



# THREE RIVERS LEVEE IMPROVEMENT AUTHORITY AGENDA

**JUNE 28, 2005**

**Yuba County Government Center  
Board of Supervisors' Chambers  
915 Eighth Street, Suite 109A  
Marysville, California**

**Unless otherwise indicated**

2:00 P.M.

**THREE RIVERS LEVEE IMPROVEMENT AUTHORITY**

**Final Budget Hearings Fiscal Year 2005/2006 (Continued from June 21, 2005)**

2:15 P.M.

**THREE RIVERS LEVEE IMPROVEMENT AUTHORITY SPECIAL MEETING**

I **ROLL CALL** – Directors Rick Brown, Mary Jane Griego, Dan Logue, Richard Webb

II **ACTION ITEMS**

A. **Public Necessity:** Adopt resolution declaring public necessity for the taking of certain property for repair, construction, installation and maintenance of the Yuba River Levee System as it relates to Assessor's Parcel Numbers 020-020-083 and 020-020-084.

B. **Bear River/Western Pacific Interceptor Canal Levee Project:** Adopt resolution adopting the Addendum to Certified Environmental Impact Report for Bear River/Western Pacific Interceptor Canal Levee Project.

C. **Status Report:** Receive status update regarding on-going levee improvement project. (No background material)

III **ADJOURN**

June 28, 2005

TO: THREE RIVERS LEVEE IMPROVEMENT AUTHORITY BOARD

FROM: ANI BHATTACHARYYA, PROJECT ENGINEER/MANAGER

SUBJ: ADOPT A RESOLUTION OF NECESSITY FOR THE ACQUISITION OF CERTAIN PROPERTY ALONG THE SOUTH BANK LEVEE OF THE YUBA RIVER, FOR THE PHASE 2 LEVEE REPAIR PROJECT

RECOMMENDATION:

That the Board adopt the attached Resolution of Necessity for the acquisition of a certain portion of the property known as Yuba County Assessor's Parcel Numbers: 020-020-083 and 020-020-084, for the Phase 2 Levee Repair Project. This property is located along the south bank of the Yuba River, east of Highway 70.

BACKGROUND:

The Three Rivers Levee Improvement Authority (TRLIA) is preparing to carry out construction/repair work along certain sections of the flood control levees along the Upper Bear River, Western Pacific Interceptor Canal (WPIC) and Yuba River. The overall work is referred to as the TRLIA Phase 2 Levee Repair Project and the project area is located in Southern Yuba County, California, within the boundaries of Reclamation District 784. The work will consist of raising and reworking existing levee sections, constructing earth berms alongside levees at certain sections, installing erosion-protection measures where deemed necessary based on the civil engineer's design, constructing slurry cutoff walls, and other related tasks including site preparation, temporary access roads, traffic control, safety and security, site cleanup, etc. The levees that are part of this project include the west bank levee of the WPIC from its confluence with the Bear River, northerly for about 6 miles; the north bank levee of the Bear River from its confluence with the WPIC, westerly to a point approximately 1,000 feet west of Highway 70 (a total length of approximately 1.5 miles); and the south bank levee of the Yuba River from Highway 70, easterly to a distance of about 4,500 feet. A CEQA analysis was done for this project and on August 24, 2004, the TRLIA Board approved a Mitigated Negative Declaration and adopted the accompanying Mitigation Monitoring Plan. On June 14, 2005, the TRLIA Board adopted an addendum to the previously approved and adopted initial study.

DISCUSSION:

Undertaking the proposed construction work along the Yuba River south bank levee will necessitate the acquisition of a portion of the property, as illustrated below:

<b>Assessor's Parcel No.</b>	<b>Owner</b>	<b>Area to be acquired (Acres)</b>
020-020-083, 084	Wal-Mart Real Estate Business Trust	0.54 acre

The property was professionally appraised by Cydney G. Bender-Reents, MAI, a certified appraiser, of Bender Rosenthal. A copy of the Appraisal Summary Statement is included with your agenda packet.

The owner of the property was offered the appraised value for the property. TRLIA has not yet negotiated a successful purchase agreement with the owner. In case TRLIA is unable to reach an amicable agreement and to protect the schedule of the project, we are recommending moving forward with the eminent domain proceedings. The first step in these proceedings is to adopt a Resolution of Necessity for acquiring the property. A detailed presentation regarding the project necessity and design will be offered at the Board meeting.

FISCAL IMPACT

TRLIA has submitted to the Department of Water Resources, a grant application for appropriation of \$25,576,058 of Prop 13 implementation funds to cover construction and land acquisition/right of way costs associated with the Phase 2 Levee Repair project. Prop 13 conditions require a 30 percent local match that will come from TRLIA levee impact fees.

