



LARSEN WURZEL  
& Associates, Inc.

PUBLIC FINANCE  
& MANAGEMENT  
**RESOLVED**

# Three Rivers Levee Fee

*NEXUS STUDY UPDATE*

*FINAL NEXUS STUDY*

*Adopted by TRLIA Ordinance No. 1600  
(Fee Effective August 8, 2021)*

Prepared For: Yuba County

Date: June 8, 2021

ORDINANCE NO. 1600

**An Ordinance Amending Title XIII, Chapter 13 of the Yuba County Ordinance  
Code by Adding Section 13.77 Relating to Levee Fees**

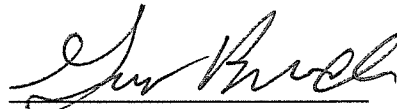
The following ordinance consisting of three (3) sections, was duly and regularly passed and adopted by the Board of Supervisors of the County of Yuba, State of California. at a regular meeting of the Board of Supervisors held on 8 day of June, 2021, by the following vote:

AYES: Supervisors Vasquez, Blaser, Fuhrer, Bradford, Fletcher

NOES: None

ABSENT: None

ABSTAIN: None



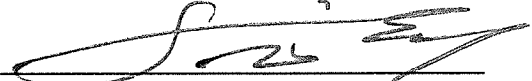
Chairman of the Board of Supervisor  
of the County of Yuba, State of California

ATTEST:

Clerk of the Board of Supervisors

By: Rachael Jordan

APPROVED AS TO FORM  
MICHAEL J. CICCOTZI  
COUNTY COUNSEL

By: 

Sims Ely, Deputy County Counsel

**The Board of Supervisors of the County of Yuba, State of California does ordain as follows:**

**Section 1.** This ordinance shall take effect Sixty (60) days after its passage, and before the expiration of Thirty (30) days after its passage a summary shall be published, with the names of the members voting for and against the same, once in a local newspaper of general circulation in the County of Yuba, State of California.

**Section 2.** Chapter 13 of the Yuba County Ordinance Code is hereby amended by repealing Sections 13.75 and Section 13.76 in their entireties and adding Section 13.77 in its entirety as follows:

**CHAPTER 13.77**

**LEEVE FEES**

**(THREE RIVERS LEEVE FEE NEXUS STUDY UPDATE)**

**13.77.010. - General provisions.**

- (a) *Authority.* This Chapter is adopted under and pursuant to the provisions of, but not necessarily limited to, Chapter 5 (commencing with Section 66000) of Division 1 of Title 7 of the California Government Code.
- (b) *Findings.* The Board of Supervisors of Yuba County, after review of the record and consideration of testimony and evidence presented at a public hearing, hereby finds and declares:
  - (1) The County has previously established the East Linda Specific Plan (ELSP) Area, the Plumas Lake Specific Plan (PLSP) Area, and the North Arboga Study Area (NASA). Collectively, the property within and around these areas is referred to herein as "flood zone".
  - (2) Property located within the flood zone lies within the Yuba River Flood Plain/Inundation Area, the Feather River Flood Plain/Inundation Area, or both flood plain/inundation areas.
  - (3) Development has occurred, is occurring, and is anticipated to continue to occur within the flood zone. In order to protect the health, safety and welfare of current and future residents within the flood zone, a series of levee improvements to the Yuba River, Feather River, Bear River, Western Pacific Interceptor Canal and Yuba Goldfields are needed to provide flood protection within the flood zone.
  - (4) The required levee improvements could not be constructed unless funds were generated to pay for such improvements. The County established a development impact fee to fund levee improvements in 2006, Yuba County Ordinance 1372, ("levee fees") to generate the necessary revenue for the levee improvements and repay debt incurred to provide funding for levee improvements. The establishment of the levee fees, pursuant to a nexus study, ensured that new development within the flood zone pays its proportionate share of the levee improvement costs. The county revised the nexus study in 2008 with adoption of Yuba County Ordinance No. 1465.
  - (5) The Three Rivers Levee Improvement Authority (TRLIA), a Joint Powers Agency established by Yuba County and Reclamation District No. 784, with funding from the County's collection of levee fees as well as funding from the issuance of debt by the Yuba Levee Finance Authority, has constructed many of the needed levee improvements and is expected to complete the improvements in 2021 or 2022.
  - (6) Because the financing plan for the levee improvements includes the use of debt which is expected to be repaid from the future collection of levee impact fees, the levee impact fee program must remain in place.
  - (7) The total amount of debt expected to be repaid from future levee fees, the timing of revenue from levee fee collection, the total cost of the improvements funded by the fee and the total amount of

revenue received through grants from the State of California by TRLIA have all changed since the adoption of Yuba County Ordinance No. 1465. As a result, the Three Rivers Levee Fee Nexus Study Update dated XX, 2021 (Nexus Study Update) has been prepared.

- (8) Based upon current flood plain/inundation maps, property within the flood zone is divided between the Linda Zone (in the North) and the Plumas Zone (in the South).
- (9) The boundaries of the Linda Zone and the Plumas Zone are depicted in Exhibit A [Map 1 of the Nexus Study Update] attached hereto and is incorporated herein by reference.
- (10) The preliminary total cost estimate for levee improvements for each flood plain and the remaining local share of those costs is set forth in Exhibit "B" [Appendix B of the Nexus Study Update] hereto and is incorporated herein by reference.
- (11) As described in the Nexus Study Update, there is a reasonable relationship between the use of the levee fees and the development projects subject to their respective fees because such development projects contribute to the need for the levee improvements identified herein.
- (12) As described in the Nexus Study Update, there is a reasonable relationship between the amount of the levee fees and the potential cost of the levee improvements attributable to development projects within the flood zone and subject to the fees.
- (13) As described in the Nexus Study Update, the method of allocation of the respective levee fees to a particular development project bears a fair relationship, and is roughly proportional to, the development project's burden on, and benefits from, levee improvements to be funded by the levee fees. The adoption of the ordinance from which this Chapter is derived is statutorily exempt from the California Environmental Quality Act under Sections 15262 and 15269 of the California Environmental Quality Act Guidelines.
- (14) The levee fees will be collected for public improvements or facilities for which an account has been established and funds appropriated and for which a proposed construction schedule or plan has been adopted, as well as to reimburse and service debt incurred to provide the public improvements or facilities.

(Prior Code, § 13.76.010; Ord. No. 1465)

#### **13.77.020. - Establishment of fees.**

Fee. Levee fees are hereby established as more particularly set forth below:

- (1) The levee fee shall be charged to all new development within the Linda Zone and the Plumas Zone in accordance with the Nexus Study Update and as set forth in Exhibit "C," attached hereto and incorporated herein by reference.
- (2) The levee fees shall be paid at building permit final.

(Prior Code, § 13.77.020; Ord. No. 1465)

#### **13.77.030. - Adoption of studies.**

After review and public hearing, the Board of Supervisors of Yuba County hereby adopts the Three Rivers Levee Fee Nexus Study Update and the analyses, calculations and conclusions provided therein.

(Prior Code, § 13.77.030; Ord. No. 1465)

**State Law reference—** Adoption by reference, Government Code § 50022.1 et seq.

**13.77.040. - Deposit of fees in trust fund.**

Each component of the levee fees received by the County shall be deposited into a separate trust fund in a manner to avoid any co-mingling of the fees with other revenues and funds of the County, except for temporary investments, and expended solely for the purposes for which the fees were collected. Any interest income earned by monies in any such trust fund shall also be deposited into such trust fund and shall be expended only for the purpose for which the fee was originally collected.

(Prior Code, § 13.77.040; Ord. No. 1465)

**13.77.050. - Protests and appeals.**

- (a) Any party may protest the imposition of any fees hereunder by the County by meeting both of the following requirements:
  - (1) Tendering any required payment in full or providing satisfactory evidence of arrangements to pay the fee when due or ensure performance of the conditions necessary to meet the requirements of the imposition.
  - (2) Serving written notice of the Clerk of the Board of Supervisors, which notice shall contain all the following information:
    - a. A statement that the required payment is tendered or will be tendered when due, or that any conditions which have been imposed are provided for or satisfied, under protest.
    - b. A statement informing the Board of Supervisors of the factual elements of dispute and the legal theory or theories forming the basis for the protest.
- (b) A protest filed in accordance with this Section shall be filed within 90 days after the date of the imposition of the fee to be imposed on the development project. The County shall provide to the project applicant a notice in writing at the time of the imposition of the fees a statement of the amount of the fees and notification that the 90 day appeal period in which the applicant may protest has begun. The hearing before the Board of Supervisors shall be set by the Clerk of the Board of Supervisors within 30 days after submission of the notice of appeal or protest and the hearing shall occur within 90 days of such submission. At the hearing, oral and written evidence may be presented. The Board of Supervisors shall issue a written decision on the appeal or protest no later than 30 days after it is submitted to the Board for decision. The written decision shall be a final administrative decision.

(Prior Code, § 13.77.050; Ord. No. 1465)

**13.77.060. - Administration.**

- (a) *Fee.* The County Auditor/Controller shall determine the estimated costs of administration of this Chapter and shall recommend to the Board of Supervisors the amount of fees which must be charged to recover those costs. Initially, costs shall be estimated and the Board may establish fees separately, by resolution, to reimburse those costs, which shall include any additional costs resulting from implementing a County review process to identify development impacts and carry out this Chapter, or from analysis by the County, not otherwise required, of matter related to implementation and/or updating of information relating to this Chapter.
- (b) *Additional rules and regulations.* The Board of Supervisors may adopt by ordinance or resolution rules, regulations, guidelines and procedures for the administration of this Chapter.

(Prior Code, § 13.77.060; Ord. No. 1465)

**13.77.070. - Enforcement.**

- (a) *Misdemeanor.* Violation of this Chapter shall be a misdemeanor. The District attorney may institute criminal proceedings hereunder. A violator, upon conviction, shall be fined not more than \$1,000.00, imprisoned for a period not exceeding six months, or both fined and imprisoned.
- (b) *Civil proceedings.* The County Counsel may institute civil proceedings to enforce this Chapter, including without limitation, actions for injunction and civil penalties. Construction without the authorization required by this Chapter may be suspended by a court of competent jurisdiction. Violation of this Chapter interferes with the provision of public services and, as such, shall be a public nuisance.
- (c) *Civil penalties.* Any violator of this Chapter shall be liable, in addition to payment of the amount of any fees dues, for civil penalties not to exceed: \$500.00 for each day during which construction proceeds in violation of this Chapter plus 15 percent of the amount of any fee not paid when due.
- (d) *Lien.* In the event of failure of the owner of a development project to pay in full any fee or fees payable under this Chapter, the County may place and record a lien upon the property on which development is constructed in the amount of the unpaid fee. The Board of Supervisors shall adopt rules concerning imposition of such liens, including notice of the imposition of such liens and an opportunity for hearing.
- (e) *Cost of securing compliance.* Any person or entity not in compliance with this Chapter shall be liable, in addition to other amounts provided herein, for attorney's fees and all other reasonable costs of securing compliance, including the cost of collection.
- (f) *Interest.* Interest shall accrue on all fees not paid when due pursuant to this Chapter at the rate prescribed by law for interest on judgments, from the date when payment was due until the date payment is received in full.
- (g) *Board modification, termination and review of fees.* The Board of Supervisors may, by ordinance, modify or terminate any fees under this Chapter and may establish additional fees or charges related to administration of this Chapter.

Exhibit A

[Insert Map 1 in Nexus Study Update]

Exhibit B

[Insert Appendix B to Nexus Study Update]

Exhibit C

[Insert Nexus Study Update Report]

(Prior Code, § 13.77.070; Ord. No. 1465)

**State Law reference**— Penalties for ordinance violations, Government Code § 25132, Penal Code § 19.

**13.77.080. - Severability.**

If any Section, subsection, sentence, clause, phrase, provision or portion of this Chapter, or the application thereof to any person or circumstances, is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining portions or provisions of this Chapter or their applicability to distinguishable situations or circumstances. In enacting this Chapter, it is the desire of the Board of Supervisors to validly regulate to the full measure of its legal authority in the public interest, and to that end, the Board of Supervisors declares that it would have adopted this Chapter and each Section, subsection, sentence, clause, phrase, provision, or portion thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, phrases or portions thereof might be declared invalid or unconstitutional in whole or in part, as applied to any particular situation or circumstances, and to this end the provisions of this Chapter are intended to be severable.

**State Law reference**— Similar provisions, Government Code § 23.

The foregoing is a true and correct  
copy of the document on file  
in this office

ATTEST: RACHEL FERRIS  
Clerk of the Board of Supervisors of  
the County of Yuba, State of California

By: Rachel Ferris

Date: June 9, 2021

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Appendix D: Total Value Index Calculations
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## List of Abbreviations

2008 Nexus Study	October 13, 2008, Three Rivers Levee Fee Nexus Study
Benefit Area	Plumas Lake Specific Plan Area, the North Arboga Study Area, the East Linda Specific Plan Area, and neighboring areas
CCAD	Consolidated Capital Assessment District
CCI	Construction Cost Index
CDSA	Yuba County Community Development & Services Agency
CFDs	Community Facilities Districts
County	Yuba County
ELSP	East Linda Specific Plan
ENR	Engineering News Record
EPS	Economic & Planning System
FAR	floor area ratio
Fee	levee improvement development impact fees
GDA	Gross developable acreage
LWA	Larsen Wurzel & Associates, Inc.
MBK	MBK Engineers
MBK Tech Memo	MBK Technical Memorandum, Lands Benefited by TRLIA Program dated November 3, 2005
NASA	North Arboga Study Area
Nexus Study	Three Rivers Levee Fee Nexus Study Update
PLSP	Plumas Lake Specific Plan
RD 784	Reclamation District 784
SAFCA	Sacramento Area Flood Control Agency
TRLIA	Three Rivers Levee Improvement Authority
TRLIA CFDs	TRLIA CFDs No. 2006–1 and 2006-2

## List of Abbreviations (Continued)

WPIC	Western Pacific Interceptor Canal
YLFA	Yuba Levee Financing Authority
YWA	Yuba Water Agency

# I. EXECUTIVE SUMMARY

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## OVERVIEW

Larsen Wurzel & Associates, Inc. (LWA) has prepared this Three Rivers Levee Fee Nexus Study Update (Nexus Study) on behalf of Yuba County (County). This Nexus Study provides the basis for a levee improvement development impact fee (Fee) to ensure that new development pays its proportionate share of the levee improvement costs associated with the Three Rivers Levee Improvement Authority (TRLIA) Levee Improvement Program. TRLIA is a joint powers authority made up of the County and Reclamation District 784 (RD 784) for the sole purpose of improving the levees providing flood protection in the southern portion of the County. Funds raised and secured by the obligations of this Fee program since its inception have been used by TRLIA to construct and finance its levee improvement program.

## UPDATED STUDY PURPOSE

This Nexus Study is an update of the October 13, 2008, Three Rivers Levee Fee Nexus Study (2008 Nexus Study) prepared by Economic & Planning Systems (EPS), formally adopted by the County Board of Supervisors on November 18, 2008, by County Ordinance No. 1465, effective January 17, 2009, and codified as subsequently amended in the County Ordinance Code Title XIII §13.76.000.

