



THREE RIVERS LEVEE IMPROVEMENT AUTHORITY
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Project Status Report dated February 14, 2011

(Submitted to The Central Valley Flood Protection Board for the February 25, 2011 meeting)

A progress report of the various phases of the Three Rivers Levee Improvement Authority (TRLIA) project is provided in the followings sections of this document. *Updates are indicated with italics and underline.*

1. Levee Design and Construction Work:

a. Phase 4 – Yuba River Levee between Simpson Lane and the Goldfields:

- 1) **Environmental:** The TRLIA Board adopted a Mitigated Negative Declaration at their April 20th meeting and Notice of Determination was filed on April 23rd. The Corps signed the NEPA Finding of No Significant Impact (FONSI) on December 29, 2010.

The CVFPB Anderson Elderberry Mitigation Site encroachment permit was signed and issued to TRLIA on February 7, 2011. TRLIA began to transplant the impacted elderberry shrubs on February 8, 2011 and utilizing additional crew and equipment completed all but three transplants by February 15, 2011. One landowner has refused access to his land for the purpose of transplanting 3 shrubs and condemnation proceedings will not allow access until after April 1, which is after the dormant season. These three shrubs will be transplanted prior to construction reaching them in late June 2011.

- 2) **Design:** The UYLIP consists of 15,150 linear feet (LF) of cutoff wall ranging from 47 to 70 feet deep, 1,559 LF of seepage berm 80 feet to 150 feet wide at the end of the project, 3,159 LF of waterside slope rock erosion protection at the end of the project, and geometry corrections throughout the project reach.

Listed below are several key design actions:

- a) The CVFPB approved issuing an Encroachment Permit at their July 22, 2010 meeting for the UYLIP. This permit is to be issued after the Corps provides Section 408 Approval.
- b) Corps HQ provided Section 408 approval on December 22, 2010. The 408 approval letter stated that the Safety Assurance Review (SAR) Plan previously approved by the South Pacific Division included a requirement to have the Board of Senior Consultants (BOSC) specifically address redundancy, resiliency and

robustness. *TRLIA's BOSC met on January 20, 2011 to accomplish this task. The BOSC Report on the results of their evaluation regarding redundancy, resiliency and robustness has been submitted to the Corps of Engineers. The BOSC found that no changes were needed for the project. It is anticipated that the Corps District office will now provide the CVFPB the 408 letter of permission, which will allow the encroachment permit to be issued.*

- c) Yuba County Water Agency (YCWA) submitted a Section 104 request to the CVFPB on February 23, 2010. The CVFPB approved a request letter to the Corps of Engineers for the Section 104 Credit at the April CVFPB Meeting.

The Section 104 approval package is now under consideration at HQs Corps of Engineers/ASA, and a decision is anticipated in March 2011, which is when TRLIA hopes to award the UYLIP construction contract

It is critical that TRLIA stays on schedule and complete the UYLIP project and the following certification process this year.

- d) A Memorandum of Understanding between the USACE and the CVFPB was signed on June 30, 2010 providing for credit under Section 2003 of the Water Resources Development Act of 2007 for the Upper Yuba Levee Improvement Project. This agreement is now complete.

- 3) **Construction:** Bids were opened for the UYLIP on August 26. TRLIA received three bids. The low bid was \$7,541,470 and the high bid was \$9,127,446. The engineer's estimate was \$13,944,126. The bids received are good until March 31, 2011. Award will not be made until the Section 104 credit request is approved by the Corps. All of the construction work for the UYLIP is planned to be accomplished during the 2011 construction season. *See 104 Credit discussion above for timing of construction award.*

b. Phase 4 – Feather River Levee between Bear and Yuba Rivers:

1) Segment 2:

- a) **Part A of Encroachment Permit:** Embankment construction was completed last year. FEMA issued the letter of final determination on August 18, 2010, which incorporated their May 27, 2010 letter stating that the Segment 2 reach of levee is accredited. Punch list items have been completed and work is complete for the Setback Levee.
- b) **Existing Levee Degrade:** Degradation was complete August 6, 2010. The offsite borrow area has been graded to final elevations. The main borrow site in the Setback Area has been graded to final elevations and grass was planted in October.
- c) **Vegetated Wave Buffer:** TRLIA submitted a separate encroachment permit application to the CVFPB for the Vegetated Wave Buffer on September 3,