**STATEMENT AND SUMMARY OF THE BASIS FOR APPRAISAL**

The following is a summary for the amount established as just compensation by an appraisal prepared in compliance with section 1255.010 Code of Civil Procedure and section 7267.2 of the Government Code. The appraisal was made in accordance with accepted appraisal principles, consistent with California valuation law. A statement of the appraisal process, which was the basis for the valuation conclusions, follows.

**BASIC PROPERTY DATA**

OWNER OF RECORD:	Wal-Mart Real Estate Business Trust
PROJECT:	Three Rivers Levee Improvement Project
ASSESSOR PARCEL NUMBER(S):	020-020-083, 084
PROPERTY ADDRESS:	1131 Beale Road; Marysville, CA 95901-6107
DATE PROPERTY ACQUIRED BY OWNER:	December 17, 2002
ZONING:	General Commercial
HIGHEST AND BEST USE:	Hold for future commercial development
PROPERTY RIGHTS PROPOSED TO BE ACQUIRED:	The proposed acquisition is a part of an entire ownership. The property rights proposed for acquisition include fee simple ownership.
<u>SIZE OF PROPOSED ACQUISITION:</u>	
Fee	24,598 SF (0.57 acres)
Temporary Construction Easement (if any)	None
<u>IMPROVEMENTS SUBJECT TO PROPOSED ACQUISITION:</u>	
There are no significant improvements located within the proposed acquisition area, and no apparent landscaping items other than natural vegetation.	
DATE OF THIS VALUATION:	May 15, 2005

---

**VALUATION PROCESS SUPPORTING COMPENSATION:**

The initial stages of the appraisal process include the investigation, organization, and analysis of relevant market data and other information that relate to the market value of the subject property. Factors that influence value include the Sutter/Yuba metropolitan region demographics and economic conditions, neighborhood characteristics and features. All of these need to be considered when rendering a value conclusion.

The three accepted approaches to value are the sales comparison approach, the income approach (capitalization analysis) and the cost approach (reproduction or replacement cost analysis). We have utilized the **sales comparison approach** to value as the best indication of market value for vacant commercial land. *The income approach and the cost approach were not considered to be applicable to this appraisal problem because the subject property does not have applicable rental income that would be utilized in an income approach, and there are no significant improvements being affected or acquired that would require use of the cost approach.*

The Sales Comparison Approach compares the subject property to other similar properties that have recently sold in the market area. This is usually the preferred method of valuation when comparable sales data are available. The respective sales prices of the comparable properties are adjusted, quantitatively if possible based on market data, but at least subjectively based on the appraiser's knowledge of market behavior, in order to derive an indication of market value. All sale properties were compared based on a price per square foot basis, consistent with the market.

The principal transactions supporting the determination of value are listed in the table below. The summary of value conclusions and estimate of just compensation follows the table.

<b>COMPARABLE LAND SALES</b>							
#	Location	Seller Buyer	Sale Date Doc. No.	Total Sale Price	Zoning	Parcel Size	Price/SF
1	W. side of Lindhurst Avenue; Linda (Yuba County)	Danahoo et.al/Lanza Penny/Lanza	10/2004 7/2004 6/2004 2004-022453 2004-014423 2004-010259	\$1,718,500	GC	10.615 acres	\$3.72
2	E. side of Tharp Road; Yuba City	Bains/Dress	4/2004 2004-0008751	\$1,200,000	C-MX	6.99 acres	\$3.94
3	N. side of Hwy. 20, E. side of Harter Road; Yuba City	Lomo Cold Storage, Richland Ranches, Sutter Land Properties/ Brown Yuba City	1/2004 2004-0002185	\$9,900,000	C-2	33.7 acres	\$6.74

*Three Rivers Levee Improvement Project  
Marysville; Yuba County  
Wal-Mart Real Estate Business Trust Property*

COMPARABLE LAND SALES							
#	Location	Seller Buyer	Sale Date Doc. No.	Total Sale Price	Zoning	Parcel Size	Price/SF
4	S. side of future Sunsweet Blvd; Yuba City	Swinney, et.al/ GFLIP III	9/2003 2003-0026811	\$1,747,845	C-3	11.23 acres	\$3.57
5	N. side of Lassen Blvd; W. side of Tharp Road, E. side of Klamath Lane; Yuba City	Bains/Leal; James R. & Rebecca L. Scott	3/2003 2003-0005955	\$2,750,000	C-M	10.15 acres	\$6.22

**TOTAL ESTIMATED FAIR MARKET VALUE                      \$123,000**

In our opinion, this is the value that should be considered for just compensation purposes.