In the 2008 Nexus Study, TRLIA estimated the local share of levee improvement costs to complete the Levee Improvement Program at \$154.2 million (2008\$). To provide the necessary upfront financing, the County, TRLIA, and the Yuba Water Agency (YWA) implemented several financing mechanisms including the formation of several Community Facilities Districts (CFDs), advance funding agreements with private development interests, and a joint borrowing through the Yuba Levee Financing Authority (YLFA). The 2008 Nexus Study considered the financing program and included repayment to those entities providing upfront financing in excess of their Fee obligation. This included the out-of-pocket debt service payments to be made by the County and YWA as well as payments back to those private developers that funded the Levee Improvement Program in excess of their project's Fee obligation. Part of the approach for structuring the Fee around these financing costs was to include within the Fee's base rate an initial capitalized amount of financing costs as well as an escalation factor covering additional financing costs over time. It was contemplated that even after the completion of the improvements, future development would continue to pay the Fee to reimburse the principal and interest costs of the upfront financing. The financing cost components of the initial Fee were set based upon an assumed absorption schedule of new development and cash flow modeling of projected fee revenues from that absorption over time. However, since adoption, the assumed absorption of new fee-paying units has not materialized and as result of the escalation factor, the Fee has increased to a level that now inhibits new development. The Fee is now being updating to address this situation and further incorporate the following:

- Updated actual and remaining costs of the Levee Improvement Program;
- Updated planned development projections including both changes to previously approved projects and projects not previously approved prior to November 2008;

- The waiver of a portion of previously approved reimbursement of principal and interests costs for levee improvement financing by the County and YWA; and,
- Updated financing costs.

## BACKGROUND

A series of levee improvements were needed to provide additional flood protection to the Plumas Lake Specific Plan Area (PLSP), the North Arboga Study Area (NASA), the East Linda Specific Plan Area (ELSP), and other neighboring areas, collectively referred to as the Benefit Area. A Technical Memorandum prepared for TRLIA by MBK Engineers (MBK), with the subject *Lands Benefited by TRLIA Program*, dated November 3, 2005 (MBK Tech Memo) describes the methodology for determining the lands benefiting from the levees and provides a map showing those lands. The Benefit Area referenced in this Nexus Study reflects the lands described in the MBK Tech Memo. Specifically, the Benefit Area is those lands that receive flood protection benefit from the levees that provide flood protection from the following waterways: Yuba River, Feather River, Bear River, Western Pacific Interceptor Canal (WPIC), and Goldfields.

The levee improvements directly benefit existing and future development in the Benefit Area. Two zones of benefit have been defined in the Benefit Area and are shown in **Map 1** presented at the end of this Section.

- The Plumas Zone is the area that benefits from all levee improvements along the Yuba River, Feather River, Bear River, WPIC and Goldfields. It is located in the southern most portion of the County and is experiencing the largest amount of growth in the Benefit Area.
- The Linda Zone is the area generally north of the County Airport and south of the Yuba River. This zone comprises the remainder of the Benefit Area. This zone benefits from improvements along the Yuba River and the Goldfields.

This Nexus Study updates the previously established nexus between the projected new development in the Benefit Area and the necessary levee improvements to be funded by the Fee.

## REPORT ORGANIZATION

This report is divided into six sections including this Executive Summary as **Section I**. **Section II** describes the Three Rivers Levee Fee. **Section III** describes the land uses in the Plumas and Linda Zones. **Section IV** provides the cost allocation methodology and calculations. **Section V** describes the Fee implementation and administration. **Section VI** provides the nexus findings for the Three Rivers Levee Fee.

This report includes five appendices. **Appendix A** provides detail on the land use calculations. **Appendix B** provides the detailed cost estimates for the Levee Improvement Program. **Appendix C** provides supporting information for the fee escalator. **Appendix D** provides the supporting assumptions used in the cost allocation calculations. **Appendix E** provides example calculations of the Three Rivers Levee Fee to aid in administration and fee collection.

## **PURPOSE OF THE STUDY**

The purpose of this study is to update the established nexus between new development occurring in the Benefit Area and the appropriate share of the local costs for the levee infrastructure required to provide an adequate level of flood protection. This study updates the calculation of the Three Rivers Levee Fee to be collected from new development based on the proportionate share of the benefit received from the improved levee system by benefit zone by land use category.

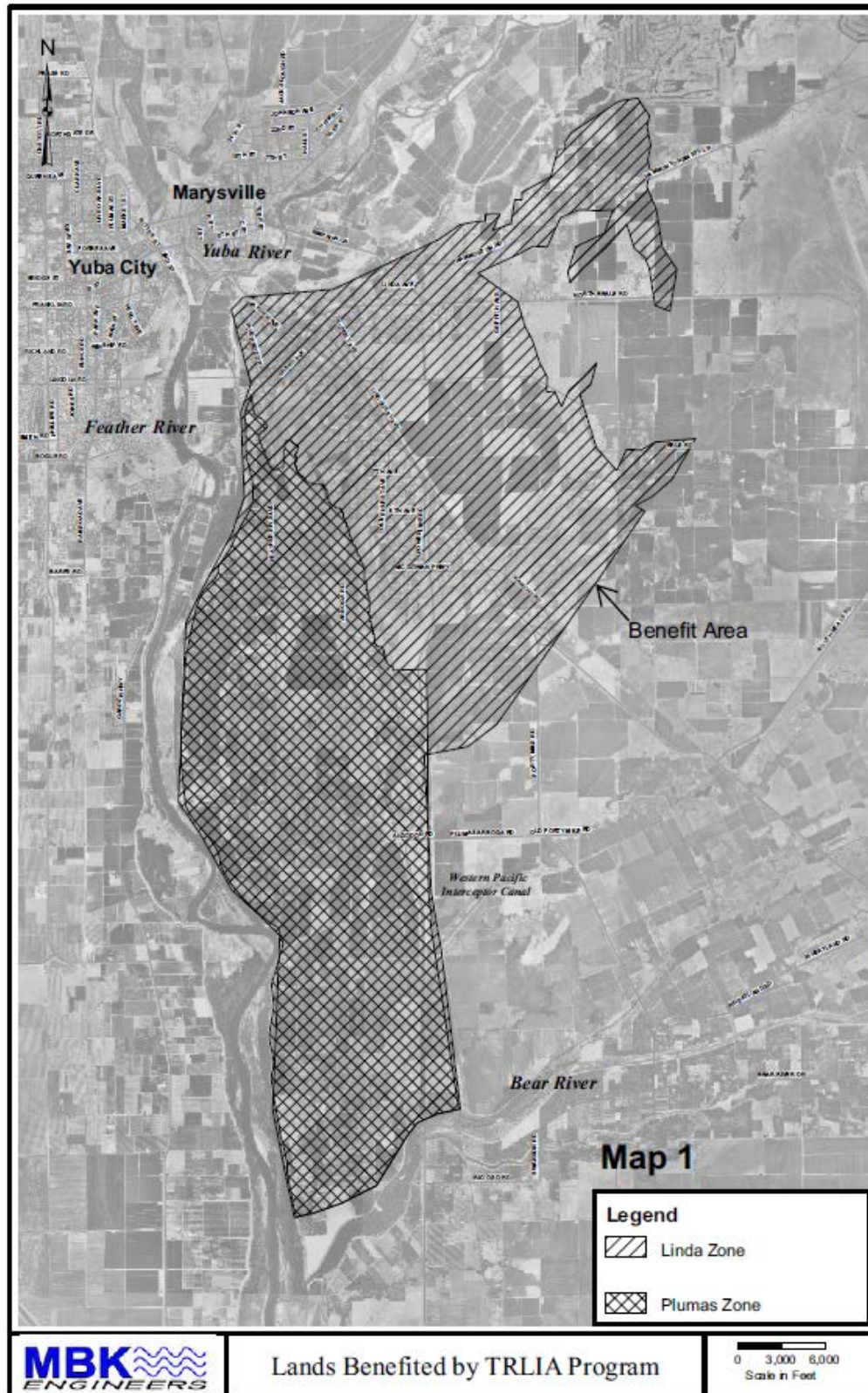
## **AUTHORITY**

This Nexus Study Update has been prepared to establish an amended development impact fee program in accordance with the guidelines as codified in California Government Section 66000 et seq. This code section sets forth the procedural requirements for establishing and collecting a development impact fee. This update follows the same procedures as those required to establish a new development impact fee. These procedures require that “a reasonable relationship,” or nexus, must exist between a governmental exaction and the purpose of the condition. Specifically, each local agency imposing a fee must perform each of the following steps:

- Identify the purpose of the fee.
- Identify how the fee is to be used.
- Determine how a reasonable relationship exists between the fee’s use and the type of development project on which the fee is imposed.
- Determine how a reasonable relationship exists between the need for the public facility and the type of development project on which the fee is imposed.
- Demonstrate a reasonable relationship between the amount of the fee and the cost of public facility or portion of the public facility attributable to the development on which the fee is imposed.



**Map 1: Lands Benefited by TRLIA Levee Improvement Program**





## II. THREE RIVERS LEVEE FEE

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### PROGRAM PURPOSE

TRLIA has determined that the local share of costs to complete the Levee Improvement Program is approximately \$79.6 million (2020\$). To provide the upfront financing for the majority of these improvements, the County and TRLIA have implemented several mechanisms including:

- Forming several CFDs
- Executing several agreements with private entities for advanced funding of levee improvements
- A joint borrowing with the YWA

The purpose of the Three Rivers Levee Fee is twofold. First, is to ensure that all properties that are developing in the Benefit Area share in the cost of the improvements. Second, is to provide repayment to those entities that have provided upfront financing for the levee improvements. This includes repayment to those that advanced fees in excess of the obligations established by prior advanced funding agreements.

This Nexus Study sets the Benefit Area as shown by the floodplain in **Map 1**. The area was defined by performing computerized hydrologic modeling of levee breaches for various inundation scenarios. As a result of this modeling, engineers performing the analysis have determined which reaches of levee improvements benefit specific areas. The resulting inundation area is divided into two zones based on the benefit of specific sets of levee improvement projects. These areas are defined as the Plumas Zone and the Linda Zone as shown on **Map 1**. Any new development occurring inside either benefit zone will be subject to that zone's respective Three Rivers Levee Fee.

### FEE COMPONENTS AND RATES

Payment of the Three Rivers Levee Fee by the fee payer covers the following three components of costs:

1. **Direct Project Costs** incurred by TRLIA to construct the levee improvements.
2. **Financing Costs** incurred by the County, YWA, and/or TRLIA to pay the direct costs.
3. **Administration Cost** of the fee program.

The initial fee rate has been calculated and includes all upfront Direct Project Costs, a portion of the Financing Costs capitalized into the initial fee rate, and the Administrative Costs. This initial fee rate will escalate over time to cover additional financing interest costs and administrative costs. **Table 1** shows the allocated cost, administrative cost, and total initial fee amounts per unit for each land use in the two benefit zones. **Table 2** shows the breakdown of the initial fee rate into its components of Direct Project Costs, Financing Costs, and Administrative Costs.

**Table 1**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**FY 2020/2021 Initial Fee Rates Per Unit**

Description	Allocated Cost [1]	Administrative Cost [2]	Total Initial Fee Rate [3][4]
	Table 11 A	B = A * 3%	C = A + B
<b>Plumas Zone</b>			
Residential	\$11,028	\$331	\$11,359
Retail/Office/Commercial	\$3,024	\$91	\$3,115
Industrial	\$1,537	\$46	\$1,583
<b>Linda Zone</b>			
Residential	\$1,521	\$46	\$1,567
Retail/Office/Commercial	\$417	\$13	\$430
Industrial	\$212	\$6	\$218
Source: LWA			"fee_summ"

[1] Includes upfront financing costs, see Table 2 for detailed breakdown.

[2] The initial Fee Rate includes an administrative charge of 3.00% of the allocated costs.

[3] Per unit; for single-family and duplex residential, each dwelling unit is a unit; for triplex, apartment, and residential developments with more than two attached units, each dwelling unit is considered 0.5 units; for nonresidential development, 1,000 square feet is considered a unit.

[3] The initial Fee Rate is effective through June 1, 2022. Commencing July 1, 2022, the Fee will escalate annually by the percentage increase in the average of the San Francisco and 20-Cities CCI as published by ENR, for the period ending May of the previous fiscal year. The base month for application of this adjustment shall be May 2021.

**Table 2**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Initial Fee Rate Components Per Unit**

Fee Component	Percentage of Total Fee	Residential	Retail/Office/ Commercial	Industrial
<b>Plumas Zone</b>				
Direct Project Costs	50.33%	\$5,717	\$1,568	\$797
Financing Costs	46.76%	\$5,311	\$1,456	\$740
Administrative Costs	2.91%	\$331	\$91	\$46
<b>Total Fee Per GDA</b>	<b>100.00%</b>	<b>\$11,359</b>	<b>\$3,115</b>	<b>\$1,583</b>
<b>Linda Zone</b>				
Direct Project Costs	50.33%	\$789	\$216	\$110
Financing Costs	46.76%	\$733	\$201	\$102
Administrative Costs	2.91%	\$46	\$13	\$6
<b>Total Fee Per GDA</b>	<b>100.00%</b>	<b>\$1,567</b>	<b>\$430</b>	<b>\$218</b>

"components"

## IMPLEMENTATION

As part of the update of the Three Rivers Levee Fee, the basis for the collection of the Fee will change from a fee charged on a per Gross Developable Acre (GDA) basis to a fee charged on a per unit basis. Determining units for purposes of the Fee are discussed further in the **Section IV**.

To convert the Fee from a GDA basis to a per unit basis, the cost per GDA was first determined, then a determination of the effective units per GDA was made to support the conversion to a unit basis fee. **Table 3** provides GDA for the Benefit Area by land use and benefit zone.

### RESIDENTIAL DEVELOPMENT

For larger, residential development requiring a subdivision map, the GDA is the gross acreage of the large lot parcel excluding major dedicated public land uses, such as major arterials, major collectors, drainage, utility corridors, parks, schools, and other public facilities. **Section V** provides greater detail for how GDA is determined based on the type of development. Acres listed as planned residential in **Table 3** include GDA only.

### NONRESIDENTIAL DEVELOPMENT

For nonresidential land uses (Retail/Office/Commercial and Industrial), the developable acreages used to determine the GDA in **Table 3** utilize floor area ratio assumptions. Therefore, the acres listed as planned nonresidential include only developable acres; hence the fee is calculated based on a comparable GDA basis.

For purposes of calculating the Fee for nonresidential land uses, the calculation of GDA will be reflective of the assumptions used in calculating the acreage in **Table 3** as discussed in **Chapter V**.

### CHANGES IN THE FEE

The updated development impact fee presented in this Nexus Study is based on the best available project cost estimates, public funding estimates, costs of financing, and land use information at the time of the update. If costs change significantly, or if additional non-local sources of funding become available, the Fee should be adjusted accordingly. Similarly, should the cost of financing change, increasing, or decreasing the costs of the program, the Fee should be adjusted accordingly. As required by law, the County will perform a review of the Fee program and determine if an update to the program is necessary.