2009. TRLIA submitted a long term management plan and additional updated information to the CVFPB staff on August 16, 2010. The first three years of maintenance for the buffer will be done via TRLIA funded contract. After the initial three years, the maintenance of the buffer will be performed by RD784 and would be funded from the TRLIA levee O&M Benefit Assessment District. TRLIA signed an EIR Addendum on January 12, 2011, which clarifies that the Vegetated Wave Buffer is part of the Feather River Levee Repair project and was adequately evaluated under CEQA. TRLIA understands that this application has been placed on the consent calendar of the February 2011 Meeting.

- d) **Feather River Elderberry Transplant Mitigation Area:** An encroachment permit application was submitted to CVFPB on October 26, 2010. Both RD784 and LD1 have endorsed this permit. TRLIA signed an EIR Addendum on January 12, 2010, which clarifies that the FRET is part of the Feather River Levee Repair project and was adequately evaluated under CEQA. TRLIA hopes to have this permit considered at the March or April 2011 CVFPB Meeting. TRLIA continues to work with DWR floodway maintenance staff and F&WS to develop an acceptable approach to floodway maintenance for all parties. DWR has set up a committee to guide the actions within the Feather River Corridor, with participation from various branches of DWR, the CVFPB, the local maintenance districts, TRLIA, the counties, and other interested stakeholder groups. The Committee is called the Feather River Corridor Management Plan development team.

2. Goldfields:

- a. The Corps of Engineers presented their hydraulic analysis and findings for the Goldfields area at the March 2010 CVFPB meeting. TRLIA continues to work on the hydraulic study to better define the risk of flooding from the Goldfields. TRLIA is completing final components of the 2-D model and expects to start model runs at the beginning of March. The TRLIA analysis is anticipated to be available April of 2011.
- b. TRLIA remains committed to achieving 200 year flood protection for South Yuba County, and will keep the CVFPB and others up to date on our progress.

3. WPIC Crack Investigation

At the January 4, 2011 Reclamation District (RD) 784 Board Meeting, TRLIA learned of the observance of a longitudinal crack in the WPIC west levee. A field observation of the reported crack was made on January 4, 2011. The crack is approximately 1,100 feet long located at Unit 4 LM 4.2 to 4.4 (Approximate WPIC Design Station 221+00 to 232+00). The crack is erratic in alignment and located approximately 2 feet from the landside hinge. Maximum width of the crack is 2.5 inches. It is filled with road aggregate base and it is difficult to determine the width of the crack in the actual levee embankment.

Repairs in this reach of the levee, which were completed in October 2006, consisted of a crown raise of approximately 1 foot with crown reshaping and a waterside fill to flatten waterside slopes. This information was provided to the CVFPB, DWR and the Corps on the

morning of January 6, 2011. A field visit with representatives from these agencies and with a geotechnical consultant hired by TRLIA was made that afternoon.

On January 11, 2011, field investigations were accomplished by shallow trenching to further investigate the crack. CVFPB Staff, DWR Staff, and the Corps were all present. This investigation determined that the crack became a hairline crack within a foot of the levee embankment surface. This hairline crack appeared to go as deep as 3.5 feet and remained vertical. This indicates that the crack is a tension crack that developed during summer heat and was prevented from completely closing once the rains began due to road aggregate in the crack. **All parties present during the January 11th field visit concluded this crack was not a significant threat to levee integrity.**

On February 9th TRLIA sealed the crack in a manner coordinated with CVFPB Staff to prevent additional rainfall from entering the crack and is monitoring the crack through the winter season to check for additional movement. No additional significant increase in the crack width has occurred nor has any settlement in the west side of the crack occurred. In early summer the crack will be further repaired through coordination and agreement on a repair plan with CVFPB and Corps Staff. TRLIA and RD784 consider this work to be routine maintenance and the work is being paid for by RD784.

4. Building Permits Issued in Plumas Lake Specific Plan Area and North Arboga Study Area

Yuba County is not providing permit information and updates on permit information cannot be provided.