**NOTICE:**

California government code §7267.2(a) provides that where the property is Owner occupied residential property and contains no more than four residential units, the homeowner shall, upon request, be allowed to review a copy of the appraisal from which the amount established as just compensation was derived.

Upon written request by an Owner-occupant of residential property that contains no more than four residential units, they will provide the homeowner with an opportunity to review said appraisal.

Signature of Appraiser:

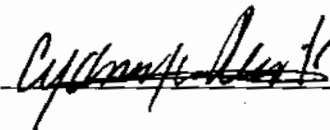
  
\_\_\_\_\_

EXHIBIT A

All that real property situate in the County of Yuba, State of California being a portion of Tract 10 of Yuba Gardens as skown on the Map thereof filed in Book 3 of Maps at Page 2, Yuba County Records, also being a portion of Parcel 3 of Parcel Map 97-12 as shown on the map thereof filed in Book 70 of Maps at Page 2, Yuba County Records described as follows:

Beginning at the 1 1/4" pipe marking the most northerly corner of said Parcel 3 thence along the northeasterly boundary of said Parcel 3 South 45°59'40" East 274.78 feet; thence leaving said northeasterly boundary North 89°36'23" West 259.57 feet to a point on the westerly boundary of said Parcel 3; thence along said westerly boundary North 18°07'57" East 198.99 feet, more or less, to said point of beginning. Containing 0.565 Acres, more or less.

APN 20-020-084

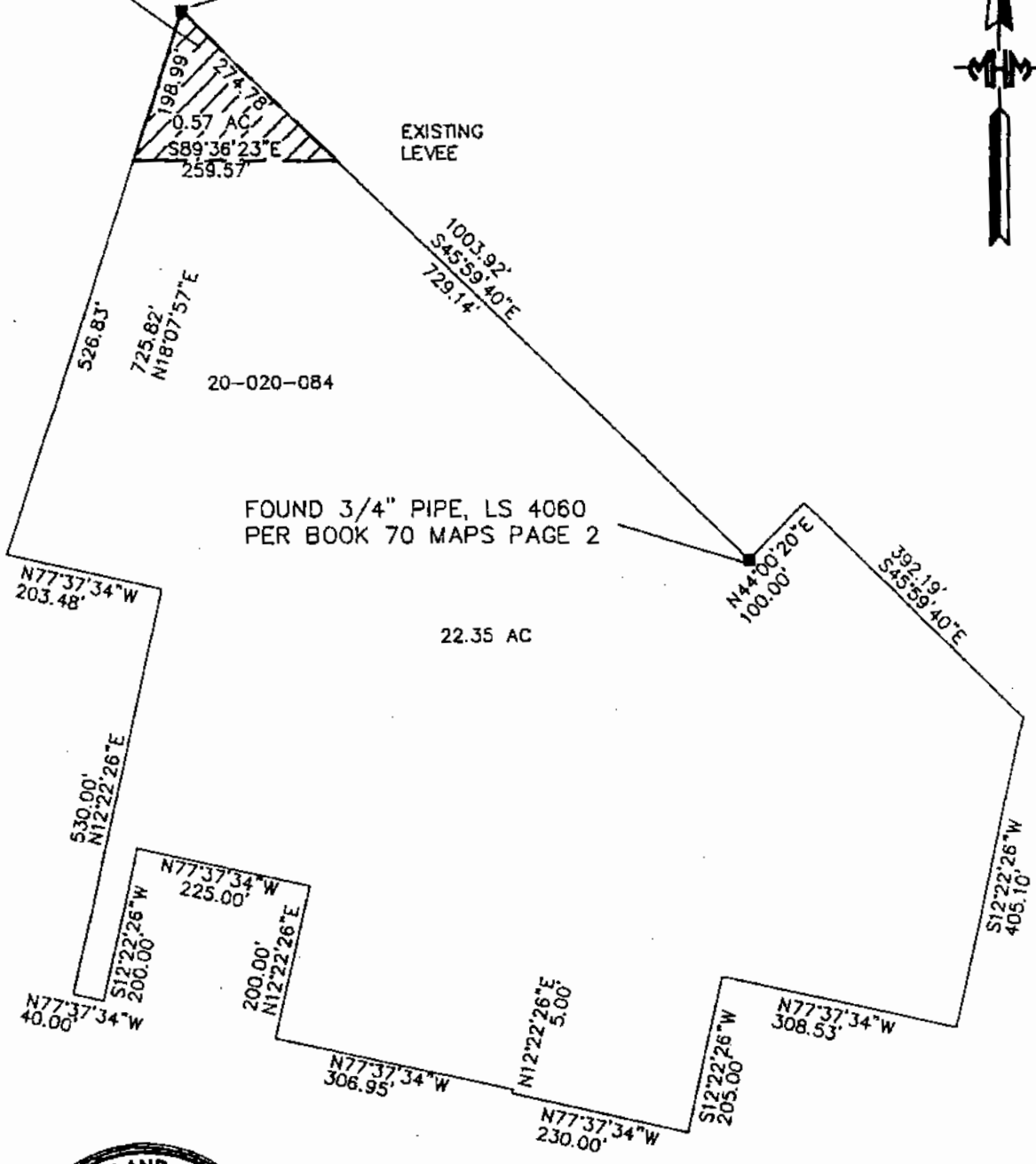
Subject to other easements and rights of Record.