### LEVEE FEE OBLIGATION

The Three Rivers Levee Fee will be collected by the County at building permit final.

The County may further defer Fee collection through an adopted Fee deferral program or through individual development agreements with project applicants. Once the Three Rivers Levee Fee has been paid, those paying are no longer obligated to fund additional future levee improvement costs or cost increases associated with the levee capital improvement program as part of the development approval process.

**Table 3**

**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Gross Developable Acreage by Land Use and Benefit Zone**

<b>Land Use</b>	<b>Plumas Zone GDA</b>	<b>Linda Zone GDA</b>
<b>Planned Development</b>		
Residential [1]	2,960.3	470.7
Retail/Office/Commercial [2]	37.3	2.5
Industrial [2]	0.0	0.0
Public Use [3]	628.9	119.5
<b><i>Subtotal Planned Development</i></b>	<b><i>3,626.5</i></b>	<b><i>592.7</i></b>
<b>Existing Development</b>		
Developed Residential		
Rural SF	16.6	51.9
Urban SF	58.3	252.2
Two or More per Lot	1.0	13.8
Mobile Home	0.0	1.3
Residential Assigned to Ag/Open Space	1,183.2	2,224.7
Developed Industrial	328.9	94.3
Developed Retail/Commercial	43.9	544.8
Vacant Land Uses		
Vacant Residential	457.8	492.7
Vacant Industrial	294.5	188.1
Vacant Retail/Commercial	0.0	0.0
Public Use/Other [3]	2,697.8	1,220.0
Agriculture Land/Open Space	7,519.3	12,951.9
<b><i>Subtotal Existing Development</i></b>	<b><i>12,601.3</i></b>	<b><i>18,035.9</i></b>
<b>Total Acres</b>	<b>16,227.7</b>	<b>18,628.5</b>

Source: Yuba County Assessor's Office, July 2005 CD-DATA Assessor's Parcel Tax Roll

"landuse"

[1] Includes multifamily residential.

[2] Retail/Office/Commercial and Industrial acreage is derived from the Plumas Lake Specific Plan. Some acres in the Specific Plan have been developed and are counted in Existing Development.

[3] Includes public land uses such as drainage, major roads, etc.

### III. LAND USE

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The Benefit Area is approximately 35,000 acres in the southernmost portion of the County. Generally, the boundary for the Plumas Zone includes the area benefiting from Goldfields, Yuba River, Feather River, Bear River, and Western Pacific Interceptor Canal levee improvements and the boundary for the Linda Zone includes the area benefiting from only those improvements along the Yuba River and in the Goldfields.

#### PLANNED AND EXISTING LAND USES

For purposes of the Fee calculation, the costs of the Levee Improvement Program must be allocated to the planned and existing development located in the Benefit Area. In this cost allocation, the following land use categories are used:

*Planned Development<sup>1</sup>:*

- Residential
- Retail/Office/Commercial
- Industrial
- Public Use

*Existing Development<sup>2</sup>:*

- Developed Residential
  - Rural Single-Family
  - Urban Single-Family
  - Two or more for each lot
  - Mobile Home Taxable
  - Residential Land Assigned to Ag/Open Space
- Developed Industrial
- Developed Retail
- Vacant Residential
- Vacant Industrial
- Vacant Retail
- Agriculture
- Public Use/Other

All land use categories, planned and existing, are allocated a relative portion of the costs proportional to each land use categories' benefit from the improvements to the levee system. Only future residential,

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<sup>1</sup> For the purposes of this Fee update, planned development consists of, planned development projects as of the original date of the Fee program (October 2008) and any additional planned development projects approved since that date.

<sup>2</sup> For the purposes of this Fee update, existing development consists of the existing development found in the basin as of the original study (October 2008). Existing development land uses types are those identified by Yuba County Assessor's Use codes.

industrial, and retail development will be charged the Three Rivers Levee Fee. **Table 3** outlines the existing and planned development located in the Plumas and Linda Zones. **Appendix A** shows all supporting relevant land use assumptions used in the analysis.

## PLANNED LAND USE DEFINITIONS

For purposes of determining the appropriate Fee rate for projects, the following definitions will be used to classify projects into the appropriate land use category:

- **Residential Land Use**—Parcels that are used exclusively for construction of residential dwellings. Residential dwellings include one-family, two-family, and multi-family dwellings but not hotels, motels, trailers, boarding or lodging houses, or any type of temporary dwellings. A multi-family dwelling is any dwelling habitable by more than two families.
- **Retail/Office/Commercial Land Use**—Parcels that include these uses or are similarly associated:
  - Stores, markets, and dealer lots
  - Service establishments, including general, business, professional, legal, and medical services
  - Churches and religious institutions
  - General and specialized offices
  - Clubs, lodges, and fraternal organizations
  - Hotels, motels, and transient lodging
  - Eating and drinking places
  - Laundromats
  - Amusement and entertainment facilities
  - Automotive supply stores and warehouses
  - Educational services, libraries, and all schools
  - Health clubs and fitness centers
  - Theaters
- **Industrial Land Use**—Parcels that include manufacturing, fabricating, and processing and storage uses and associated structures, including, but not limited to, these purposes:
  - Apparel and finished products made from fabric and similar materials
  - Concrete- and asphalt-mixing plants
  - Food and beverages, including ice, dry ice, and cold storage
  - Furniture, fixtures, and cabinets
  - Instruments, optics, photographic equipment, and supplies
  - Jewelry, silverware, and metalware
  - Leather and leather products
  - Lumber and wood products, including mobile home, modular home, and prefabricated structures
  - Machinery, including electrical, electronic, and communications
  - Metal products

- Miscellaneous goods and supplies, including armaments, musical instruments, toys and games, sporting and athletic goods, and artists' materials
- Stone, clay, glass, and concrete products
- Textiles
- Transportation equipment and machinery
- Ambulance service
- Building construction and special trade contractor's shops and service yards
- Building material sales yard
- Exterminating and pest control service
- Granaries
- Hatcheries
- Parcel delivery service
- Oil and gas well service and supply
- Research laboratories
- Transportation facilities and terminals
- Warehousing



## IV. COST ALLOCATION AND FEE DETERMINATION

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This chapter describes the cost allocation methodology and the determination of the Three Rivers Levee Fee. The methodology for determining the Fee is summarized below:

1. Determine *planned* GDA for the benefiting lands in each zone.
2. Determine *existing* GDA for the benefiting lands in each zone.
3. Determine the total costs and local share of costs allocable to each zone.
4. Adjust the GDA of each land use type in each zone by the Total Value Index to adjust for the relative benefit of the improvements between varying land use types.
5. Allocate the cost of levee improvements to the adjusted GDA for each planned and existing land use in each zone.
6. Divide the allocated costs by the actual GDA of each land use type in each zone to determine the per GDA allocated cost.
7. Adjust the allocated cost of each land use category in each zone for administrative and financing costs to determine the Fee rate per GDA.
8. Convert the per GDA Fee rate, including administering any financing costs, to a per unit fee based on the average units per GDA for each land use type.
9. Adjust the per unit fee for additional financing costs on an annual basis by the approved escalation rate.

As previously stated, the Three Rivers Levee Fee covers three main components:

1. **Direct Project Costs** incurred by TRLIA to construct the levee improvements.
2. **Financing Costs** incurred by the County, YWA, and/or TRLIA to pay the direct costs.
3. **Administration Cost** of the fee program.

### DIRECT COSTS

The local share of the levee improvements benefitting each zone are shown in **Table 4**. TRLIA provided updated levee improvement costs as of January 2020 reflective of completion of the levee improvement program. **Appendix B** provides a detailed breakdown of the levee improvement cost allocation to each zone.

The total local share of levee improvement costs shown in **Table 4** is estimated to be approximately \$153.5 million, and includes:

- Direct levee improvement construction costs
- Land and right-of-way acquisition
- Environmental mitigation costs
- Direct interest costs on prior advanced construction funding
- Financing contingency costs
- Locally funded upfront financing costs

**Table 4**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Total Levee Improvement Cost Calculation**

<b>Item</b>	<b>Source</b>	<b>Cost (2020\$)</b>
<b>Plumas Zone Costs</b>		
Local Share of Costs	<i>Table B-6</i>	\$77,297,109
Financing Costs [1]		\$71,817,363
<b><i>Plumas Zone Improvement and Financing Costs on Bonds</i></b>		<b><i>\$149,114,473</i></b>
<b>Linda Zone Costs</b>		
Local Share of Costs	<i>Table B-6</i>	\$2,301,486
Financing Costs [1]		\$2,138,329
<b><i>Linda Zone Improvement and Financing Costs on Bonds</i></b>		<b><i>\$4,439,815</i></b>
<b>Total Cost</b>		<b>\$153,554,288</b>

"cost"

[1] Financing cost is determined to be the amount needed to repay all borrowing of the Program from future Impact Fee Revenues as shown on Table C-4.

## FINANCING COSTS

TRLIA obtained financing to fund the required local share of upfront direct construction costs. The financing mechanisms used by the County and TRLIA to fund the upfront construction costs of the levee improvements include:

- Several agreements with private entities for the advanced funding of the levee impact Fee and in some cases reimbursement.
- A joint borrowing between Yuba County and the YWA through a Joint Powers Authority, the Yuba Levee Financing Authority.

Fee revenue collected will be used to pay directly as well as reimburse the financing costs associated with the upfront funding of the Levee Improvement Program. **Table 4** shows the component of costs funded by the Fee representing financing costs.

## ADMINISTRATIVE COSTS

The Fee program will be administered and maintained by County staff with support from TRLIA. Fee program administration includes periodic Fee updates and reporting, Fee collection, and Fee program revenue distribution. Fee collection will be the responsibility of Community Development and Services Agency staff and the tracking and distribution of Fee revenues will be the responsibility of TRLIA and County staff. According to the July 22, 2008 Agreement Concerning Levee Impact Fees Among County of Yuba, Yuba County Water Agency, and Yuba Levee Financing Authority, Fee revenues are utilized by the Yuba Levee Finance Authority.

## FEE ESCALATOR

The Levee Improvement Program is expected to be substantially complete by 2022. While the Three Rivers Levee Fee includes an upfront financing charge in the base Fee rate to directly cover a portion of the financing costs, the Fee has been designed to escalate over time to cover the remaining interest costs. Both financing mechanisms mentioned above are long-term borrowings that incur interest expenses over time. As such, the direct cost and financing component of the initial Fee will escalate to cover these interest costs. The required rate of Fee escalation is directly related to the expected stream of Fee revenue to be collected over time. To the extent that Fee revenue is received by the County faster than interest expenses occur over time, the County will be able to amortize the repayment of the debt faster than the specific terms of the borrowings. **Appendix C** provides calculations that determine the estimated annual Fee escalation to be approximately 3.0 percent. This is based on relevant assumptions regarding likely borrowing costs and Fee revenue projections.

As administrative costs are incurred to complete these associated tasks, they will escalate over time with inflation. The administrative component of the Fee will need to escalate in order to ensure that the costs of administering the program can be funded over time.

To address these two components of increasing costs over time, the Fee will be escalated annually by the percentage increase in the average of the San Francisco and 20-Cities Construction Cost Index (CCI) as

published by Engineering News Record (ENR), for the period ending May of the previous fiscal year. The base month for application of this adjustment shall be May 2021.

As further discussed in **Section V**, the Fee will be adjusted annually by this fee escalator. The adjusted Fee rate will go into effect at the beginning of each fiscal year on July 1<sup>st</sup>, starting July 1, 2022 **Table 1** provides the initial Fee rates subject to further escalation. To the extent these assumptions are adjusted, based on periodic review by the County, the Fee schedule will be revised.

## **COST ALLOCATION**

The purpose of allocating improvement costs among the various land uses is to provide an equitable method of funding the improvements. The key to the cost apportionment of improvements to different land uses is the assumption that the benefits derived from public facilities are related to land use type and that such benefits can be stated in relative terms. Only by relating the benefit received from facilities and services to land use types can a reasonable nexus, or relationship, be established for the apportionment of costs to that land use.

As previously discussed, the assumed pace of absorption of new fee-paying units has not materialized over time causing the Fee to increase to a level that now inhibits new development. The Fee is being updating to address this situation and further incorporate the following:

- Updated actual and remaining costs of the Levee Improvement Program;
- Updated planned development projections including both changes to previously approved projects and projects not previously approved prior to November 2008;
- The waiver of a portion of previously approved reimbursement of principal and interests costs for levee improvement financing by the County and YWA; and,
- Updated financing costs.

This Fee update will rely on the previously established methodology for cost allocation, including the value indices developed in the 2008 Nexus Study. While absolute property values may change over time, the relative proportionality between property values remains relatively stable. Therefore, the value indices previously developed can be relied upon.

## **TOTAL VALUE INDEX**

The levee improvement cost allocations to the land use categories are based on the total value of each land use. This methodology is based on a similar analysis performed for the Consolidated Capital Assessment District (CCAD) in Sacramento and Sutter Counties for the Sacramento Area Flood Control Agency (SAFCA). SAFCA is the local agency levying capital assessments for flood control purposes on a land use basis in Sacramento and Sutter Counties.

Each category is defined by a value index providing a value relation of land use categories as compared to the value of a new single-family home. Thus, a relative ratio is established between existing development and new development that is slated to occur in the Benefit Area. All values are on a per-acre basis and were provided by assessor's parcel records obtained from the County Assessor's Office for existing development

and appraisal or market valuation information for planned development. The values utilized in this Nexus Study are the same values utilized in the original 2008 Nexus Study. The rationale for maintaining this relative relationship is that it is assumed that any changes from 2008 to today would be relatively proportional between all land uses. As a result, the relative proportionality between land uses calculated based on 2008 data would remain the same as those calculated based on 2020 data.

Two property-related categories of benefit are examined: land value and building improvement value.

### **Land Value**

**Table 5** shows the Land Value Index for all land uses in the Benefit Area. The Land Value Index reflects land valuation, comparing all land use categories to new residential development. The values were based on land value alone, exclusive of building improvements. **Appendix D** shows how land valuation calculations were derived for all land use categories.

### **Building Improvement Value**

**Table 6** shows the Building Improvement Index for all land uses. The Building Improvement Index reflects building improvement valuation, comparing all land use categories to new residential development. **Appendix D** shows how building valuation calculations were derived for all land use categories.

### **Total Value**

**Table 7** shows the land, building, and other improvement values per acre as well as the total value and Total Value Index. Values are shown as a percentage of the total valuation for the land category. As a general rule, one-quarter of total value usually is derived from the land and the remainder is derived from the building. Total Value calculations for the Benefit Area are consistent with this guideline. The Total Value Index represents the total benefit each land use receives as compared to new residential development. The Total Value Index will be used to set the adjustment factor for the Three Rivers Levee Fee.

