No other business shall be conducted at this meeting. The public shall have an opportunity to address the Authority only with respect to items set forth in this agenda. Each individual or group will be limited to no more than five minutes. Prior to this time, speakers are requested to fill out a “Request to Speak” card and submit it to the Clerk of the Board of Supervisors.

I CALL TO ORDER: Welcome to the Three Rivers Levee Improvement Authority (TRLIA) meeting. As a courtesy to others, please turn off cell phones, pagers, or other electronic devices which might disrupt the meeting. Thank you.

II ROLL CALL – Directors Rick Brown, Jerry Crippen, Don Graham, Mary Jane Griego, John Nicoletti

III ACTION ITEMS

A. Adopt resolution approving Engineer’s Report, confirming diagram and assessment, and ordering levy of assessments within the Levee and Flood Control Facilities Assessment District for Fiscal Year 2009-2010.

B. Approve minutes of the special meeting of May 26, 2009.

IV BOARD AND STAFF MEMBERS' REPORTS

V ADJOURN
June 2, 2009

TO: Three Rivers Levee Improvement Authority Board
FROM: Paul Brunner, Executive Director
SUBJECT: Formation of Special Benefit Assessment District

Recommendation:
That the Board of Directors adopts the resolution entitled:

RESOLUTION NO.____

A RESOLUTION OF THE BOARD OF DIRECTORS OF
THE THREE RIVERS LEVEE IMPROVEMENT AUTHORITY
APPROVING ENGINEER’S REPORT, CONFIRMING DIAGRAM AND
ASSESSMENT, AND ORDERING LEVY OF ASSESSMENTS WITHIN THE
LEVEE AND FLOOD CONTROL FACILITIES ASSESSMENT DISTRICT FOR
FISCAL YEAR 2009-2010

Background:
When Three Rivers Levee Improvement Authority (TRLIA) was created by Reclamation District (RD) 784 and Yuba County as a Joint Powers Authority, it was empowered to accomplish a wide variety of tasks, including the ability to finance flood control improvements and maintenance; create community facility districts, assessment districts, or other financing districts; construct/repair/acquire property; and jointly maintain significant levee improvements with RD 784.

On July 11, 2006, the TRLIA Board began the process of forming an assessment district to provide funding to maintain the improved RD 784 levees to a much higher standard. This higher standard involves transforming the maintenance program from rural to urban practices, as is required by numerous funding agreements that TRLIA has signed with the State. It is also a critical component of the FEMA levee accreditation process.

On September 26, 2006, SCI Consulting Group (SCI) was selected to perform the tasks needed to determine if an assessment district was viable and, if so, prepare the Engineer’s Report for the TRLIA Board to consider forming the district and levying a special benefit assessment.
Working with a wide spectrum of stakeholders, SCI prepared a Draft Engineer’s Report that provided the needed information to form a Benefit Assessment District pursuant to the Benefit Assessment Act of 1982. The formation of such an Assessment District is subject to the procedures outlined within Proposition 218 – the Right to Vote on Taxes Act, approved November 6, 1996.

A Benefit Assessment levied under the new Assessment District has these characteristics:
- Assessment must be based on proportional special benefit to the property
- Subject to approval by affected property owners
- Votes are weighted by the amount of each landowner’s proposed assessment
- Approval requires support of 50 percent of weighted ballots returned
- Procedure and most requirements governed by Proposition 218
- Benefit calculation and assessment methodology described in an Engineer’s Report

At the February 17, 2009, TRLIA Board meeting a workshop was conducted to discuss the proposed Assessment District. At the conclusion of the workshop, the Board gave direction to TRLIA staff to finalize the proposed Assessment District documentation and schedule for consideration the initial formation resolutions for the March 3rd Board meeting.