*Edgar C. Hanlin*  
5/9/05

Proposed  
Additional  
Levee R/W

FOUND 1 1/4" PIPE PER  
BOOK 6 MAPS PAGE 46  
P.O.B. EXHIBIT 'A'



*Edgar C. Hanlin*  
6-1-05

<b>EXHIBIT 'B'</b>	
THREE RIVERS LEVEE IMPROVEMENT AUTHORITY LEVEE IMPROVEMENTS	
PLAT FOR ACQUISITION OF LAND FOR LEVEE IMPROVEMENTS	
YUBA COUNTY CALIFORNIA	MARCH 28, 2005 SCALE 1"=200'
PREPARED BY: MHM, INC., MARYSVILLE CA.	
05123A	SHEET 1 OF 1



RESOLUTION NO. \_\_\_\_\_

A RESOLUTION OF THE THREE RIVERS LEVEE IMPROVEMENT AUTHORITY  
DECLARING THE PUBLIC NECESSITY FOR THE TAKING OF CERTAIN PROPERTY  
FOR REPAIR, CONSTRUCTION, INSTALLATION AND MAINTENANCE OF THE YUBA RIVER  
LEVEE SYSTEM  
(CODE CIV. PROC. § 1245.230)

---

WHEREAS, Three Rivers Levee Improvement Authority ("TRLIA") proposes to repair, construct, install, and maintain the Yuba River Levee System (the "Project") affecting a portion of Assessor's Parcel Nos. 020-020-083 and 020-020-084, in the County of Yuba, California (the "Property"); and

WHEREAS, TRLIA has advised the owners of the Property of the need for the Project and offered said owners an opportunity for a hearing before the TRLIA Board on June 28, 2005 pursuant to section 1245.235 of the Code of Civil Procedure, State of California; and

WHEREAS, the Board of Directors of TRLIA adopts this resolution in compliance with Section 1245.230 of the Code of Civil Procedure.

NOW THEREFORE, THE BOARD OF DIRECTORS OF THE THREE RIVERS LEVEE IMPROVEMENT AUTHORITY HEREBY RESOLVES AS FOLLOWS:

SECTION 1. The Property to be acquired is for the repair, construction, installation and maintenance of the Yuba River Levee System.

TRLIA is authorized to acquire property for the Project pursuant to, among others, the following statutes: Government Code section 25350.5; Code of Civil Procedure section 1250.140; and Water Code section 50930.

SECTION 2. The general location and extent of the Property to be acquired is as set forth in the legal description attached hereto as Exhibit A and accompanying map attached hereto as Exhibit B, and incorporated herein by reference.

SECTION 3. The Board of Directors declares that it has found and determined as follows:

- a. The public interest and necessity require the proposed Project.
- b. The proposed Project is planned and located in the manner that will be most compatible with the greatest public good and the least private injury.
- c. The Property described in Exhibits A and B is necessary for the proposed Project.
- d. The offer of just compensation required by Government Code Section 7267.2 has been made to the owners of record of the Property.

PASSED AND ADOPTED by the Board of Directors of the Three Rivers Levee Improvement Authority this 28th day of June, 2005 by a two-thirds (2/3) or greater vote as follows:

AYES:

NOES:

ABSTAIN:

ABSENT:

---

CHAIRPERSON

ATTEST:

---

Donna Stottlemeyer, Secretary

EXHIBIT A

All that real property situate in the County of Yuba, State of California being a portion of Tract 10 of Yuba Gardens as shown on the Map thereof filed in Book 3 of Maps at Page 2, Yuba County Records, also being a portion of Parcel 3 of Parcel Map 97-12 as shown on the map thereof filed in Book 70 of Maps at Page 2, Yuba County Records described as follows:

Beginning at the 1¼" pipe marking the most northerly corner of said Parcel 3 thence along the northeasterly boundary of said Parcel 3 South 45°59'40" East 274.78 feet; thence leaving said northeasterly boundary North 89°36'23" West 259.57 feet to a point on the westerly boundary of said Parcel 3; thence along said westerly boundary North 18°07'57" East 198.99 feet, more or less, to said point of beginning. Containing 0.565 Acres, more or less.