As appraisals were not previously available in 2008 for future Retail/Office/Commercial or Industrial land uses for the Benefit Area, valuation estimates from comparable projects in South Sutter County were used as a proxy to estimate the Total Value Index for these land uses.

**Table 8** shows the adjusted acres for all land uses in the Plumas and Linda Zones, respectively. This table multiplies the then existing acres by the Total Value Index to calculate adjusted acres. The adjusted acres then are used to allocate costs.

### **Cost for Each Acre**

The total average cost for each residential acre is shown in **Table 9**. The total local share of costs for the levee improvements including financing is expected to be \$153.5 million; \$149.1 million for the Plumas Zone and \$4.4 million for the Linda Zone. These amounts are divided by the adjusted acres in each zone that are subject to the Fee to determine the Average Cost per Adjusted Acre.

The total average cost for each adjusted acre for each zone is then adjusted by the Total Value Index for each land use to determine the cost per GDA for each land use. The allocated cost by land use for each zone is shown in **Table 10**.

### **Cost per Unit**

The Three Rivers Levee Fee is to be charged on a per unit basis. The units for purpose of the Fee will be determined as follows.

#### *Residential Development*

- For single-family residence and duplex developments, a unit is a single dwelling unit (i.e., a single-family residence is one unit; a duplex is two units)
- For triplex, apartment, and other residential developments with more than two attached units, each dwelling unit is considered one half of a unit (i.e., a triplex is one and one-half units, a six-apartment complex is three units).

#### *Nonresidential Development*

- For nonresidential development, a unit is 1,000 square feet of building space.

It is necessary to convert the Fee per GDA calculated in **Table 10**, to a per unit Fee to determine the Fee to be collected at building permit final. To do this, assumptions were made regarding the units per GDA for all land use categories. For Residential, data from known developments was analyzed to identify the appropriate units per GDA of 4.29. For Retail/Office/Commercial and Industrial, the Yuba County 2030 General Plan allows for floor area ratios<sup>3</sup> (FAR) from 0.2 to 1.0. Therefore, an average FAR of 0.6 was assumed (equivalent to 26.14 units per acres) for new nonresidential development. **Table 11** shows the assumed units per GDA and the calculation of the Fee per unit.

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<sup>3</sup> Floor area ratio (FAR) is the proportion of building square footage to land square footage.

**Table 5**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Land Value Index**

Land Use	Land Value per Gross Developable Acre	Land Use Index [1]
Planned Residential [2]	\$40,183	1.000
Developed Residential		
Rural SF	\$14,593	0.363
Urban SF	\$135,669	3.376
Two or more per lot	\$19,889	0.495
Mobile Home	\$14,005	0.349
Developed Industrial	\$9,685	0.241
Developed Retail/Commercial	\$17,868	0.445
Vacant Residential	\$48,604	1.210
Vacant Industrial	\$5,489	0.137
Vacant Retail/Commercial	\$0	0.000
Public Use/Other [3]	\$17,289	0.430
Agriculture Land/Open Space	\$2,058	0.051

Source: Yuba County Assessor's Office, July 2005 and July 2008 CD-DATA Assessor's Parcel Tax  
Roll, Seevers, Jordan, Ziegenmeyer February 23, 2008 Proposed TRLIA CFD

"land\_val"

[1] The Land Use Index is derived by dividing the total value of each land use category by the land value of the New Residential category.

[2] Uses an average Finished Lot Valuation based on the SJZ Appraisal of \$9,455 and assumes a density of 4.25 units per acre.

[3] "Other" category includes public land uses such as drainage, well sites, etc.

**Table 6**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Building Value Index**

Land Use	Building Improvement Value per Acre [1]	Building Improvement Index [2]
Planned Residential [3]	\$1,498,929	1.000
Developed Residential		
Rural SF	\$49,744	0.033
Urban SF	\$459,278	0.306
Two or more per lot	\$52,051	0.035
Mobile Home	\$16,655	0.011
Developed Industrial	\$10,574	0.007
Developed Retail/Commercial	\$44,093	0.029
Vacant Residential	\$16,452	0.011
Vacant Industrial	\$14,595	0.010
Vacant Retail/Commercial	\$0	0.000
Public Use/Other [4]	\$7,906	0.005
Agriculture Land/Open Space	\$946	0.001

Source: Yuba County Assessor's Office, July 2005 and July 2008 CD-DATA Assessor's  
Parcel Tax Roll, The Gregory Group, Seevers Jordan Ziegenmeyer Proposed TRLIA CFD

"bldg\_value"

[1] Excludes Land Value.

[2] The Building Improvement Index is derived by dividing the total value of each land use category by the land value of the New SF Residential category.

[3] Uses an average selling price of \$362,144 per home less \$9,455 land value from Table 5 and assumes a density of 4.25 units per acre.

[4] "Other" category includes public land uses such as drainage, well sites, etc.



**Table 7**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Total Value Index**

Land Use	Land Value per Acre Table 5	Percent Contribution to Total Value	Building Improvements Value per GDA Table 6	Percent Contribution to Total Value	Other Improvements Value per GDA	Percent Contribution to Total Value	Total Value	Total Value Index [1]
<b>Planned Development</b>								
Residential	\$40,200	2.6%	\$1,498,900	97.4%	\$0	0.0%	\$1,539,100	1.000
Retail/Office/Commercial [2]							\$2,571,250	1.671
Industrial [3]							\$1,306,800	0.849
<b>Existing Development</b>								
Developed Residential								
Rural SF	\$14,600	22.6%	\$49,700	77.0%	\$263	0.4%	\$64,563	0.042
Urban SF	\$135,700	22.8%	\$459,300	77.2%	\$35	0.0%	\$595,035	0.387
Two or more per lot	\$19,900	27.2%	\$52,100	71.3%	\$1,086	1.5%	\$73,086	0.047
Mobile Home	\$14,000	39.8%	\$16,700	47.5%	\$4,491	12.8%	\$35,191	0.023
Developed Industrial	\$9,700	47.4%	\$10,600	51.8%	\$176	0.9%	\$20,476	0.013
Developed Retail/Commercial	\$17,900	28.6%	\$44,100	70.5%	\$575	0.9%	\$62,575	0.041
Vacant Residential	\$48,600	74.7%	\$16,500	25.3%	\$0	0.0%	\$65,100	0.042
Vacant Industrial	\$5,500	27.4%	\$14,600	72.6%	\$0	0.0%	\$20,100	0.013
Vacant Retail/Commercial	\$0	0.0%	\$0	0.0%	\$0	0.0%	\$0	0.000
Public Use/Other [4]	\$17,300	66.5%	\$7,900	30.4%	\$802	0.0%	\$26,002	0.017
Agriculture Land/Open Space	\$2,100	58.0%	\$900	24.9%	\$618	17.1%	\$3,618	0.002

Source: Yuba County Assessor's Office, July 2005 CD-DATA Assessor's Parcel Tax Roll

"total\_value"

[1] Total Value Index is derived by dividing the total value of each land use category by the land value of the Planned Residential Development category.

[2] New Retail/Office/Commercial Total Value based on development in South Sutter County.

[3] New Industrial Total Value are based on industrial development in South Sutter County and assume a 0.4 Floor Area Ratio (Total Building Square Feet to Gross Parcel Acreage).

[4] "Other" category includes public land uses such as drainage, well sites, etc.

**Table 8**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Adjusted Acreage Calculation by Benefit Zone**

Land Use	Plumas Zone			Linda Zone		
	GDA	Total Value Index	Adjusted Acreage	GDA	Total Value Index	Adjusted Acreage
	Table 3	Table 7		Table 3	Table 7	
<b>Planned Development</b>						
Residential	2,960.3	1.000	2,960.3	470.7	1.000	470.7
Retail/Office/Commercial	37.3	1.671	62.3	2.5	1.671	4.2
Industrial	0.0	0.849	0.0	0.0	0.849	0.0
Public Use Acres [1]	628.9	0.017	10.6	119.5	0.017	2.0
<b>Subtotal Planned Development</b>	<b>3,626.5</b>		<b>3,033.2</b>	<b>592.7</b>		<b>476.9</b>
<b>Existing Development</b>						
Developed Residential						
Rural SF	16.6	0.042	0.7	51.9	0.042	2.2
Urban SF	58.3	0.387	22.5	252.2	0.387	97.5
Two or More per Lot	1.0	0.047	0.0	13.8	0.047	0.7
Mobile Home	0.0	0.023	0.0	1.3	0.023	0.0
Residential Assigned to Ag/Open Space	1,183.2	0.002	2.8	2,224.7	0.002	5.2
Developed Industrial	328.9	0.013	4.4	94.3	0.013	1.3
Developed Retail/Commercial	43.9	0.041	1.8	544.8	0.041	22.2
Vacant Land Uses						
Vacant Residential	457.8	0.042	19.4	492.7	0.042	20.8
Vacant Industrial	294.5	0.013	3.8	188.1	0.013	2.5
Vacant Retail/Commercial	0.0	0.000	0.0	0.0	0.000	0.0
Public Use/Other [1]	2,697.8	0.017	45.6	1,220.0	0.017	20.6
Agriculture Land/Open Space	7,519.3	0.002	17.7	12,951.9	0.002	30.4
<b>Subtotal Existing Development</b>	<b>12,601.3</b>		<b>118.7</b>	<b>18,035.9</b>		<b>203.4</b>
<b>Total</b>	<b>16,227.7</b>		<b>3,151.9</b>	<b>18,628.5</b>		<b>680.2</b>

Source: Yuba County Assessor's Office, July 2005 CD-DATA Assessor's Parcel Tax Roll

"fee\_landuse"

[1] Includes public land uses such as drainage, major roads, well sites, etc.

**Table 9**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Average Cost Calculation**

Item	Source	Levee Cost Calculation
<b>Plumas Zone</b>		
Total Cost for Plumas Zone Levee Improvements	<i>Table 4</i>	\$149,114,473
Adjusted Acreage Subject to the Fee	<i>Table 8</i>	3,151.9
<b>Total Plumas Zone Average Cost per Adjusted Acre</b>		<b>\$47,309</b>
<b>Linda Zone</b>		
Total Cost for Linda Zone Levee Improvements	<i>Table 4</i>	\$4,439,815
Adjusted Acreage Subject to the Fee	<i>Table 8</i>	680.2
<b>Total Linda Zone Average Cost per Adjusted Acre</b>		<b>\$6,527</b>
Source: LWA		"fee"

**Table 10**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Allocated Cost by Land Use**

Item	Plumas Zone				Linda Zone			
	Cost per	Total Value	Allocated	Allocated Cost Per	Cost per	Total Value	Allocated	Allocated Cost Per
	Adjusted Acre	Index	Cost per GDA	GDA for Fee [1]	Adjusted Acre	Index	Cost per GDA	GDA for Fee [1]
	Table 9	Table 7			Table 9	Table 7		
<b>Average Cost per Adjusted Acre</b>	<b>\$47,309</b>				<b>\$6,527</b>			
<b>Planned Development</b>								
Residential		1.000	\$47,309	\$47,309		1.000	\$6,527	\$6,527
Nonresidential								
Retail/Office/Commercial [2]		1.671	\$79,036	\$79,036		1.671	\$10,904	\$10,904
Industrial [3]		0.849	\$40,169	\$40,169		0.849	\$5,542	\$5,542
Public Acres		0.017	\$799	NA		0.017	\$110	NA
<b>Existing Development</b>								
Developed Residential								
Rural SF		0.042	\$1,985	NA		0.042	\$274	NA
Urban SF		0.387	\$18,290	NA		0.387	\$2,523	NA
Two or More per Lot		0.047	\$2,247	NA		0.047	\$310	NA
Mobile Home		0.023	\$1,082	NA		0.023	\$149	NA
Residential Assigned to Ag/Open Space		0.002	\$111	NA		0.002	\$15	NA
Developed Industrial		0.013	\$629	NA		0.013	\$87	NA
Developed Retail/Commercial		0.041	\$1,923	NA		0.041	\$265	NA
Vacant Land Uses								
Vacant Land Residential		0.042	\$2,001	NA		0.042	\$276	NA
Vacant Land Industrial		0.013	\$618	NA		0.013	\$85	NA
Vacant Land Retail		0.000	\$0	NA		0.000	\$0	NA
Public Use/Other		0.017	\$799	NA		0.017	\$110	NA
Agriculture Land/Open Space Use		0.002	\$111	NA		0.002	\$15	NA

Source: LWA

"fee\_sched"

[1] The Fee is not applicable to Public Acres or Existing Development.

[2] New Retail/Office/Commercial valuation estimates are based on development in Sutter County.

[3] New Industrial valuation estimates are based on industrial development in Sutter County and assume a 0.40 FAR.

**Table 11**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Allocated Cost by Land Use Per Unit**

Item	Plumas Zone			Linda Zone		
	Allocated Cost Per	Assumed Units	Allocated Cost Per	Allocated Cost Per	Assumed Units	Allocated Cost Per
	GDA for Fee [1]	Per GDA	Unit	GDA for Fee [1]	Per GDA	Unit
	Table 10		Table 10	Table 10		
<b>Planned Development</b>						
Residential [1]	\$47,309	4.29	\$11,028	\$6,527	4.29	\$1,521
Nonresidential [2]						
Retail/Office/Commercial	\$79,036	26.14	\$3,024	\$10,904	26.14	\$417
Industrial	\$40,169	26.14	\$1,537	\$5,542	26.14	\$212

Source: LWA

"fee\_sched"

[1] For residential, samples of new developments were examined to determine an appropriate units per GDA.

[2] For nonresidential, a unit is considered 1,000 square feet of building space. An average FAR of 0.6 was assumed.

## V. IMPLEMENTATION

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The Three Rivers Levee Fee rates presented in this Nexus Study Update are based on the best levee improvement and environmental work cost estimates, administrative cost estimates, and land use information available at this time. As cost estimates become actual costs, land use assumptions are refined, actual development occurs, actual costs of repaying financing are determined, or additional information becomes available, the Fee rates may be adjusted by the County.

The cost estimates presented in this report are in 2020 dollars. Because the costs are financed upfront, the County should not need to adjust the costs and Fee for inflation. As previously discussed, the cost of financing is addressed through the use of an escalator. The Fee is to be adjusted annually to reflect interest costs and administrative cost increases over time.

### FEE COLLECTION, DEFERRAL, EXEMPTIONS, AND ADJUSTMENTS

#### FEE COLLECTION

For all new development occurring in the Benefit Area, the applicant shall pay the Three Rivers Levee Fee at building permit final.

#### FEE DEFERRAL

Notwithstanding any of the procedures discussed above that pertain to the collection of the Three Rivers Levee Fee, should the Fee be included in any fee deferral program approved by the County Board of Supervisors through either an adopted ordinance, resolution, or development agreement(s) with project applicant(s), the applicable provisions of the Three Rivers Levee Fee shall be modified according to the fee deferral program approved by the County for the development impacted by that approval.

