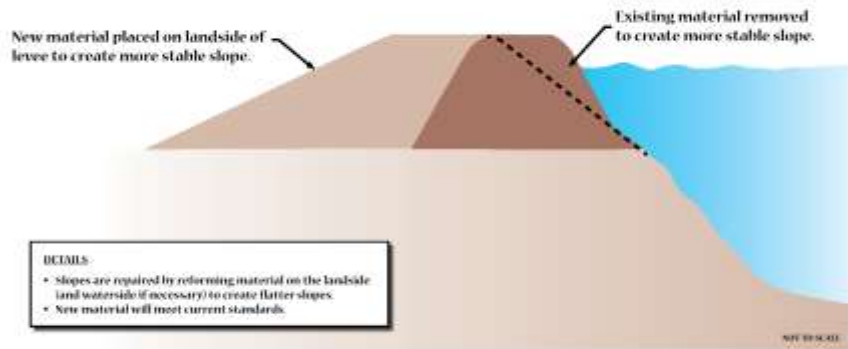
Sheet Pile Wall

Concept:
Steel panels are driven into the levee core to provide a seepage barrier.



Slope Flattening

Concept:
Flatter slopes are more stable and less susceptible to erosion.



Internal Drain

Concept:
Capture any through-seepage and direct it away from the face of the levee.