APN 20-020-084

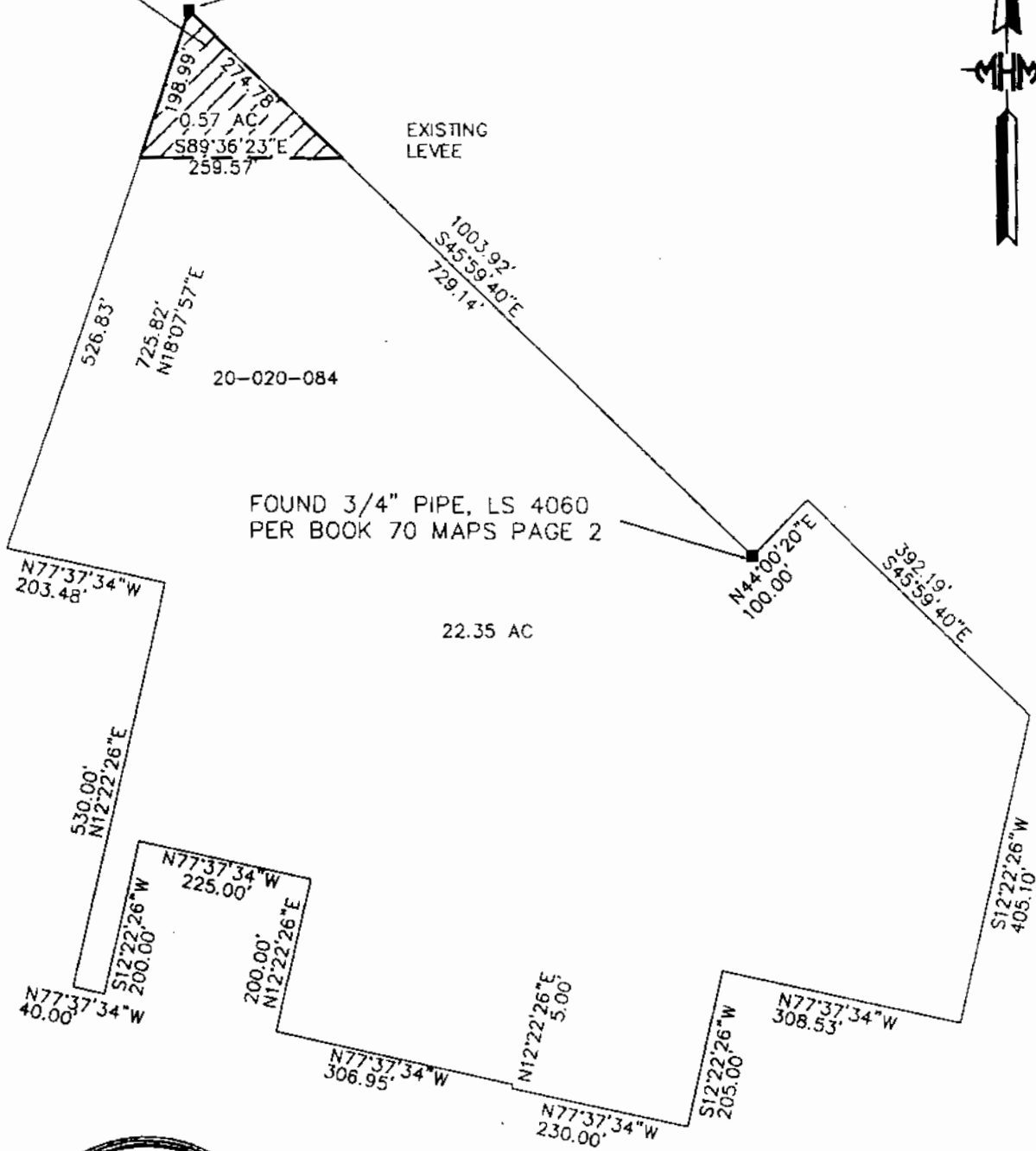
Subject to other easements and rights of Record.