#### FEE EXEMPTIONS

The following land uses are exempt from the Three Rivers Levee Fee:

- Existing residential, industrial, retail development (except for expansions in excess of 1,000 square feet of structures)
- Vacant residential, industrial, or retail land until developed
- Agricultural land
- Open space
- Public Agency Owned Land (including federal, state, and local agencies)
- "Other" land as defined below

Agricultural land slated to become new development will no longer be exempt once an application for development is accepted. "Other" land includes public use land uses, such as drainage canals, detention ponds, open space, well sites, railroad right of way, and schools.

With written approval from the County, any or all portions of the proposed fees may be waived if it can be determined that a proposed project will not derive permanent benefit from the improvements for which the fees are collected (i.e., it can be shown that the property does not benefit from the flood protection). Written fee waivers may be available on a case-by-case basis for certain temporary structures, such as a mobile structure used for construction management purposes.

## **ADJUSTMENTS, DEFERMENTS, AND REDUCTIONS TO THE FEE**

The County may reduce the Three Rivers Levee Fee for applicable properties under certain circumstances, such as economic development, and other community benefit purposes. Any adjustment, deferment, or reduction in the Three Rivers Levee Fee will be based on the County's independent analysis and review of the particular property and will be subject to the restrictions imposed on the County by any separate agreements. In adjusting, deferring, or reducing the Fee on a discretionary basis, the County should consider the affect such modification will have on the repayment of financing for the improvements.

## **REIMBURSEMENTS AND FEE CREDITS**

The Levee Improvement Program has been partially funded through agreements with certain landowners to advance fund the levee impact Fee. As reflected in this Nexus Study, the Three Rivers Levee Fee is being reduced. The reduction in the Three Rivers Levee Fee does not immediately impact landowners that had previously paid or advanced the Fee at the previously higher rate. Some landowners who previously advanced funded the levee impact Fee have a claiming and right to a credit against a future levee impact Fee that may be due as a result of continued building or reimbursement for claimed overpayment. These rights remain and the amount of credits due on a per unit basis will be adjusted accordingly through a separate agreement. This Nexus Study Update acknowledges the claim by the landowners regarding credits and reimbursements that may be due and has taken that into consideration in developing the new Three Rivers Levee Fee. No reimbursement or additional Fee Credit for a previously paid or advanced Three Rivers Levee Fee will be provided without an approved Fee Credit and/or Reimbursement Agreement (or Fee Credit and/or Reimbursement provisions within a previously approved Development Agreement).

## **FEE CREDIT AND/OR REIMBURSEMENT FOR CONSTRUCTION OF FACILITIES**

There has been no construction of levee system facilities by developers and no plans currently exist for developers to construct any remaining portion of the levee system in exchange for Fee credits. In the event this does occur, the County will enter into a separate agreement specifying the level of Fee credit, on a per unit basis, provided for the construction of improvements.

## **PUBLIC FINANCING OF IMPROVEMENTS COVERED BY THE FEE**

TRLIA and the County have, in the past, allowed for the use of land-secured public financing of the Three Rivers Levee Fee. TRLIA CFD's No. 2006-1 and 2006-2 (TRLIA CFDs) have been utilized for this purpose. The County and TRLIA have no plans to form any new Mello-Roos Community Facilities Districts to further finance this Fee.

For those properties currently within the TRLIA CFD's, financing the Three Rivers Levee Fee does not specifically exempt landowners from the obligations imposed by the Fee. To the extent advances from the CFD's generate revenue legally available to finance facilities funded by the Three Rivers Levee Fee (either through proceeds from a bond issuance or levy of special taxes), these revenues (net of any administrative expenses or other expenses not directly covered by the Fee) provide a credit against the Three Rivers Levee Fee. Credit generated by TRLIA CFD revenues is provided at the then current Fee rate at the time TRLIA CFD revenues are transferred to the Levee Impact Fee fund. Credit is tracked and applied to projects consistent with the Board of Supervisor's adopted Credit and Reimbursement Policies incorporated into Yuba County Board of Supervisor's Resolution No. 2008-153. It is expected that the Board may revisit the policies to incorporate a change in basis of the Fee. In the absence of an adjustment to these policies, Community Development & Services Agency (CDSA) staff will utilize the data supporting the calculations of this Fee to covert credit to the appropriate per unit basis of the Fee.

## ANNUAL FEE ESCALATOR AND PERIODIC FEE REVIEW

### ANNUAL FEE ESCALATION

As previously discussed, to address increasing financing and administrative costs over time, the initial Three Rivers Levee Fee will be adjusted annually by the County. Increasing financing costs result from interest costs due on reimbursements owed from Fee revenues consistent with the analysis presented in **Appendix C**. Increasing administrative costs are driven by inflation and rising labor costs over time. **Table 1** and **Table 2** provide the initial Fee rates. These rates will be adjusted at the beginning of each fiscal year on July 1<sup>st</sup> starting July 1, 2022.

The Fee will escalate annually by the percentage increase in the average of the San Francisco and 20-Cities CCI as published by ENR, for the period ending May of the previous fiscal year. The base month for application of this adjustment shall be May 2021. The adjusted Fee rate will go into effect at the beginning of each fiscal year on July 1<sup>st</sup>, starting July 1, 2022. The Fee shall be increased by the ratio of the most recent index to the prior year's index.

For example, the initial Fee rate will remain in effect until June 30, 2022. On July 1, 2022, the Fee will be increased by multiplying the current Fee by the ratio of the May 2021 Index to the May 2022 Index.

### PERIODIC FEE REVIEW

The Fee will be subject to periodic updates based on changes in developable land, levee cost estimates, or outside funding sources. The County will review the costs and Fee regularly, as required by law, to determine if any updates to the Fee are warranted. During the regular reviews, the following aspects will be analyzed:

- Changes to the required facilities listed in the Nexus Study
- Changes in the cost to update or administer the fee
- Changes in annual financing costs
- Changes in assumed land uses
- Changes in other funding sources



Any changes to the Three Rivers Levee Fee based on the periodic review will be presented to the Board of Supervisors for approval.

## FIVE YEAR REVIEW

The fifth fiscal year following the first deposit into the Fee account or fund, and every five years thereafter, the County is required to make all the following findings about that portion of the account or fund remaining unexpended:

- Identify the purpose for which the fee is to be used.
- Demonstrate a reasonable relationship between the fee and the purpose for which it is charged.
- Identify all sources and amounts of funding anticipated to complete financing in incomplete plan area improvements.
- Designate the approximate dates that the funding referred to in the above bullet is expected to be deposited in the appropriate account or fund.

The County must refund the unexpended or uncommitted revenue portion for which a need could not be demonstrated in the above findings unless the administrative costs exceed the amount of the refund.

According to Government Code Section 66006, the County is required to deposit, invest, account for, and expend the Fee in the prescribed manner.

## FEE ADMINISTRATION

### FEE CALCULATION

The following discussion outlines the process for calculating the Three Rivers Levee Fee. **Appendix E** provides examples to aid in calculating the Three Rivers Levee Fee. The following information is required to calculate the Three Rivers Levee Fee:

- Project location
- Type of development
- Number of units
- Current Fee rates

### Project Location

The applicable Fee schedule is based on the location of the property paying the Fee. The location of the property on **Map 1** determines the appropriate zone of benefit. In the event the location of property cannot be determined using **Map 1** (i.e., the map is not sufficiently detailed), TRLIA will use its best efforts and all available electronic information to determine the appropriate zone of the property paying the Fee.

### Type of Development

For purposes of determining the appropriate Fee rate for projects, the land use definitions to classify projects can be found in **Section III** under the heading *Planned Land Use Definitions*.

## **Number of Units**

The Three Rivers Levee Fee is to be charged on a per unit basis. The units for purpose of the Fee calculation will be determined as follows.

### **For New Development of Vacant Land**

In the case where a new structure is being constructed on vacant land or land that has not previously been developed:

#### *Residential Development*

- For single-family residence and duplex developments, a unit is a single dwelling unit (i.e., a single-family residence is one unit; a duplex is two units)
- For triplex, apartment, and other residential developments with more than two attached units, each dwelling unit is considered one half of a unit (i.e., a triplex is one and one-half units, a six-apartment complex is three units).

#### *Nonresidential Development*

- For nonresidential development, a unit is 1,000 square feet of building space.

### **For Development of Land with Existing or Pre-Existing Structures**

In the case of expansion of an existing structure or the construction of a new structure within two years after demolition of a previous structure, units will be calculated as follows:

#### *Residential Development*

- For a residential expansion project in excess of 1,000 new habitable square feet, the addition shall be treated as a new unit.
- For residential replacement projects, if the project involves development of a new residential structure after the demolition or destruction of a pre-existing structure (regardless of the use of the pre-existing structure), and the new structure is larger than the demolished structure by more than 1,000 square feet of conditioned space, the additional square footage of the replacement project will be treated as a new unit.
- For a residential expansion project of less than 1,000 new habitable square feet no fee will be due.

#### *Nonresidential Development*

- For Retail/Office/Commercial or Industrial expansion projects in excess of 1,000 new square feet, the additional square footage will be converted to units the same as for new construction by dividing the additional square footage by 1,000.
- For Retail/Office/Commercial or Industrial replacement projects, if the project involves development of a new nonresidential structure after the demolition of a pre-existing structure (regardless of the use of the pre-existing structure) and the new structure is larger than the

- previous structure, the additional square footage will be converted to units the same as for new construction by dividing the additional square footage by 1,000.
- For Retail/Office/Commercial or Industrial expansion projects less than 1,000 new square feet no fee will be due.

## **VI. ASSEMBLY BILL 1600 NEXUS FINDING**

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### **AUTHORITY**

This Nexus Study has been prepared to establish and update the Three Rivers Levee Fee for the Benefit Area in accordance with the procedural guidelines established in Assembly Bill 1600 codified in California Government Section 66000 et seq. These code sections set forth the procedural requirements for establishing and collecting various development impact fees. These procedures require that “a reasonable relationship or nexus must exist between a governmental exaction and the purpose of the condition.” Specifically, each local agency imposing a fee must perform the following steps:

- Identify the purpose of the fee.
- Identify how the fee is to be used.
- Determine how a reasonable relationship exists between the fee’s use and the type of development project on which the fee is imposed.
- Determine how a reasonable relationship exists between the need for the public facility and the type of development project on which the fee is imposed.
- Demonstrate a reasonable relationship between the amount of the fee and the cost of public facility or portion of public facility attributable to the development on which the fee is imposed.

### **PURPOSE OF THE FEE**

The Three Rivers Levee Fee in the County’s jurisdiction will help maintain adequate levels of flood control for development in the Benefit Area. As new development increases in the County, so will the requirement for levees and various flood control measures. The Three Rivers Levee Fee will fund levee improvements and flood control infrastructure necessary to accommodate residential and nonresidential development in the Benefit Area.

### **USE OF THE FEES**

Since adoption, the Three Rivers Levee Fee collected from new development in the County’s jurisdiction has been used to directly fund improvements and reimburse entities that have provided upfront funding for the improvements to the levee system. A description of the levee system improvements was provided by MBK (TRLIA’s contract Program Management firm) to TRLIA’s Executive Director, in a memorandum dated December 8, 2005. The levee improvements generally include a combination of the following types of work: installing slurry walls, raising and strengthening levees, installing seepage berms, and installing setback levees. The Levee Improvement Program is designed to improve levees that provide protection from the 1/200 Annual Exceedance Probability flood event. This is a flood event that has a ½ percent chance of flooding in any given year. Additional costs associated with the improvements include right-of-way land acquisition and environmental restoration and mitigation.

Fees collected were also used to directly fund and reimburse the design, permitting, consulting, and management expenses associated with the levee improvements. In addition, fees collected were used to

directly fund and reimburse the overhead and administrative costs incurred by the County, YWA, YLFA, and TRLIA in implementing the Levee Improvements Program. As described in this report, all improvements have been completed, therefore, as the Fee is collected, it will continue to reimburse those entities that have provided upfront funding for the improvements of the levee system. Transfer of Fee collections will occur no less than annually to those entities to reimburse for upfront financing of the levee system.

## **RELATIONSHIP BETWEEN USE OF FEE AND TYPE OF DEVELOPMENT**

Development of residential and nonresidential land uses in the southern County will require flood protection, which will be provided through the improved levee system and funded through this Fee program and other public and private funding sources.

## **RELATIONSHIP BETWEEN NEED FOR FACILITY AND TYPE OF PROJECT**

Each residential and nonresidential development project will add to the incremental need for flood protection because of the increase in damage that would occur as a result of a flood, and each new project will benefit from the new levee infrastructure. For the new development described in this Nexus Study to occur in the Benefit Area, the levee improvements are required to be expanded or improved to provide adequate flood protection to the area.

## **RELATIONSHIP BETWEEN AMOUNT OF FEES AND COST OF OR PORTION OF FACILITY ATTRIBUTED TO DEVELOPMENT ON WHICH FEE IS IMPOSED**

Construction of necessary levee improvements will directly serve and benefit residential and nonresidential development in the Benefit Area.

The appropriate common use factor for allocating costs to land use is a Total Value Index determined for each land use. **Table 7** shows the Total Value Index for each land use in the Benefit Area.

TRLIA has estimated the total cost of the required levee improvements. MBK has provided a breakdown of costs for the lands benefited by the specific improvements. A breakdown of these costs and an allocation to the zones of benefit based on the acres adjusted by the Total Value Index has been presented in **Appendix B**. The costs allocated to each benefit zone have then been further allocated to each land use in each zone based on the Total Value Index calculated for each type of land use. The result is a cost of the improvements attributed to each acre of residential and nonresidential development land use. **Table 10** shows the allocated costs to each land use in each zone.

## **Appendix A:**

### **Land Use Calculations**

Table A-1	Land Use Assumptions.....	A-1
Table A-2	Residential and Ag/Open Space Assignment.....	A-2
Table A-3	Planned Development Land Use Detail .....	A-3

**Table A-1**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Existing Development Land Use Assumptions**

Land Use	Acreage	Land Sq. Ft.
<b>Plumas Zone</b>		
Residential		
Rural SF	16.6	722,342
Urban SF	58.3	2,539,458
Two or More per Lot	1.0	43,670
Mobile Home	0.0	1,762
Residential Assigned to Ag/Open Space	1,183.2	51,538,682
Developed Industrial	328.9	14,326,886
Developed Retail/Commercial	43.9	1,910,542
Vacant		
Vacant Residential	457.8	19,940,029
Vacant Industrial	294.5	12,829,726
Vacant Retail/Commercial	0.0	0
Public Use/Other [1]	2,697.8	117,517,035
Agriculture Land/Open Space	7,519.3	327,540,903
<b>Total Plumas Zone</b>	<b>12,601.3</b>	<b>548,911,036</b>
<b>Linda Zone</b>		
Residential		
Rural SF	51.9	2,258,726
Urban SF	252.2	10,986,984
Two or More per Lot	13.8	602,298
Mobile Home	1.3	58,068
Residential Assigned to Ag/Open Space	2,224.7	96,906,974
Developed Industrial	94.3	4,109,453
Developed Retail/Commercial	544.8	23,731,920
Vacant		
Vacant Residential	492.7	21,462,456
Vacant Industrial	188.1	8,194,944
Vacant Retail/Commercial	0.0	0
Public Use/Other [1]	1,220.0	53,144,072
Agriculture Land/Open Space	12,951.9	564,186,510
<b>Total Linda Zone</b>	<b>18,035.9</b>	<b>785,642,405</b>

Source: Yuba County Assessor's Office, July 2005 CD-DATA Assessor's Parcel Tax Roll

"sqft\_fee"

[1] "Other" category includes public land uses such as drainage, well sites, etc.