On March 10, 2009, the TRLIA Board adopted a Resolution (2009-07) that initiated proceedings, provided intention to levy assessments, preliminarily approved Engineer’s Report, and provided notice of the Public Hearing for the formation of the TRLIA Levee and Flood Control Facilities Assessment District. Ballots were mailed in late March to begin the 45-day balloting period. During the balloting period numerous public outreach meetings were conducted. Below are the key points discussed at the public meetings:

- The proposed TRLIA benefit assessment will pay for levee maintenance.
- If growth occurs in the district, then some revenues in excess of what is needed for levee maintenance could be used to repay the obligations incurred to fund local share of flood control improvements.
- TRLIA Assessment revenues will not be used to pay for drainage services.
- RD784 currently receives approximately $600,000 per year for both levee maintenance and drainage services. About half is used for levee maintenance.
- TRLIA will receive 1-2% of assessment revenues for management of the assessment district, to include the cost of the annual audit. TRLIA is a pass-through organization that provides revenues to RD784 for levee maintenance.
- RD 784 needs these additional funds to maintain levees to strict state and federal guidelines.
- TRLIA has helped RD784 pay for levee maintenance needs the last two years because RD784 does not have sufficient funding. TRLIA used funds from developers that were provided in earlier funding agreements. TRLIA will not have the ability to provide RD784 with levee maintenance funds into the future.
- TRLIA is proposing the assessment district for one primary reason: TIMING
1. The Assessment is needed "now" due to RD784 financial needs, funding agreement requirements, and FEMA accreditation.
2. RD784 does not have time to annex properties outside its boundaries that receive benefit, but pay nothing toward levee maintenance.
3. TRLIA has the authority to propose a district larger than RD784 to capture all that receive benefit from improved levees.
4. RD784 will pursue annexation in coming years.
   - The proposed assessment rate for Central B is higher than Central A because properties in Central B do not currently pay a levee maintenance assessment. When the current RD784 assessment is included, Central A will pay more toward levee maintenance than Central B.
   - Assessment revenues will not be used to complete levee construction and improvements. That program is being funded by state and local sources.
   - The proposed benefit assessment is not a tax. Unlike a tax, the assessment is based upon proportional special benefit to property; in this case, the benefit is the flood protection each property receives from the improved levees.
   - By state law, every property that receives benefit is assessed accordingly. This includes publicly-owned properties.
   - The benefit assessment has an annual cap. The only increase allowed is a small cost of living increase tied to the US Department of Labor Consumer Price Index (CPI). The increase is not automatic, and is capped at a maximum of four percent each year.
   - Returned ballots were collected and held by the County Clerk. They were counted by an independent third-party.
   - If RD784 does not have the funds it needs for required levee maintenance, the state could instead form a state maintenance area. Under this scenario, the state would set the rate and bill property owners for the cost, and property owners would not be allowed to vote on the formation of such an area.
   - The Federal Emergency Management Agency (FEMA) will not accredit levees without a properly funded maintenance program. If levees aren’t accredited, South Yuba County will be mapped into a high-risk flood zone. Flood insurance will become mandatory, and development would be severely restricted.
   - Mandatory, high-risk flood insurance can cost up to $2,700 per year, which is much higher than $350 per year low-risk flood insurance.
   - TRLIA and RD784 are partnering to provide 200-year flood protection for South Yuba County. They are not duplicating efforts.
   - These points were shared in the ballot information guide, at every public meeting (3), stakeholder meetings (10), in TRLIA’s Assessment District newsletter, on TRLIA’s Web site at www.trlia.org, in responses to questions and comments (200+ formally answered in writing), and with callers to the TRLIA hotline (75+).

