

**Central Valley Flood Protection Board Meeting
December 18, 2015**

**INFORMATIONAL BRIEFING – MARYSVILLE RING LEVEE PROJECT
BRIEFING SUMMARY**

Background

The historic City of Marysville is located at the confluence of the Yuba and Feather Rivers approximately 40 miles north of Sacramento. The City is surrounded by a ring levee providing flood protection for approximately 12,700 residents and essential infrastructure including State Highways 65, 70, and major railways (Attached Map). Major flood events occurred in the basin in 1950, 1955, 1964, 1986, and 1997 and, based on these floods, about five (5) miles of the 7.5-mile ring levee were identified as needing improvements to resist potential seepage issues during flood events greater than 200-year on the Yuba and Feather Rivers.

- The Marysville Ring Levee (MRL) Project is a separable element of the larger Congressionally-authorized Yuba River Basin Project, which was authorized through the Water Resources Development Act of 1999 (P.L. 106-53), and re-authorized in 2007 (P.L. 110-114).
- The Yuba River Basin Project consists of three reaches: Reach 1 is Linda/Olivehurst, Reach 2 is Lower RD784, and Reach 3 is MRL. Reach 3 is the remaining feature of the project.
- The project was divided into four phases based on factors of safety and to streamline design and contracting (Attached Map).
- As the Federal sponsor, the U.S. Army Corps of Engineers (USACE) entered into a three-way Project Partnership Agreement (PPA) for the MRL with the Central Valley Flood Protection Board (Board) and the Marysville Levee District (MLD) in July 2010.
- The Board also entered into a Local Project Partnership Agreement with MLD.
- The Project Delivery Team (PDT) consists of project managers, engineers, attorneys, real estate and environmental specialists from USACE's Sacramento District; MLD's consulting engineer, MBK Engineers; Department of Water Resources' (DWR) Flood Project Office staff working on behalf of the Board, and recently added Board staff.
- Phase 1 construction was completed in 2013 using American Recovery and Reinvestment Act funds as well as a non-federal cost share.
- The Board and MLD assumed O&M responsibility on July 31, 2014. MLD continues to maintain the levee.

Design, Acquisition and Construction Status

The following three phases are in different stages of design and construction as described below:

Phase 2A: Design was completed by USACE in November 2015. The non-federal sponsors are working to secure real estate rights and relocate utilities in the 4,500 foot section. Construction is planned for the summer of 2016.

Phase 2B: The design will be contracted to an Architectural Engineering (AE) contractor in 2016 due to a lack of internal design resources at USACE's district and division levels. Real Estate acquisition will occur in 2017 and construction is planned for the summer of 2018.

Phase 3: Design will occur in 2016, followed by real estate acquisition in 2017 and 2018 with construction currently scheduled in the summer of 2019. This phase has the potential for a condemnation action due to one inhabitant in the floodway. This phase could be further subdivided if adequate Federal construction appropriations are not received.

Phase 4A: Design was completed by USACE August 20, 2013. Real estate acquisition was completed in August 2015. USACE is currently in construction contracting for Phase 4A after resolving right of way issues with Union Pacific Railroad (UPRR) Construction is expected to begin in the spring of 2016.

Funding Status

USACE completed an Integral Determination Report (IDR) on October 31, 2013 to affirm that work completed by the State and Local Agencies in Reach 1 of the Yuba River Basin Project was integral to providing flood protection to the Basin. The Assistant Secretary of the Army, Civil Works approved the IDR in a letter dated February 12, 2014. USACE has been working toward executing an amendment to the PPA to allow the non-Federal sponsors to receive credit under Section 3041 of the Water Resources Development Act of 2007 by the State and Local Agencies for work performed along the Yuba River. This work was carried out by Three Rivers Levee Improvement Authority and cost shared by the State through the Department of Water Resources' Early Implementation Program.

When the PPA is amended, applicable costs associated with this advanced work can be applied to the non-federal cost share of the Marysville Ring Levee.

Remaining project costs are estimated at \$85 million, but final costs may be lower due to design refinements in Phases 2B and 3, and a favorable construction climate.