*Edgar C. Hanlin*  
5/9/05

Proposed  
Additional  
Levee R/W

FOUND 1 1/4" PIPE PER  
BOOK 6 MAPS PAGE 46  
P.O.B. EXHIBIT 'A'



*Edgar C. Hanlin*  
6-1-05

<b>EXHIBIT 'B'</b>	
THREE RIVERS LEVEE IMPROVEMENT AUTHORITY LEVEE IMPROVEMENTS	
PLAT FOR ACQUISITION OF LAND FOR LEVEE IMPROVEMENTS	
YUBA COUNTY CALIFORNIA	MARCH 28, 2005 SCALE 1"=200'
PREPARED BY: MHM, INC., MARYSVILLE CA.	
05123A	SHEET 1 OF 1

June 28, 2005

TO: Three Rivers Levee Improvement Authority Board  
FROM: Ani Bhattacharyya, Project Engineer/Manager  
SUBJECT: Approval and Adoption of the Addendum to the Certified Environmental Impact Report for the Bear River and Western Pacific Interceptor Canal Levee Improvements Project

### **Recommended Action**

Approve and adopt the Addendum to the Adoption of the Addendum to the Certified Environmental Impact Report for Bear River and Western Pacific Interceptor Canal Levee Improvements Project

### **Background**

The Upper Bear River and WPIC Levee Improvements Project is needed to bring deficient levee sections up to standards to achieve adequate level of flood protection. The proposed levee improvements include filling land-side depressional area, installing slurry cutoff walls, raising and widening levees, and installing erosion protection. An environmental impact report (EIR) was prepared to evaluate the potential project effects and was circulated for public review (SCH Number 200432118). TRLIA certified the final EIR in August 2004, and adopted the project in March 2005. Since that certification, certain project refinements have occurred, based on development of the design from 30 –percent to 100-percent level, and based on requirements to meet U.S. Army Corps of Engineers' geotechnical criteria and conditions imposed by the Reclamation Board. The specific design refinements are as follows:

- Addition of a water-side impervious zone on the Bear River north levee.
- Adjustment to the relocation of Pump Station No. 6.
- Extending the fill area of the land-side borrow ditch adjacent to the WPIC west levee.
- Extending the fill on the water-side of the WPIC levee to accommodate additional levee height.
- Additional slurry cutoff wall on the WPIC levee.

This Resolution is brought before the Board to adopt the Addendum to the Certified Environmental Impact Report, which addressed the aforementioned project refinements.

**Reason for Recommended Action/Discussion**

Approval and adoption of the referenced by the TRLIA Board of Directors will allow the implementation of these project refinements.

**BEFORE THE THREE RIVERS LEVEE IMPROVEMENT AUTHORITY  
OF THE COUNTY OF YUBA**

**IN RE:** )  
 ) **RESOLUTION No.** \_\_\_\_\_  
 )  
 ) **RESOLUTION TO ADOPT THE ADDENDUM TO THE** )  
 ) **CERTIFIED ENVIRONMENTAL IMPACT REPORT FOR** )  
 ) **THE BEAR RIVER AND THE WESTERN PACIFIC** )  
 ) **INTERCEPTOR CANAL LEVEE PROJECT** )  
 )  
 \_\_\_\_\_ )

WHEREAS, the Three Rivers Levee Improvement Authority (TRLIA), as project proponent, caused an environmental study to be prepared in connection with levee repair along the north bank of the Bear River, and the west bank of the Western Pacific Interceptor Canal (WPIC) in Yuba County, California; and

WHEREAS, an environmental impact report (EIR) was prepared for the proposed work by the TRLIA project staff (State Clearinghouse Number 2004-032-118);

WHEREAS, by adoption of Resolution 04-05 on August 24, 2004, TRLIA approved the EIR; and,

WHEREAS, this Resolution is brought before the Board to adopt an addendum entitled "Addendum to Certified Environmental Impact Report" to include within the previously adopted EIR, refinements to the work proposed along the WPIC and the Bear River. Adoption of this addendum by the TRLIA Board of Directors will allow the implementation of these refinements as part of the overall project.

NOW, THEREFORE, BE IT IS RESOLVED BY THE BOARD OF DIRECTORS OF THE THREE RIVERS LEVEE IMPROVEMENT AUTHORITY AS FOLLOWS:

1. The foregoing recitals are true and correct.
2. The "Addendum to Certified Environmental impact Report" which is included herein as an attachment to this resolution, is approved and adopted.

PASSED AND ADOPTED at a regular meeting of the Board of Directors of the  
Three Rivers Levee Improvement Authority, on the \_\_\_\_\_ day of June, 2005, by the  
following vote:

AYES:

NOES:

ABSENT:

ATTEST: DONNA STOTTLEMEYER  
Clerk of the Board of Supervisors

Chairperson

By \_\_\_\_\_

APPROVED AS TO FORM

  
DANIEL G. MONTGOMERY,  
County Counsel





# Jones & Stokes

## Addendum to Certified Environmental Impact Report

**Lead Agency:** Three Rivers Levee Improvement Authority  
915 Eighth; Street  
Marysville, CA 95901

**Contact:** Ani Bhattacharyya  
**Telephone:** 530/749-5621

**Project Title:** Bear River and Western Pacific Interceptor Canal Levee Improvements Project

**Project Location (nearest town):** Olivehurst, Yuba County

**Project Background:** The Three Rivers Levee Improvement Authority (TRLIA) is a joint powers authority with the mission of advancing the flood safety of Yuba County, California. TRLIA's member agencies include Reclamation District 784 (RD 784) and the County of Yuba (County). The county is subject to seasonal flood threat from many rivers and creeks, including the Yuba River, Feather River, Bear River, Western Pacific Interceptor Canal (WPIC) and tributary drainages. Because of this flood risk, many local rivers have been confined by constructed levees.