On May 12, the TRLIA Board conducted a Public Hearing that ended the 45-day balloting period. Tabulation of ballots by third-party CPA Michael Hinz was conducted between May 19 – 21, 2009. Ballot tabulation results were announced on May 21, 2009.
Below are the tabulation results:

- Total Number of Valid Ballots Processed: 2,434
- Total assessment Amount of Valid Ballots: $275,441.59
- Total Number of "Yes" Votes Processed: 1,364
- Total assessment amount of "Yes" Votes Processed: $171,440.15
- Total Percentage of "Yes" Assessment Amount: 62.24%
- Total Number of "No" Votes Processed: 1,070
- Total Assessment Amount of "No" Votes Processed: $104,001.44
- Total Percentage of "No" Assessment Amount: 37.76%
- Total Number of "Invalid" Ballots Processed: 25
- Total Assessment Amount "Invalid" Ballots Processed: $1,954.58

The total number of ballots received by the end of the public input portion of the public hearing on May 12, 2009 was 2,459. This represents a 24.98% ballot return rate on the 9,842 ballots mailed.

Discussion:
The Tabulation results show that people within the proposed Assessment District approve of the formation of the proposed Benefit Assessment District. The attached Resolution (Attachment 1) accomplishes the following:

- Approves the Engineer’s Report
- Forms the Three Rivers Levee Improvement Authority Levee and Flood Control Facilities Assessment District as shown on the confirming diagram (assessment boundary)
- Orders the levy of Assessments within the Levee and Flood Control Facilities Assessment District for Fiscal Year 2010

Since the May 12, 2009, TRLIA Board Meeting, two adjustments were made to the proposed assessment boundary. The boundary adjustments are described in the attached MBK memos (Attachments 2 & 3). The changes were made after direct inquiries from property owners, resulting in the TRLIA staff and Executive Director’s analyzing the relevant information and concluding the adjustments were appropriate.

Fiscal Impact
Approximately $400 million is being invested in levee improvements in South Yuba County.
- Once completed, the improvements will provide 200-year flood protection.
- An aggressive operations and maintenance program will reduce the risk of flooding over the long-term.
TRLIA’s Benefit Assessment is initially projected to generate $800,000/yr.

Future growth within the Assessment District may potentially generate additional revenues to repay Yuba County and YCWA for their advance funding of levee improvements. Initially, no costs are allocated to fund this item.

Assessments will appear on property tax bills beginning fall 2009.

Next Steps:
TRLIA will enter into an agreement with RD 784 to perform the additional required maintenance. Concurrently, TRLIA will develop and approve a plan for an annual RD784 budget review and update to the Engineer’s Report.

Attachments:
1. Proposed Resolution with Engineers Report, Confirming Diagram and Assessment
2. MBK Boundary Adjustment Memo dated May 11, 2009
3. MBK Boundary Adjustment Memo dated May 27, 2009
THREE RIVERS LEVEE IMPROVEMENT AUTHORITY

RESOLUTION NO.____

A RESOLUTION OF THE BOARD OF DIRECTORS OF
THE THREE RIVERS LEVEE IMPROVEMENT AUTHORITY
APPROVING ENGINEER'S REPORT, CONFIRMING DIAGRAM AND ASSESSMENT, AND ORDERING
LEVY OF ASSESSMENTS WITHIN THE LEVEE AND FLOOD CONTROL FACILITIES ASSESSMENT
DISTRICT FOR FISCAL YEAR 2009-2010

WHEREAS, Yuba County and Reclamation District No. 784 formed the Three Rivers Levee Improvement Authority ("Three Rivers") to provide improved flood protection in Yuba County;

WHEREAS, Three Rivers has installed and otherwise made substantial improvements to the flood control facilities along portions of the Feather, Yuba and Bear Rivers and the Western Pacific Interceptor Canal within Yuba County (the "Facilities");

WHEREAS, to fund the ongoing maintenance, operation, installation, improvement and repayment of the capital costs of the flood control facilities (the "Services"), it is necessary to create a new assessment district—the Three Rivers Levee Improvement Authority Flood Control Facilities Assessment District (the "District")—and to levy a new special benefit assessment pursuant to the Benefit Assessment Act of 1982 (the "Act") and Article XIII D of the California Constitution ("Proposition 218");