**Table A-2**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Residential and Open Space Assignment**

Land Use	Total Acres	Total Land Sq. Ft.	Estimated Building Sq. Ft.	Floor Area Ratio Factor [1]	Estimated Land Area in Sq. Ft. [2]	Remaining Vacant Residential/Open Space Sq. Ft.	Developed Acres	Acres Assigned to Vacant Residential/Open Space
	A	B	C	D	E = C * D	F = B - E	G = E / 43,560	H = F / 43,560
<b>Plumas Zone</b>								
<b>Developed Residential</b>								
Rural SF	766.4	33,382,650	361,171	2	722,342	32,660,308	16.6	749.8
Urban SF	208.7	9,090,480	1,269,729	2	2,539,458	6,551,022	58.3	150.4
Two or more per lot	99.7	4,342,062	21,835	2	43,670	4,298,392	1.0	98.7
Mobile Home	184.4	8,030,722	881	2	1,762	8,028,960	0.0	184.3
<b>Total Developed Residential</b>	<b>1,259.1</b>	<b>54,845,914</b>	<b>1,653,616</b>	<b>2</b>	<b>3,307,232</b>	<b>51,538,682</b>	<b>75.9</b>	<b>1,183.2</b>
<b>Total Plumas Zone Residential Assigned to Ag/Open Space</b>						<b>51,538,682</b>		<b>1,183.2</b>
<b>Linda Zone</b>								
<b>Developed Residential</b>								
Rural SF	1,255.2	54,677,407	1,129,363	2	2,258,726	52,418,681	51.9	1,203.4
Urban SF	820.2	35,726,912	5,493,492	2	10,986,984	24,739,928	252.2	568.0
Two or more per lot	132.5	5,773,012	301,149	2	602,298	5,170,714	13.8	118.7
Mobile Home	336.0	14,635,719	29,034	2	58,068	14,577,651	1.3	334.7
<b>Total Developed Residential</b>	<b>2,543.9</b>	<b>110,813,050</b>	<b>6,953,038</b>	<b>2</b>	<b>13,906,076</b>	<b>96,906,974</b>	<b>319.2</b>	<b>2,224.7</b>
<b>Total Linda Zone Residential Assigned to Ag/Open Space</b>						<b>96,906,974</b>		<b>2,224.7</b>

Source: Yuba County Assessor's Office, July 2005 CD-DATA Assessor's Parcel Tax Roll

"fee\_acres"

[1] Represents an assumed 0.5 floor area ratio (FAR) for residential development, this factor provides the relationship between home size and lot size.

[2] Includes the area immediately adjacent to residential structures and represents the entire developed portion of the residential lot.



**Table A-3**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Planned Development Land Use Detail**

	<b>Planned Development Acres [1]</b>	<b>Public Use Acres</b>	<b>Total Acres</b>
<b>Plumas Zone</b>			
Residential Tentative Maps Acreage	2,960	517	3,477
Commercial Development [2]	37	112	149
<b>Total Plumas Zone</b>	<b>2,998</b>	<b>629</b>	<b>3,626</b>
<b>Linda Zone</b>			
Residential Tentative Maps Acreage	471	112	583
Commercial Development [2]	3	8	10
<b>Total Linda Zone</b>	<b>473</b>	<b>120</b>	<b>593</b>

Source: Development Community, Yuba County Surveyor, July 2005 CD-DATA Assessor's Parcel Tax Roll

"planned\_detail"

Note: All amounts are rounded to the nearest Acre.

[1] Equivalent to Gross Developable Acres remaining on Projects that have been submitted in the Linda Zone. Non-residential is per the East Linda Specific Plan including the commercial in the Edgewater Project. A 5% reduction is estimated as a conservative estimate to account for certain acreage not developing.

[2] Commercial Development assumes a 0.25 FAR.

## **Appendix B:**

### **Local Share of Costs Calculations**

Table B-1	Allocation of Public Funding and Local Share Summary.....	B-1
Table B-2	Total Cost Estimate for Levee Improvements.....	B-2
Table B-3	Summary of Non-Local Sources Funding .....	B-3
Table B-4	Total Cost Estimate for Environmental Mitigation .....	B-4
Table B-5	Summary of Adjusted Acreage .....	B-5
Table B-6	Cost Summary by Zone .....	B-6

**Table B-1**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Allocation of Public Funding and Local Share Summary**

Item	Source	Label	Total	Yuba River Floodplain Allocation	Feather River Floodplain Allocation
<b>Levee Improvement Costs</b>	<i>Table B-2</i>	<i>A</i>	<b>\$350,589,696</b>	<b>\$76,556,250</b>	<b>\$274,033,445</b>
Percentage of Levee Improvement Cost [1]		<i>B</i>		21.8%	78.2%
<b>Environmental Costs</b>	<i>Table B-3</i>	<i>C</i>	<b>\$40,066,088</b>	<b>\$520,996</b>	<b>\$39,545,092</b>
Percentage of Environmental Cost [1]		<i>D</i>		1.3%	98.7%
<b>Financing Costs Paid by Program [2]</b>		<i>E</i>	<b>\$91,569</b>	<b>\$18,067</b>	<b>\$73,502</b>
<b>Total TRLIA Program Costs</b>		<i>F = A + C + E</i>	<b>\$390,747,353</b>	<b>\$77,095,313</b> 19.7%	<b>\$313,652,040</b> 80.3%
<b>Non-Local Levee Improvement Funding</b>	<i>Table B-4</i>	<i>G</i>	<b>\$292,576,310</b>		
<b>Non-Local Levee Funding Allocation</b>					
Percentage of Funding to Allocate		<i>B (repeated for clarity)</i>		21.8%	78.2%
Total Non-Local Levee Funding		<i>H = B x G</i>	<b>(\$292,576,310)</b>	<b>(\$63,888,202)</b>	<b>(\$228,688,108)</b>
<b>Environmental Mitigation Funding</b>					
Department of Fish & Game Funding		<i>I</i>	<b>\$18,572,448</b>		
<b>Environmental Funding Allocation</b>					
Percentage of Funding to Allocate		<i>D (repeated for clarity)</i>		1.3%	98.7%
Total Environmental Funding		<i>J = D x I</i>	<b>(\$18,572,448)</b>	<b>(\$241,505)</b>	<b>(\$18,330,942)</b>
<b>Net Costs Funded by Local Sources</b>		<i>K = F + H + J</i>	<b>\$79,598,595</b>	<b>\$12,965,606</b>	<b>\$66,632,989</b>

Source: TRLIA, LWA "public\_funds"

[1] The percentages are used for allocating non-local funding sources.  
[2] Represents interest costs associated with builder advance funding for Phases 1 - 3 work.

**Table B-2**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Total Cost Estimate for Levee Improvements**

Levee Improvement Costs					
Cost Item/Task Levee Improvement Costs [1]	Total Cost (2020\$)	Yuba River Floodplain		Feather River Floodplain	
		Allocated Cost	Pct. of Total [2]	Allocated Cost	Pct. of Total [2]
<b>Phase 1 - Non-Categorized</b>	<b>\$3,982,286</b>	<b>\$3,982,286</b>	<b>100%</b>	<b>\$0</b>	<b>0%</b>
<b>Phase 2</b>					
Design	\$3,867,750	\$657,518	17%	\$3,210,233	83%
Construction	\$28,857,760	\$6,348,707	22%	\$22,509,053	78%
Construction Management	\$2,143,421	\$278,645	13%	\$1,864,777	87%
Right of Way	\$4,955,579	\$4,856,467	98%	\$99,112	2%
<b>Subtotal Phase 2 Costs</b>	<b>\$39,824,511</b>	<b>\$12,141,337</b>	<b>30%</b>	<b>\$27,683,174</b>	<b>70%</b>
<b>Phase 3</b>	<b>\$42,200,634</b>	<b>\$0</b>	<b>0%</b>	<b>\$42,200,634</b>	<b>100%</b>
<b>Phase 4 Yuba</b>	<b>\$39,379,864</b>	<b>\$39,379,864</b>	<b>100%</b>	<b>\$0</b>	<b>0%</b>
<b>WPIC 200-Year Compliance</b>	<b>\$10,269,650</b>	<b>\$10,269,650</b>	<b>100%</b>	<b>\$0</b>	<b>0%</b>
<b>200-Year Compliance - 1986 Break Site</b>	<b>\$278,872</b>	<b>\$278,872</b>	<b>100%</b>	<b>\$0</b>	<b>0%</b>
<b>Goldfields (100-Year &amp; 200-Year)</b>	<b>\$7,442,270</b>	<b>\$7,442,270</b>	<b>100%</b>	<b>\$0</b>	<b>0%</b>
<b>200-Year Compliance (Non EIP)</b>	<b>\$900,003</b>	<b>\$900,003</b>	<b>100%</b>	<b>\$0</b>	<b>0%</b>
<b>Feather Phase 4</b>					
Feather Phase 4, Segment 1	\$14,832,053	\$0	0%	\$14,832,053	100%
Feather Phase 4, Segment 3	\$16,303,660	\$0	0%	\$16,303,660	100%
Feather Phase 4, Segment 2 Setback Levee	\$150,475,567	\$0	0%	\$150,475,567	100%
<b>Subtotal Feather Phase 4 Costs</b>	<b>\$181,611,280</b>	<b>\$0</b>	<b>0%</b>	<b>\$181,611,280</b>	<b>100%</b>
<b>Olivehurst Detention Basin</b>	<b>\$6,683,926</b>	<b>\$0</b>	<b>0%</b>	<b>\$6,683,926</b>	<b>100%</b>
<b>Total Overhead &amp; Expenses [3]</b>	<b>\$17,429,600</b>	<b>\$2,091,552</b>	<b>12%</b>	<b>\$15,338,048</b>	<b>88%</b>
<b>Interim Operations &amp; Maintenance</b>	<b>\$586,801</b>	<b>\$70,416</b>	<b>12%</b>	<b>\$516,385</b>	<b>88%</b>
<b>Total Estimated Costs</b>	<b>\$350,589,696</b>	<b>\$76,556,250</b>	<b>22%</b>	<b>\$274,033,445</b>	<b>78%</b>

Source: Yuba County, Klienfelder Engineering, HDR Engineering, TRLIA, MBK Engineers, LWA

"trlia\_costs"

[1] Updated estimates provided in Cash Flow prepared by TRLIA and LWA as of 01/13/20.

[2] Cost split for Yuba & Feather Floodplains provided by MBK Engineers.

[2] Overhead and Admin Costs of \$17,429,600 are a portion of Total TRLIA Overhead and Expenses. The total (\$19,366,222) is distributed on a pro-rata basis between levee improvement costs and environmental costs and then again distributed between the Yuba and Feather River Floodplains.

**Table B-3**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Total Cost Estimate for Environmental Mitigation**

Environmental Mitigation Costs					
Cost Item/Task Environmental Mitigation Costs [1]	Total Cost (2020\$)	Yuba River Floodplain		Feather River Floodplain	
		Allocated Cost	Pct. of Total	Allocated Cost	Pct. of Total
Phase 1	\$0	\$0	100%	\$0	0%
Phase 2	\$82,832	\$13,253	16%	\$69,579	84%
Phase 3 Environmental	\$30,548,820	\$0	0%	\$30,548,820	100%
Phase 4 (Yuba)	\$469,011	\$469,011	100%	\$0	0%
Phase 4 (Feather)	\$6,918,616	\$0	0%	\$6,918,616	100%
Olivehurst DB	\$110,188	\$0	0%	\$110,188	100%
Total Overhead, Expenses, & Financing [2]	\$1,936,622	\$38,732	2%	\$1,897,890	98%
<b>Total Estimated Costs</b>	<b>\$40,066,088</b>	<b>\$520,996</b>	<b>1%</b>	<b>\$39,545,092</b>	<b>99%</b>

Source: Yuba County, Kleinfelder Engineering, HDR Engineering, TRLIA, MBK Engineers, LWA

"trlia\_env\_costs"

[1] Updated estimates provided in Cash Flow prepared by TRLIA and LWA as of 01/13/20.

[2] Overhead and Admin Costs of \$17,429,600 are a portion of Total TRLIA Overhead and Expenses. The total (\$19,366,222) is distributed on a pro-rata basis between levee improvement costs and environmental costs and then again distributed between the Yuba and Feather River Floodplains.

**Table B-4**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Summary of Non-Local Sources Funding**

Item	Total
<b>Proposition 13 Funds for Levee Improvements</b>	
Phase 2 Design & Construction + Retention	\$20,422,017
Phase 3 Design & Construction 2A/2B + Retention	\$23,450,635
<b>Subtotal Prop 13 Funding</b>	<b>\$43,872,651</b>
<b>DWR Prop 1E &amp; 84 EIP Grant Funding for Levee Improvements</b>	
Feather River	\$152,291,827
Upper Yuba Project	\$38,571,886
Goldfields 200yr	\$42,529,251
Goldfields Feasibility Study	\$2,000,000
<b>Subtotal Prop 13 Funding</b>	<b>\$235,392,964</b>
<b>FEMA Grant - Olivehurst Detention Basin</b>	<b>\$4,702,765</b>
<b>Pump Station / RD 784 Reimbursements [1]</b>	<b>\$4,068,612</b>
<b>Miscellaneous [2]</b>	<b>\$4,539,318</b>
<b>Total Non-Local Levee Improvement Funding</b>	<b>\$292,576,310</b>
Source: TRLIA, LWA	"levee_fund"

[1] Includes revenues for work done by TRLIA and reimbursable from other interests for local drainage improvements.

[2] Includes revenue generated from earned interest over time.