The U.S. Army Corps of Engineers (USACE) has established criteria for levees that specify the height, width, permeability standards, and other factors needed to provide adequate protection for a given hydrologic event (stage and discharge) based on geotechnical, hydraulic, and hydrologic conditions. Most of the levee systems in Yuba County were built during the 1920's using construction practices of that era. Recent studies conducted by USACE (January 1990) and Kleinfelder (November 2003) have concluded that substantial segments of area levees do not meet current USACE protection standards for a 100-year event. Insufficient height, susceptibility to through-seepage and under-seepage, and susceptibility to erosion need to be remedied to meet the USACE criteria.

Deficiencies in area levee segments have been recently demonstrated by the floods of 1986 and 1997. In 1986, approximately 10,700 acres were inundated, more than 4,000 homes and businesses were damaged or destroyed, and one human life was lost. In 1997, approximately 16,000 acres were inundated, more than 850 homes and businesses were damaged or destroyed, and three human lives were lost.

TRLIA is seeking approval for the Feather-Bear-WPIC Levee Project (project) to modify the levee system in southern Yuba County to address the deficiencies described above, as well as the backwater effects and rise in river stages from the lack of floodway capacity near the confluence of the Bear and Feather Rivers. The ultimate goal is to maintain and increase flood protection to a level greater than the calculated 200-year event, consistent with goals of The Reclamation Board of the State of California (Rec Board), which oversees modifications to federal project levees. The objectives of the project are to:

## Addendum to Certified EIR

### Page 2

- provide increased flood protection greater than the calculated 100-year flood event in the overall RD 784 area, and meet 200-year standards where improvements are implemented (i.e., where levee work is endeavored, it will meet or exceed criteria for the calculated 200-year flood event);
- avoid increasing downstream flow and stage during peak-flow conditions; and
- enhance and restore fish, wildlife, and riparian habitat.

**Original Project Description:** The Upper Bear River and WPIC Levee Improvements Project is needed to bring deficient levee sections up to standards to achieve the project objectives. Specifically, most of the northern levee of the Bear River and several reaches of the WPIC have insufficient height to provide the desired level of flood protection. Additionally, some levee reaches have problems associated with levee stability and susceptibility to erosion. The flood control improvements would include seepage protection, reconstruction of levee reaches that failed as a result of 1997 overtopping, erosion protection, and raising the height of the levee. The levee improvements include segments of the Bear River north levee and WPIC west levee, including filling land-side depressional areas, installing slurry cutoff walls, raising and widening levees, and installing erosion.

**Previously Certified EIR:** An environmental impact report (EIR) was prepared to evaluate potential project effects and was circulated for public review (SCH number 2004032118). TRLIA certified the final EIR in August 2004 and TRLIA adopted the project in March 2005.

**Refinements to the Project:** Since certification of the final EIR, minor project refinements have occurred based on development of the design from the 30%-to 100%-level, and based on requirements to meet U.S. Army Corps of Engineers' geotechnical criteria and conditions imposed by The Reclamation Board of the State of California. Specific design refinements are listed below:

- addition of a water-side impervious zone on Bear River north levee;
- adjustment to the relocation of Pump Station No. 6;
- extending the fill area of the land-side borrow ditch adjacent to the WPIC west levee;
- extending the fill on the water-side of the WPIC levee to accommodate additional levee height; and
- additional slurry cutoff wall on the WPIC levee.

Figure 1 depicts the location of each project element. Table 1 provides a summary of the project refinements. The impacts associated with the design refinements would not result in new significant impacts (construction- or operation-related). Table 2 shows a comparison of project impacts. The refinements in the project description are minor and mainly consist of adjustments in the location of the treatments on the levee and additional water-side levee treatments on the WPIC. The impacts of these new treatments would be the same as those analyzed in the previously certified EIR.