WHEREAS, after preparation and consideration of the following documents analyzing the potential environmental effects of the Services pursuant to the California Environmental Quality Act ("CEQA"), the Board of Directors approved and/or certified that the documents fully comply with CEQA:

- June 2005. Addendum to Yuba River Levee Repair Project Initial Study/Mitigated Negative Declaration, SCH #2004082014.
- July 2006. Yuba River Levee Repair Project (Phase 4) Initial Study/Mitigated Negative Declaration, SCH #2006062037.
WHEREAS, the ongoing maintenance, operation, repair and minor alteration of existing flood control structures and facilities, such as the Facilities, is exempt from CEQA pursuant to Title 14, section 15301 of the California Code of Regulations;

WHEREAS, CEQA does not apply to the establishment or approval of charges by public agencies which the public agency finds are for the purpose of: (1) meeting operating expenses, including employee wage rates and fringe benefits, (2) purchasing or leasing supplies, equipment, or materials, (3) meeting financial reserve needs and requirements, or (4) obtaining funds for capital projects, necessary to maintain service within existing service areas, pursuant to Title 14, section 15273 of the California Code of Regulations;

WHEREAS, a state-licensed professional engineer with the SCI Consulting Group prepared a detailed Engineer's Report to describe the boundaries of the proposed District, characterize the flood control improvements, explain the special benefits to be provided by the Services, and establish a methodology for levying a special benefit assessment against the properties within the District in proportion to the special benefits they will receive from the Services;

WHEREAS, on March 10, 2009, the Board of Directors of Three Rivers adopted Resolution No. 2009-03, a Resolution of Intention to Levy Assessments for Fiscal Year 2009 – 2010, which:
- Proposed forming the District and levying a special benefit assessment,
- Preliminarily approved the Engineer's Report,
- Fixed the time of a public hearing to hear public comment on the proposed District and special benefit assessment, and
- Directed Three Rivers' staff to undertake the procedural and approval processes necessary for the establishment of the District and levying of a special assessment proportional to the special benefits to be provided by the Services.

WHEREAS, during March through May 2009, Three Rivers conducted an assessment ballot proceeding pursuant to Proposition 218 in which the landowners that would be specially benefited by the Services were provided by mail with notice of the proposed special assessment and the opportunity to vote as to whether Three Rivers should levy the assessment;
WHEREAS, as part of the assessment ballot proceeding, the Three Rivers Board of Directors held a public hearing on May 12, 2009 for the purpose of receiving comments on and protests to the proposed benefit assessment and for accepting new or changed ballots from specially benefited landowners;

WHEREAS, during the public hearing, the Board of Directors considered all public comments.

NOW, THEREFORE, BE IT RESOLVED THAT:

1. The above recitals are true and correct.

2. The canvass of the assessment ballots submitted by property owners is complete and was certified by Michael Hinz, CPA, and the votes cast were as follows:

   Total Number of Valid Ballots Submitted: 2,434
   Total Assessment Amount of Valid Ballots: $275,441.59

   Total Number of "Yes" Votes: 1,364
   Total Weighted Value of "Yes" Votes: $171,440.15
   Total Weighted Percentage of "Yes" Votes: 62.24%

   Total Number of "No" Votes: 1,070
   Total Weighted Value of "No" Votes: $104,001.44
   Total Weighted Percentage of "No" Votes: 37.76%

   Total Number of "Invalid" Ballots: 25
   Total Assessment Amount of "Invalid" Ballots: $1,954.56

3. A total of 2,459 assessment ballots were returned and received by or on behalf of the Board Secretary prior to the close of the public input portion of the public hearing on May 12, 2009. Of the assessment ballots returned, 25 assessment ballots were declared invalid in that they were either not marked with a "Yes" or "No," were marked with both a "Yes" and a "No," were not signed, or the property ownership and barcode information was illegible.