**Table B-5**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Summary of Adjusted Acreage**

Area	Source	Adjusted Acreage	Cost Allocation Percentage
<b>Yuba River Floodplain</b>		A	$B = A / 3,832$
Linda Zone	<i>Table 8</i>	680	18%
Plumas Zone	<i>Table 8</i>	3,152	82%
<b>Total Yuba River Food Plain Adjusted Acres</b>		<b>3,832</b>	
<b>Feather River Floodplain</b>		A	$B = A / 3,152$
Plumas Zone	<i>Table 8</i>	3,152	100%
<b>Total Feather River Floodplain Adjusted Acres</b>		<b>3,152</b>	
Source: Source: Yuba County Assessor's Office, July 2005 CD-DATA Assessor's Parcel Tax Roll			"acre_share"

**Table B-6**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Cost Summary by Zone**

Description	Total Costs Funded by Local Sources	Linda Zone		Plumas Zone	
		Percentage	Share of Cost	Percentage	Share of Cost
	Table B-3	Table B-5		Table B-5	
	A	B	C = A * B	D	E = A * D
Total Yuba River Floodplain Costs	\$12,965,606	18%	\$2,301,486	82%	\$10,664,120
Total Feather River Floodplain Costs	\$66,632,989	0%	\$0	100%	\$66,632,989
	F = Sum Above	G =H / F	H = Sum Above	I = J / F	J = Sum Above
Total Share of Cost by Zone	\$79,598,595	3%	\$2,301,486	97%	\$77,297,109

Source: LWA

"zone\_costs"



## Appendix C:

### Fee Escalator Analysis

Table C-1	Reimbursable Funded Costs - Principal Amounts for County and Landowners .....	C-1
Table C-2	Estimate of Fee Paying Units After Credit for Prior Advanced Funding .....	C-2
Table C-3	Key Assumptions.....	C-4
Table C-4	Payment of First Priority Developer Reimbursements .....	C-5

**Table C-1**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Reimbursable Funded Costs - Principal Amounts for County and Landowners**

Item	Impact Fee "Lender" Reimbursements Due [1]	Yuba Levee Financing Authority [2]	Total
Amounts Subject to Reimbursement by the Fee			
First & Second Funding Agreements	\$1,321,387	n/a	\$1,321,387
Additional Funding	n/a	\$46,600,000	\$46,600,000
Total Funding Amount	\$1,321,387	\$46,600,000	<b>\$47,921,387</b>
Advance Funding Amounts Subject to Reimbursement [3]	\$1,321,387	\$46,600,000	<b>\$47,921,387</b>
Estimated Financing Cost Burden [4]	82%	121%	
Plus Financing Costs	\$1,089,880	\$56,251,000	<b>\$57,340,880</b>
	<i>Estimated Reimbursement Amount to Date</i>	<i>Projected Amount to be Reimbursed in Aggregate</i>	<i>Total Reimbursement Amount</i>
<b>Total</b>	<b>\$2,411,267</b>	<b>\$102,851,000</b>	<b>\$105,262,267</b>

"advance\_fund\_cost"

[1] Impact Fee Lenders represents funding received to date through all advanced funding agreements that are in excess of a project's Levee Impact Fee obligations based upon the base levee fee established for crediting (\$60,159 / GDA). These amounts are to be reimbursed from future Levee Impact Fees received after the County and YCWA have been fully reimbursed for their borrowed funding.

[2] The County and Water Agency Financing by the YLFA provided \$46.6 million in funding for the Project. Some reimbursement for the principal and interest on the prior bond

[3] The total amount of Advance funding received to date expected to be reimbursed from future levee impact fee, excluding interest.

[4] Represents total interest and financing costs associated with proceeds received.

**Table C-2**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Estimate of Fee Paying Units After Credit for Prior Advanced Funding**

Absorption Scenario	Plumas Fee Paying Units		Linda Fee Paying Units	
	True Absorption	Net After Credit	True Absorption	Net After Credit
2020	175	0	100	N/A
2021	175	34	100	N/A
2022	175	35	100	N/A
2023	175	35	100	N/A
2024	175	35	100	N/A
2025	175	35	100	N/A
2026	175	35	100	N/A
2027	175	35	100	N/A
2028	175	59	100	N/A
2029	175	175	100	N/A
2030	175	175	100	N/A
2031	175	175	100	N/A
2032	175	175	100	N/A
2033	175	175	100	N/A
2034	175	175	100	N/A
2035	175	175	84	N/A
2036	175	175	0	0
2037	175	175	0	0
2038	175	175	0	0
2039	180	180	0	0
2040	180	180	0	0
2041	180	180	0	0
2042	180	180	0	0
2043	180	180	0	0
2044	180	180	0	0
2045	180	180	0	0
2046	180	180	0	0
2047	180	180	0	0
2048	180	180	0	0
2049	180	180	0	0
2050	180	180	0	0
2051	180	180	0	0
2052	180	180	0	0
2053	180	180	0	0
2054	180	180	0	0
2055	180	180	0	0
2056	180	180	0	0
2057	180	180	0	0
2058	180	180	0	0
2059	180	180	0	0
2060	180	180	0	0
2061	180	180	0	0
2062	180	180	0	0

**Table C-2**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Estimate of Fee Paying Units After Credit for Prior Advanced Funding**

Absorption Scenario	Plumas Fee Paying Units		Linda Fee Paying Units	
	True Absorption	Net After Credit	True Absorption	Net After Credit
2063	180	180	0	0
2064	180	180	0	0
2065	180	180	0	0
2066	180	180	0	0
2067	180	180	0	0
2068	180	180	0	0
2069	180	180	0	0
2070	180	180	0	0
2071	180	180	0	0
2072	180	180	0	0
2073	180	180	0	0
2074	180	180	0	0
2075	180	180	0	0
2076	180	180	0	0
2077	180	180	0	0
2078	180	180	0	0
2079	180	180	0	0
2080	180	180	0	0
2081	82	82	0	0
2082	0	0	0	0
Total Units [1]	10,967	9,695	1,584	0

"absorp\_summ"

[1] The total fee paying units are estimated based upon the total amount of estimated units remaining less the estimated number of units that have advanced funded their fee obligation. The timing of when fee credit units pay is based upon the County's policy for allowing credit for advanced funding to be taken.

**Table C-3**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Key Assumptions**

Item	Source	Amount
<b>Financing Authority Reimbursement Amount [1]</b>		
Total Remaining Debt Service	Table C-1	\$102,851,000
<b>Total Principal Amount of Funding by Financing Authority</b>		<b>\$102,851,000</b>
<b>Reimbursements to Fee Lenders (paid after Financing Authority Reimbursement) [2]</b>		
Estimated Amount to Date	Table C-1	\$1,321,387
plus Estimated Burden for Reimbursement Mechanism	Table C-1	\$1,089,880
<b>Total Principal Amount of Funding Due to Landowners</b>		<b>\$2,411,267</b>
<b>Total Amount of Funding to be Reimbursed by Fee Program</b>		<b>\$105,262,267</b>
<b>Current Estimated Plumas Zone Residential Fee Per Unit Calculation</b>		
Base Fee Per GDA (Not Including 3% Administrative Charges) [4]		\$47,309
Average Units Per Acre [5]		4.51
<b>Estimated Fee Per Residential Unit (for 2020)</b>		<b>\$10,491</b>
<b>Current Estimated Linda Zone Residential Fee Per Unit Calculation</b>		
Base Fee Per GDA (Not Including 3% Administrative Charges) [4]		\$6,527
Average Units Per Acre [5]		4.51
<b>Estimated Fee Per Residential Unit (for 2020)</b>		<b>\$1,447</b>
<b>Interest Rates Assumptions</b>		
Annual Fee Increase - (Needed for repayment of Reimbursements to County & Participants)		3.00%
Yuba Levee Financing Authority Funds & Developer Reimbursements [6]		4.00%

"assump"

[1] Paid from 100% of Fee Revenue collected from 2020 going forward.

[1] Amount is based on ML Stern's September 3, 2008 Final Pricing Analysis provided by CPFG.

[2] Amount is based upon an analysis of advanced funding by landowner's to date versus their levee obligation as determined by a revised Levee Impact Fee Amount.

[4] Based on revised program costs and revised land use estimates not inclusive of the 3% Administrative Charges.

[5] The Average units per acre is based upon 1858 Acres with 8,380 units.

[6] Interest Rate based on the All Inclusive Interest Cost for 2016 Refunding Bonds per Raymond James (rounded).

**Table C-4**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Payment of First Priority Developer Reimbursements**

Year	Plumas Fee -	Plumas	Linda Fee	Linda Estimated	Total Fee	Estimated Repayment Calculation					
	Paying Units	Estimated Fee	Paying Units	Fee Per Unit [1]	Revenue Per	Beginning	Starting	YLFA Annual	Interest Earned	Fee Revenue for	Ending Balance
	Table C-2	Table C-3	Table C-2	Table C-3		Balance	Amount	Debt Service	4.00%	Repayment	
	A	B	C	D	E = A*B + C*D	F = Prior Year K	G	H	I = F * 4.00%	J = Max of E Until D = 0	K = Sum F to J
2020	0	\$10,491	100	\$1,447	\$144,738	\$0	\$2,411,267	\$0	\$0	(\$144,738)	\$2,266,529
2021	34	\$10,806	100	\$1,491	\$516,477	\$2,266,529	\$0	\$5,428,000	\$90,661	(\$516,477)	\$7,268,713
2022	35	\$11,130	100	\$1,536	\$543,102	\$7,268,713	\$0	\$5,425,000	\$507,869	(\$543,102)	\$12,658,480
2023	35	\$11,464	100	\$1,582	\$559,395	\$12,658,480	\$0	\$5,422,000	\$723,339	(\$559,395)	\$18,244,425
2024	35	\$11,808	100	\$1,629	\$576,176	\$18,244,425	\$0	\$5,416,000	\$946,657	(\$576,176)	\$24,030,905
2025	35	\$12,162	100	\$1,678	\$593,462	\$24,030,905	\$0	\$5,424,000	\$1,177,876	(\$593,462)	\$30,039,320
2026	35	\$12,527	100	\$1,728	\$611,266	\$30,039,320	\$0	\$5,446,000	\$1,418,533	(\$611,266)	\$36,292,587
2027	35	\$12,903	100	\$1,780	\$629,604	\$36,292,587	\$0	\$5,440,000	\$1,669,543	(\$629,604)	\$42,772,527
2028	59	\$13,290	100	\$1,833	\$967,446	\$42,772,527	\$0	\$5,436,000	\$1,928,501	(\$967,446)	\$49,169,582
2029	175	\$13,688	100	\$1,888	\$2,584,332	\$49,169,582	\$0	\$5,434,000	\$2,184,223	(\$2,584,332)	\$54,203,473
2030	175	\$14,099	100	\$1,945	\$2,661,862	\$54,203,473	\$0	\$5,423,000	\$2,385,499	(\$2,661,862)	\$59,350,109
2031	175	\$14,522	100	\$2,004	\$2,741,718	\$59,350,109	\$0	\$5,424,000	\$2,590,924	(\$2,741,718)	\$64,623,316
2032	175	\$14,958	100	\$2,064	\$2,823,970	\$64,623,316	\$0	\$5,416,000	\$2,801,893	(\$2,823,970)	\$70,017,238
2033	175	\$15,406	100	\$2,126	\$2,908,689	\$70,017,238	\$0	\$5,408,000	\$3,017,330	(\$2,908,689)	\$75,533,879
2034	175	\$15,869	100	\$2,189	\$2,995,949	\$75,533,879	\$0	\$5,397,000	\$3,237,675	(\$2,995,949)	\$81,172,605
2035	175	\$16,345	84	\$2,255	\$3,049,748	\$81,172,605	\$0	\$5,395,000	\$3,462,784	(\$3,049,748)	\$86,980,641
2036	175	\$16,835	0	\$2,323	\$2,946,141	\$86,980,641	\$0	\$5,391,000	\$3,695,026	(\$2,946,141)	\$93,120,525
2037	175	\$17,340	0	\$2,392	\$3,034,525	\$93,120,525	\$0	\$5,385,000	\$3,940,461	(\$3,034,525)	\$99,411,460
2038	175	\$17,860	0	\$2,464	\$3,125,561	\$99,411,460	\$0	\$5,376,000	\$4,191,858	(\$3,125,561)	\$105,853,758
2039	180	\$18,396	0	\$2,538	\$3,311,309	\$105,853,758	\$0	\$5,365,000	\$4,449,190	(\$3,311,309)	\$112,356,639
2040	180	\$18,948	0	\$2,614	\$3,410,648	\$112,356,639	\$0	\$0	\$4,708,866	(\$3,410,648)	\$113,654,856
2041	180	\$19,516	0	\$2,693	\$3,512,968	\$113,654,856	\$0	\$0	\$4,546,194	(\$3,512,968)	\$114,688,083
2042	180	\$20,102	0	\$2,773	\$3,618,357	\$114,688,083	\$0	\$0	\$4,587,523	(\$3,618,357)	\$115,657,250
2043	180	\$20,705	0	\$2,857	\$3,726,907	\$115,657,250	\$0	\$0	\$4,626,290	(\$3,726,907)	\$116,556,632
2044	180	\$21,326	0	\$2,942	\$3,838,715	\$116,556,632	\$0	\$0	\$4,662,265	(\$3,838,715)	\$117,380,183
2045	180	\$21,966	0	\$3,030	\$3,953,876	\$117,380,183	\$0	\$0	\$4,695,207	(\$3,953,876)	\$118,121,514
2046	180	\$22,625	0	\$3,121	\$4,072,492	\$118,121,514	\$0	\$0	\$4,724,861	(\$4,072,492)	\$118,773,883
2047	180	\$23,304	0	\$3,215	\$4,194,667	\$118,773,883	\$0	\$0	\$4,750,955	(\$4,194,667)	\$119,330,171
2048	180	\$24,003	0	\$3,311	\$4,320,507	\$119,330,171	\$0	\$0	\$4,773,207	(\$4,320,507)	\$119,782,871
2049	180	\$24,723	0	\$3,411	\$4,450,122	\$119,782,871	\$0	\$0	\$4,791,315	(\$4,450,122)	\$120,124,063
2050	180	\$25,465	0	\$3,513	\$4,583,626	\$120,124,063	\$0	\$0	\$4,804,963	(\$4,583,626)	\$120,345,400
2051	180	\$26,229	0	\$3,619	\$4,721,135	\$120,345,400	\$0	\$0	\$4,813,816	(\$4,721,135)	\$120,438,081
2052	180	\$27,015	0	\$3,727	\$4,862,769	\$120,438,081	\$0	\$0	\$4,817,523	(\$4,862,769)	\$120,392,836
2053	180	\$27,826	0	\$3,839	\$5,008,652	\$120,392,836	\$0	\$0	\$4,815,713	(\$5,008,652)	\$120,199,897
2054	180	\$28,661	0	\$3,954	\$5,158,911	\$120,199,897	\$0	\$0	\$4,807,996	(\$5,158,911)	\$119,848,982
2055	180	\$29,520	0	\$4,073	\$5,313,679	\$119,848,982	\$0	\$0	\$4,793,959	(\$5,313,679)	\$119,329,262
2056	180	\$30,406	0	\$4,195	\$5,473,089	\$119,329,262	\$0	\$0	\$4,773,170	(\$5,473,089)	\$118,629,344
2057	180	\$31,318	0	\$4,321	\$5,637,282	\$118,629,344	\$0	\$0	\$4,745,174	(\$5,637,282)	\$117,737,236
2058	180	\$32,258	0	\$4,450	\$5,806,400	\$117,737,236	\$0	\$0	\$4,709,489	(\$5,806,400)	\$116,640,325
2059	180	\$33,226	0	\$4,584	\$5,980,592	\$116,640,325	\$0	\$0	\$4,665,613	(\$5,980,592)	\$115,325,346