Challenges and Solutions

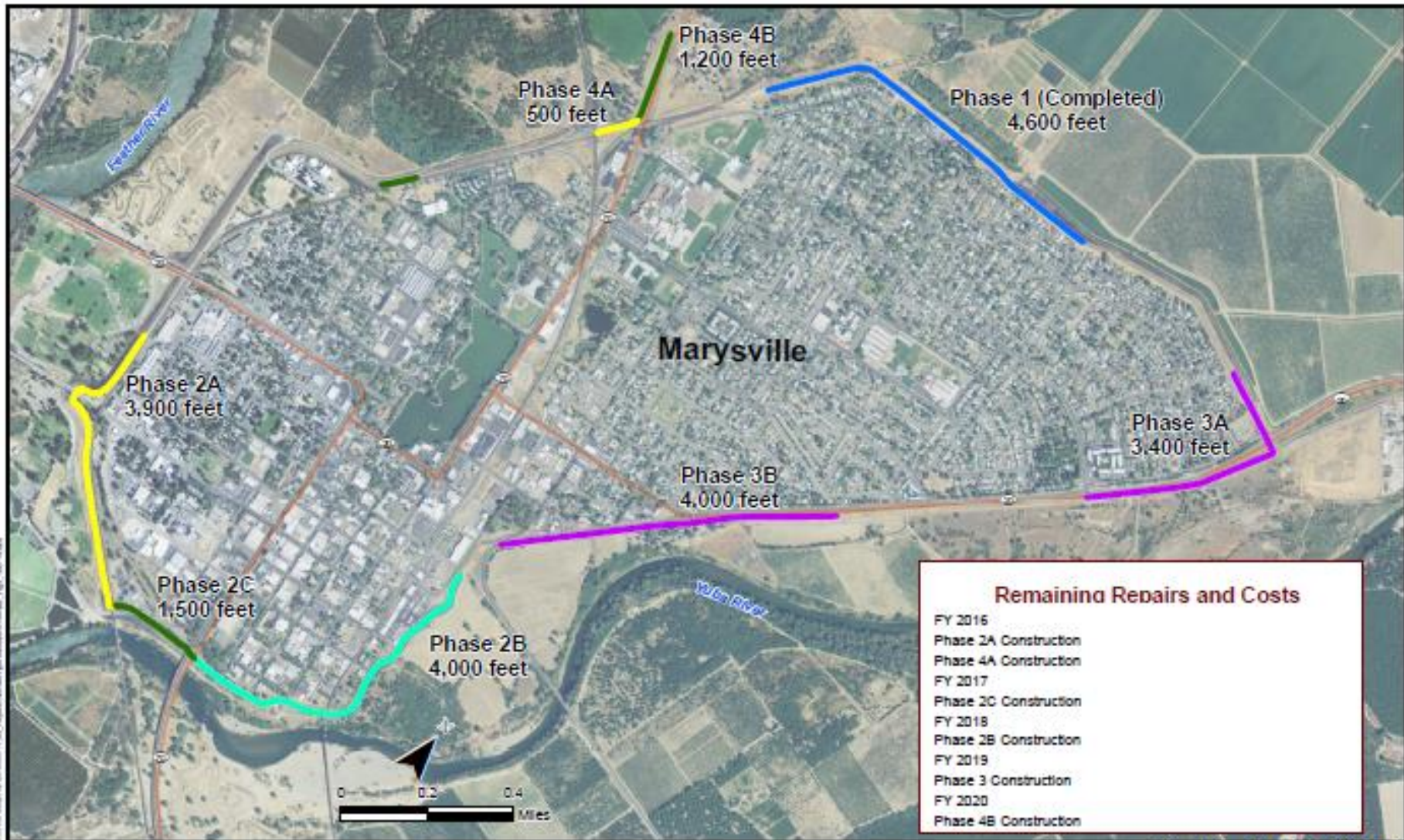
Right of Way Challenges Between USACE and Union Pacific Railroad (UPRR):

The execution of a right of entry document agreeable to both USACE and UPRR delayed construction of Phase 4A. However, intensive collaboration between MLD, UPRR, and USACE and relationship building between project team and national and local UPRR representatives during Phase 4A real estate easement negotiations has led to increased responsiveness by UPRR on subsequent phases.

Project Cost Increases: There have been various cost increases due to increased cutoff wall depth assumptions, increases real estate acquisition costs, contingency factors, and additional site investigations. In response, the project delivery team provided time sensitive responses to reduce scope creep, refine design assumptions, and compress timelines.

Next Steps

- USACE Headquarters is expected to review and approve the PPA Amendment within the next month and prepare the package for Assistant Secretary of the Army's approval.
- The package will then be routed to MLD and Board for signature.
- Board will consider adopting a resolution to approve the PPA Amendment and delegate the authority to sign the amendment to the Board President.



Marysville Ring Levee Repair Schedule

Yuba River Basin, California
 Marysville Ring Levee Project
 August 2015