

## THREE RIVERS LEVEE IMPROVEMENT AUTHORITY 1114 Yuba Street, Suite 218 Marysville, CA 95901 Office (530) 749-7841 Fax (530) 749-6990

#### THREE RIVERS LEVEE IMPROVEMENT AUTHORITY

Project Status Report dated January 17, 2011 (Submitted to The Central Valley Flood Protection Board for the January 28, 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 public comment period for the Draft UYLIP Environmental Assessment for the Section 408 and 104 credit approvals ended on June 23. Two comment letters were received. The Corps has completed Section 7 consultation with the USFWS with receipt of the Biological Opinion on August 16. Section 106 consultation was completed on September 10. The Corps submitted the Section 408 evaluation package to their HQ on September 21. With approval by Corps HQ of Section 408 on December 22, 2010, the FONSI was signed by the Corps District Commander on December 29, 2010.

TRLIA is working with the State (DWR & CVFPB staffs), Corps, and USFWS on using the existing Anderson Road Elderberry Mitigation site for the UYLIP project. The Anderson Site is along the Feather River and is located in the floodway. The USFWS Biological Opinion received August 16 allows the elderberry mitigation to occur at the Anderson site. On October 26, 2010, TRLIA submitted an encroachment permit application for use of the existing Anderson Mitigation Site. Both RD784 and LD1 endorsed the application. *TRLIA provided an informational briefing on the Anderson site at the December CVFPB Meeting. It is TRLIA's understanding that based on the CVFPB members response to the information briefing that this application will probably be a consent item at the January Board meeting. TRLIA hopes to transplant the impacted elderberry shrubs during the dormant season (November 1 – February 15) in order to minimize required mitigation. The TRLIA Board has approved an agreement with RD 784 to provide long term maintenance for the transplant mitigation area and a license with the Sacramento San Joaquin Drainage District for use of State land for the transplants.* 

- 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) TRLIA submitted the Draft Section 408 Summary Report on March 2 for review by the CVFPB and Corps of Engineers staff. The CVFPB submitted a request letter to the Corps of Engineers for Section 408 Approval on May 18, 2010. The Sacramento District submitted an approval package for Section 408 to its HQ on September 21. 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, as well as the additional SAR plan requirement to specifically address redundancy, resiliency and robustness (being prepared by the TRLIA Board of Senior Consultants) should be implemented prior to project construction. TRLIA will incorporate all SAR requirements into the upcoming UYLIP construction project.
  - 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. With approval of Section 408, the Section 104 approval package is now under consideration, which is expected in February 2011.
  - 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.

### 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:** TRLIA re-started degradation for the 2010 construction season on April 12, 2010. 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 prepared and submitted a long term management plan and additional updated information to the CVFPB staff on August 16. 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. The cost to RD784 is estimated to be less than \$10,000 per year and would be funded from the TRLIA levee O&M Benefit Assessment District. *TRLIA signed an EIR Addendum on January 12, 2010, which clarifies that the Vegetated Wave Buffer is part of the Feather River Levee Repair project and was adequately evaluated under CEQA. TRLIA hopes to have this application considered at the January 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 baseline model documentation and will provide this to the peer reviewer (Ford Consulting). 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 11<sup>th</sup> field visit concluded this crack was not a significant threat to levee integrity.

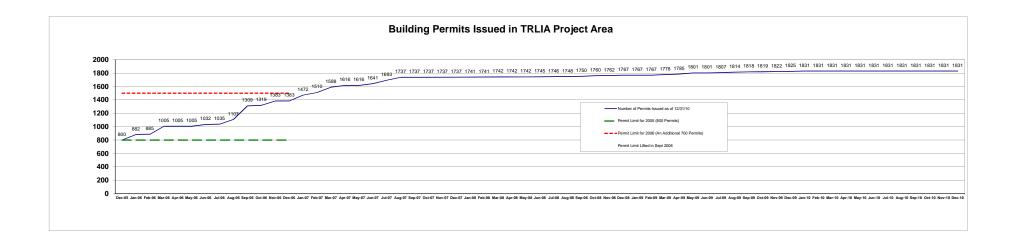
TRLIA will seal the crack with bentonite slurry to prevent additional rainfall from entering the crack and will monitor the crack through the winter season to check for additional movement. In early summer the crack will be repaired by excavating a narrow trench along the crack to the total depth of the crack and then filling and compacting excavated material in the trench.

# 4. <u>Building Permits Issued in Plumas Lake Specific Plan Area and North Arboga Study Area in 2010:</u>

- a. The attached graph and table provides information related to residential building permits issued for the Plumas Lake Plan Area (PLSPA) and the North Arboga Study Area (NASA) within Yuba County in 2010.
- b. As shown in the table, a total of 6 building permits were issued in 2010. <u>0 permits were issued in December of 2010</u>.

#### Attachments:

- 1. Building permit graphic
- 2. Building permit table



#### Plumas Lake Specific Plan Area and North Arboga Study Area - Building Permits Issued in 2010

Developer/Builder		Monthly Building Permits Issued for Plumas Lake and North Arboga Study Area															Total								
	Jan-10		Feb-10		Mar-10		Apr-10		May-10		Jun-10		Jul-10		Aug-10		Sep-10		Oct-10		Nov-10		Dec-10		(By Builder)
	Plumas	NASA	Plumas	NASA	Plumas	NASA	Plumas	NASA	Plumas	NASA	Plumas	NASA	Plumas	NASA	Plumas	NASA	Plumas	NASA	Plumas	NASA	Plumas	NASA	Plumas	NASA	
KB Homes North Bay	6																								6
Cresleigh Homes																									0
Forecast Homes/K Hovnanian																									0
Homes by Towne/HBT Constr.																									0
Beazer Homes																									0
California Homes/Home Builders																									0
Cassano Kamilos Homes																									0
D.R. Horton/Western Pacific																									0
Other																									0
Monthly Totals		3		)	0			)		)		)	(	)		0		)		0		)		0	6

As of December 31, 2010

Total Permits for 2010 6 As of December 31, 2010