**Table C-4**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Payment of First Priority Developer Reimbursements**

Year	Plumas Fee -	Plumas	Linda Fee	Linda Estimated	Total Fee	Estimated Repayment Calculation					
	Paying Units	Estimated Fee	Paying Units	Fee Per Unit [1]	Revenue Per	Beginning	Starting	YLFA Annual	Interest Earned	Fee Revenue for	
	Table C-2	Table C-3	Table C-2	Table C-3		Balance	Amount	Debt Service	4.00%	Repayment	Ending Balance
	A	B	C	D	E = A*B + C*D	F = Prior Year K	G	H	I = F * 4.00%	J = Max of E Until D = 0	K = Sum F to J
2060	180	\$34,222	0	\$4,721	\$6,160,010	\$115,325,346	\$0	\$0	\$4,613,014	(\$6,160,010)	\$113,778,350
2061	180	\$35,249	0	\$4,863	\$6,344,810	\$113,778,350	\$0	\$0	\$4,551,134	(\$6,344,810)	\$111,984,673
2062	180	\$36,306	0	\$5,009	\$6,535,155	\$111,984,673	\$0	\$0	\$4,479,387	(\$6,535,155)	\$109,928,906
2063	180	\$37,396	0	\$5,159	\$6,731,209	\$109,928,906	\$0	\$0	\$4,397,156	(\$6,731,209)	\$107,594,853
2064	180	\$38,517	0	\$5,314	\$6,933,146	\$107,594,853	\$0	\$0	\$4,303,794	(\$6,933,146)	\$104,965,501
2065	180	\$39,673	0	\$5,473	\$7,141,140	\$104,965,501	\$0	\$0	\$4,198,620	(\$7,141,140)	\$102,022,981
2066	180	\$40,863	0	\$5,638	\$7,355,374	\$102,022,981	\$0	\$0	\$4,080,919	(\$7,355,374)	\$98,748,527
2067	180	\$42,089	0	\$5,807	\$7,576,035	\$98,748,527	\$0	\$0	\$3,949,941	(\$7,576,035)	\$95,122,432
2068	180	\$43,352	0	\$5,981	\$7,803,316	\$95,122,432	\$0	\$0	\$3,804,897	(\$7,803,316)	\$91,124,013
2069	180	\$44,652	0	\$6,160	\$8,037,416	\$91,124,013	\$0	\$0	\$3,644,961	(\$8,037,416)	\$86,731,558
2070	180	\$45,992	0	\$6,345	\$8,278,538	\$86,731,558	\$0	\$0	\$3,469,262	(\$8,278,538)	\$81,922,282
2071	180	\$47,372	0	\$6,536	\$8,526,894	\$81,922,282	\$0	\$0	\$3,276,891	(\$8,526,894)	\$76,672,279
2072	180	\$48,793	0	\$6,732	\$8,782,701	\$76,672,279	\$0	\$0	\$3,066,891	(\$8,782,701)	\$70,956,469
2073	180	\$50,257	0	\$6,934	\$9,046,182	\$70,956,469	\$0	\$0	\$2,838,259	(\$9,046,182)	\$64,748,545
2074	180	\$51,764	0	\$7,142	\$9,317,568	\$64,748,545	\$0	\$0	\$2,589,942	(\$9,317,568)	\$58,020,919
2075	180	\$53,317	0	\$7,356	\$9,597,095	\$58,020,919	\$0	\$0	\$2,320,837	(\$9,597,095)	\$50,744,661
2076	180	\$54,917	0	\$7,576	\$9,885,008	\$50,744,661	\$0	\$0	\$2,029,786	(\$9,885,008)	\$42,889,440
2077	180	\$56,564	0	\$7,804	\$10,181,558	\$42,889,440	\$0	\$0	\$1,715,578	(\$10,181,558)	\$34,423,459
2078	180	\$58,261	0	\$8,038	\$10,487,005	\$34,423,459	\$0	\$0	\$1,376,938	(\$10,487,005)	\$25,313,393
2079	180	\$60,009	0	\$8,279	\$10,801,615	\$25,313,393	\$0	\$0	\$1,012,536	(\$10,801,615)	\$15,524,314
2080	180	\$61,809	0	\$8,527	\$11,125,663	\$15,524,314	\$0	\$0	\$620,973	(\$11,125,663)	\$5,019,623
2081	82	\$63,664	0	\$8,783	\$5,220,408	\$5,019,623	\$0	\$0	\$200,785	(\$5,220,408)	\$0
2082	0	\$65,573	0	\$9,047	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>Total</b>	<b>9,695</b>				<b>\$310,838,711</b>		<b>\$2,411,267</b>	<b>\$102,851,000</b>	<b>\$205,576,444</b>	<b>(\$310,838,711)</b>	

"priority"

[1] Base fee is assumed to increase 3.00% per year.

## **Appendix D:**

### **Total Value Index Calculations**

Table D-1	Valuation and Acreage Calculations - Developed Residential .....	D-1
Table D-2	Valuation and Acreage Calculations - Industrial, Retail & Ag/Open Space .....	D-2
Table D-3	Valuation and Acreage Calculations for Vacant Residential, Industrial, and Retail.....	D-3



**Table D-1**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Valuation and Acreage Calculations - Developed Residential**

Item	Formula	Rural Single Family [1]	Urban Single Family [2]	Two or More Units per Lot [3]	Mobile Home [4]
<b>Building Improvement Value</b>					
Improvement Value for Residential	<i>A</i>	\$68,510,104	\$472,535,242	\$11,731,144	\$8,666,470
Total Acres of Residential [1]	<i>B</i>	1,377.3	1,028.9	225.4	520.4
<b>Improvement Value per Residential Acre</b>	$C = A / B$	<b>\$49,744</b>	<b>\$459,278</b>	<b>\$52,051</b>	<b>\$16,655</b>
<b>Land Value</b>					
Land Value for Residential	<i>D</i>	\$20,097,892	\$139,584,907	\$4,482,514	\$7,287,580
Total Acres of Residential	<i>E</i>	1,377.3	1,028.9	225.4	520.4
<b>Land Value per Residential Acre</b>	$F = D / E$	<b>\$14,593</b>	<b>\$135,669</b>	<b>\$19,889</b>	<b>\$14,005</b>
<b>Other Value</b>					
Other Value for Residential	<i>G</i>	\$362,690	\$35,593	\$244,810	\$2,336,632
Total Acres of Residential	<i>H</i>	1,377.3	1,028.9	225.4	520.4
<b>Other Value per Residential Acre</b>	$I = G / H$	<b>\$263</b>	<b>\$35</b>	<b>\$1,086</b>	<b>\$4,491</b>
<b>Total Value per Residential Acre</b>	$J = C + F + I$	<b>\$64,600</b>	<b>\$594,981</b>	<b>\$73,025</b>	<b>\$35,151</b>

Source: Yuba County Assessor's Office, July 2005 CD-DATA Assessor's Parcel Tax Roll

"dev\_res"

[1] Value data for all Rural Single Family Units were incomplete; therefore only units with complete value data were included in the sample size to determine the Total Value per Residential Acre for Rural Single Family Units.

[2] Acres of Urban Single Family developed land were provided for only some lots. Calculations for total acres are made based on a sample size.

[3] Value data for all Two or More Units per Lot were incomplete; therefore only units with complete value data were included in the sample size to determine the Total Value per Residential Acre for Two or More Units per Lot parcels.

[4] Value data for all Mobile Home Units were incomplete; therefore only units with complete value data were included in the sample size to determine the Total Value per Residential Acre for Mobile Home Units.

Table D-2

**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Valuation and Acreage Calculations - Industrial, Retail & Ag/Open Space**

Item	Value	Acres	Value per Acre
<b>Industrial</b>			
Improvement Value for Industrial	\$2,086,922	197	\$10,574
Land Value for Industrial	\$1,911,418	197	\$9,685
Other Value for Industrial [1]	\$34,820	197	\$176
<b>Total Value per Industrial Acre</b>			<b>\$20,436</b>
<b>Retail</b>			
Improvement Value for Retail	\$31,184,266	707	\$44,093
Land Value for Retail	\$12,636,846	707	\$17,868
Other Value for Retail [1]	\$406,827	707	\$575
<b>Total Value per Retail Acre</b>			<b>\$62,536</b>
<b>Public Use/Other [2]</b>			
Improvement Value for Public Use/Other	\$9,705,373	1,228	\$7,906
Land Value for Public Use/Other	\$21,223,769	1,228	\$17,289
Other Value for Public Use/Other [1]	\$0	1,228	\$0
<b>Total Value per Public Use/Other Acre</b>			<b>\$25,195</b>
<b>Agriculture/Open Space</b>			
Improvement Value for Agriculture/Open Space	\$12,651,225	13,372	\$946
Land Value for Agriculture/Open Space	\$27,515,679	13,372	\$2,058
Other Value for Agriculture/Open Space [1]	\$8,260,231	13,372	\$618
<b>Total Value per Agriculture/Open Space Acre</b>			<b>\$3,622</b>

Source: Yuba County Assessor's Office, July 2005 CD-DATA Assessor's Parcel Tax Roll

"ind\_value"

[1] "Other value" includes fixed equipment or private property on site.

[2] "Other" category includes public land uses such as drainage, well sites, etc.

**Table D-3**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Valuation and Acreage Calculations for Vacant Residential, Industrial, and Retail**

Item	Value	Acres	Value per Acre
<b>Vacant Residential</b>			
Improvement Value for Vacant Residential	\$39,231,273	2,385	\$16,452
Land Value for Vacant Residential	\$115,903,269	2,385	\$48,604
<b>Total Value per Vacant Residential Acre</b>			<b>\$65,056</b>
<b>Vacant Industrial</b>			
Improvement Value for Vacant Industrial	\$15,934,503	1,092	\$14,595
Land Value for Vacant Industrial	\$5,992,667	1,092	\$5,489
<b>Total Value per Vacant Industrial Acre</b>			<b>\$20,083</b>
<b>Vacant Retail</b>			
Improvement Value for Vacant Retail	\$0	0	\$0
Land Value for Vacant Retail	\$0	0	\$0
<b>Total Value per Vacant Retail Acre</b>			<b>\$0</b>

Source: Yuba County Assessor's Office, July 2005 CD-DATA Assessor's Parcel Tax Roll

"vacant"

## Appendix E:

### Example Fee Calculations

Table E-1	Development Calculation 1.....	E-1
Table E-2	Development Calculation 2.....	E-2
Table E-3	Development Calculation 3.....	E-3
Table E-4	Development Calculation 4.....	E-4
Table E-5	Development Calculation 5.....	E-5
Table E-6	Development Calculation 6.....	E-6
Table E-7	Development Calculation 7.....	E-7

**Table E-1**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Development Example 1**

Description	Assumption		
Project	New Small Lot Residential Subdivision		
Location	Plumas Zone		
Land Use Type	Single-Family Residential		
Total # of Residential Lots in Map	64		

Description	Formula	Value	Application
Total # of Units	$a$	64	
Fee per Unit	$b$	\$11,359	Fee rate per Unit (Current In Effect)
<b>Total Fee</b>	$c = a * b$	<b>\$726,956</b>	Collected at building permit final

Source: LWA

"example\_1"

**Table E-2**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Development Example 2**

Description	Assumption		
Project	Construction of a new 3,500 SF Single-Family residence		
Location	Plumas Zone		
Land Use Type	Single-Family Residential		

Description	Formula	Value	Application
Total # of Units	$a$	1	
Fee per Unit	$b$	\$11,359	Fee rate per Unit (Current In Effect)
<b>Total Fee</b>	$c = a * b$	<b>\$11,359</b>	Collected at building permit final

Source: LWA

"example\_2"

**Table E-3**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Development Example 3**

Description	Assumption		
Project	Construction of a 1,200 SF addition to single-family residential		
Location	Plumas Zone		
Land Use Type	Single-Family Residential		

Description	Formula	Value	Application
Total new habitable SF of Home	$a$	1,200	New Habitable SF of Home
Additional Units	$b$	1	Appli
Cost Fee per Unit	$c$	\$11,359	Fee rate per Unit (Current In Effect)
<b>Total Fee</b>	<b><math>d = c * b</math></b>	<b>\$11,359</b>	Collected at building permit final

Source: LWA

"example\_3"

**Table E-4**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Development Example 4**

Description	Assumption
Project	Demolition of 2,000 SF industrial property and the construction of a new 2,800 SF single-family residential home
Location	Plumas Zone
Land Use Type	Single-Family Residential (Based upon land-use of new structure)

Description	Formula	Value	Application
Total new habitable SF of Home	<i>a</i>	2,800	New habitable SF of Home
Total habitable SF of existing structure	<i>b</i>	2,000	Existing habitable SF of prior structure (use does not matter)
Net new habitable SF	<i>c = a-b</i>	800	Net new habitable structure
<div> <div>E-4</div> <div>Note: Project is exempt from fee since net new habitable SF is less than 1,000 SF</div> </div>			
Additional Units	<i>d</i>	N/A	
Cost Fee per Unit	<i>e</i>	N/A	
<b>Total Fee</b>	<b><i>f = d * e</i></b>	N/A	

Source: LWA

"example\_4"



**Table E-5**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Development Example 5**

Description	Assumption		
Project	Demolition of 2,000 SF industrial property and the construction of a new 4,200 SF single-family residential home		
Location	Plumas Zone		
Land Use Type	Single-Family Residential (Based upon land-use of new structure)		

Description	Formula	Value	Application
Total new habitable SF of home	$a$	4,200	New habitable SF of Home
Total habitable SF of existing structure	$b$	2,000	Existing habitable SF of prior structure (use does not matter)
Net new habitable SF	$c = a - b$	2,200	Net new habitable structure
Units	$d$	1	Additional SF over 1,000 is considered a unit
Cost Fee per Unit	$e$	\$11,359	Plumas Zone Fee rate at time of building permit
<b>Total Fee</b>	$f = d * e$	\$11,359	Collected at building permit final

Source: LWA

"example\_5"

**Table E-6**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Development Example 6**

Description	Assumption		
Project	Redevelopment of an existing 30,000 SF industrial facility which also includes the addition of 5,000 SF of structure for a total redeveloped structure of 35,000 SF.		
Location	Plumas Zone		
Land Use Type	Industrial (Manufacturing or processing)		

Description	Formula	Value	Application
Total new habitable SF of structure	$a$	5,000	New habitable SF of facility
Units	$b = a / 1,000$	5.000	GDA based on new habitable structure for nonresidential
Cost Fee per GDA	$e$	\$1,583	Plumas Zone Fee rate at time of building permit
<b>Total Fee</b>	$f = d * e$	\$7,915	Collected at building permit final

Source: LWA

"example\_6"

**Table E-7**  
**Three Rivers Levee Improvement Authority Levee Impact Fee Nexus Study**  
**Development Example 7**

Description	Assumption		
Project	Development of a new multifamily apartment complex (100 dwelling units)		
Location	Plumas Zone		
Land Use Type	Residential		

Description	Formula	Value	Application
Units	$a = DU * 0.5$	50	For multifamily residential projects, each dwelling unit is 0.5 units
Cost Fee per GDA	$c$	\$11,359	Plumas Zone Fee rate at time of building permit
<b>Total Fee</b>	$d = c * b$	\$567,934	Collected at building permit final

Source: LWA

"example\_7"