Specific compensatory habitat restoration and mitigation plans are presently under development, in coordination with state and federal resource and regulatory agencies. Mitigation will occur on-site to the greatest extent feasible; however, it should be understood that not all habitat types may be replaceable on-site in accordance with flood management standards and conditions (such as seasonally wetted

## Addendum to Certified EIR

Page 3

depressional areas on the land-side of levees). Where habitat types are not replaceable on-site, TRLIA will purchase credits from a mitigation bank approved by the U.S. Army Corps of Engineers and U.S. Fish and Wildlife Service.

**Findings:** The refinements to the project are considered minor technical changes. Pursuant to Section 15164 (e) of the State CEQA Guidelines, in considering the record as a whole, there is no substantial evidence that the refinements to the project design will cause significant new environmental effects or a substantial increase in previously identified significant effects of the project. As such, an Addendum to the EIR is the appropriate environmental evaluation.

**Table 1. Summary of Project Refinements (based on 100% construction drawings)**

Project Element	Levee Deficiency	Previous Location	Revised Location
Bear River Levee Reconstruction	Through-seepage, freeboard	Bear River Station 121+00 to 140+00	Bear River Station 122+00 to 130+00
Bear River Water-side Impervious Zone	Through-seepage	not included previously	Bear River Station 130+00 to 139+00
Bear River Levee Raise	Freeboard	Bear River Station 158+50 to 169+00	Bear River Station 139+00 to 144+00 and 147+70 to 168+80
Bear River Erosion Protection	Slope erosion and scour	Bear River Station 150+00 to 170+00	Bear River Station 164+00 to 168+80 and 168+50 to 169+15
Pump Station No. 6 Relocation	Under-seepage	Bear River Station 140+00	Bear River Station 141+00
WPIC Borrow Ditch Fill	Under-seepage	WPIC Station 0+00 to 45+00, 95+00 to 106+50, and 115+00 to 120+00	WPIC Station 0+00 to 130+00
WPIC Water-side Levee Raise	Freeboard	not included previously	WPIC Station 0+30 to 137+50
WPIC Water-side Levee Raise	Freeboard	not included previously	WPIC Station 205+50 to 275+70
WPIC Water-side Levee Raise	Freeboard	not included previously	WPIC Station 284+10 to 305+00
WPIC Land-side Levee Raise	Freeboard	WPIC Station 296+00 to 332+50	WPIC Station 305+00 to 311+58
WPIC Slurry Wall	Under-seepage	WPIC Station 252+50 to 261+50	WPIC Station 254+65 to 260+00 and 276+56 to 287+00

Table 2. Project Activities and Impacts (based on 100% construction drawings)

Project Element	Bear River	WPIC	Ag Canals and Open Water	Emergent Wetland	Seasonal Pond	Seasonal Wetland	Willow Scrub	Revised Total	Previous Total	Change
<b>PERMANENT EFFECTS</b>										
Bear River Levee Reconstruction (Bear River Station 122+00 to 130+00)	0.09							0.09	0.12	-0.03
Bear River Water-side Impervious Zone (Bear River Station 130+00 to 139+00)								0	0	0
Bear River Levee Raise (Bear River Station 139+00 to 144+00 and 147+70 to 168+80)								0	0	0
Bear River Erosion Protection (Bear River Station 164+00 to 168+80 and 168+50 to 169+15)	0.12							0.12	0.17	-0.05
Pump Station No. 6 Relocation (Bear River Station 141+00)		0.21						0.21	0.13	+0.08
WPIC Borrow Ditch Fill (WPIC Station 0+00 to 130+00)		0.12		0.18	2.01	0.35	1.43	4.09	3.31	+0.18
WPIC Water-side Levee Raise (WPIC Station 0+30 to 137+50)		3.08						3.08		
WPIC Water-side Levee Raise (WPIC Station 205+50 to 275+70)		1.12						1.12	3.45	+1.12
WPIC Water-side Levee Raise (WPIC Station 284+10 to 305+00)		0.37						0.37		
WPIC Land-side Levee Raise (WPIC Station 305+00 to 311+58)								0		
WPIC Slurry Wall (WPIC Station 254+65 to 260+00 and 276+56 to 287+00)								0		
<b>TEMPORARY EFFECTS</b>										
Temporary Construction Easements	0.38	11.51	0.18	0.01	0.13	0.13	0.09	12.43	10.16	+2.27
Staging Areas						0.09		0.09	0	+0.09
<b>TOTALS</b>										
Total of Permanent Impacts	0.21	4.57	0.33	0.18	2.01	0.35	1.43	9.08	7.78	+2.29
Total of Temporary Impacts	0.38	11.51	0.18	0.01	0.13	0.22	0.09	12.52	10.16	+2.36
Grand Totals	0.59	16.08	0.51	0.19	2.14	0.57	1.52	21.60	17.94	+4.65