4. After the ballots were weighted according to the proportional financial obligation of the affected property, the tabulation shows that 62.24% of the valid ballots were cast in support of the Three Rivers Levee Improvement Authority Levee and Flood Control Facilities Assessment District assessment. Since a majority protest, as defined by Article XIII-D of the California Constitution, did not exist, the Board may levy the assessment as described in the Engineer’s Report to pay the costs and expenses of the Services identified therein.

5. The Engineer’s Report for the Three Rivers Levee improvement Authority Levee and Flood Control Facilities Assessment District, together with the diagram of the District contained therein, and the proposed assessment roll for fiscal year 2009-10 contained therein, which Engineer’s Report is attached hereto as Exhibit A and is incorporated hereby by reference, are hereby confirmed and approved.
6. That based on the oral and documentary evidence, including the Engineer's Report, offered and received at the public hearing, the Board finds and determines that: (a) each of the several assessed lots and parcels of land within the District will be specially benefited by the Services (as described in the Engineer's Report) in at least the amount of the benefit assessment apportioned against such lots and parcels of land, respectively; and (b) there is substantial evidence to support, and the weight of the evidence preponderates in favor of, said finding and determination as to special benefit to property within the Assessment District from the Services to be financed with assessment proceeds.

7. The Three Rivers Levee Improvement Authority Levee and Flood Control Facilities Assessment District is hereby formed, and assessments consistent with the Engineer's Report are hereby levied, pursuant to the Act.

8. The assessments for fiscal year 2009-10 shall be levied at the rate of one hundred forty-eight dollars and four cents ($148.04) per single-family equivalent benefit unit for the South Zone, eleven dollars and thirty-three cents ($11.33) for the Central A Zone, thirty-two dollars and sixteen cents ($32.16) for the Central B Zone, and eleven dollars and twelve cents ($11.12) for the East Zone, as specified in the Engineer's Report for fiscal year 2009-10 with estimated total annual assessment revenues as set forth in the Engineer's Report.

9. The Services to be financed with assessment proceeds described in the Engineer's Report are hereby ordered.

10. The authorized maximum assessment to be levied in future fiscal years shall be adjusted based on the U.S. Department of Labor Consumer Price Index for the San Francisco Bay Area, not to exceed 4% per year as described in the Engineer's Report. In the event that the annual change in CPI exceeds 4%, any percentage change in excess of 4% may be cumulatively reserved and added to the annual change in the CPI in years for which the change is less than 4%.

11. Three Rivers staff is directed to file or cause to be filed a certified copy of the Diagram and Assessment and a certified copy of this Resolution with the Auditor/Controller of Yuba County (the "County Auditor/Controller"). Upon such filing, the County Auditor/Controller shall enter on the County tax roll opposite each lot or parcel of land in the District the amount of assessment thereupon as shown in the Engineer's Report and described in Section 8 of this Resolution. The benefit assessment shall be collected at the same time and in the same manner as County ad valorem taxes are collected and all laws providing for the collection and enforcement of County ad valorem taxes shall apply to the collection and enforcement of the assessments. After collection by the County Tax Collector, the net amount of the assessments, after deduction of any compensation due the County for collection, shall be paid to Three Rivers for the purposes of the District.

12. The monies representing assessments collected shall be deposited in a separate fund designated for the District. Amounts deposited to such fund shall be expended only for the Services and other activities that specially benefit the lands within the Assessment District as described in the Engineer's Report, including repayment of capital costs of the flood control facilities.

13. The assessment, as it applies to any parcel, may be corrected, cancelled or a refund granted as appropriate, by order of the Board or by order of the Executive Director of Three Rivers. Any such corrections, cancellations or refunds shall be limited to the current fiscal year.
14. The potential environmental effects of funding the Services have been analyzed pursuant to CEQA documents previously certified and/or approved by the TRLIA Board of Directors. The creation of the assessment funding mechanism is exempt from CEQA because it is for the ongoing maintenance, operation, repair and minor alteration of existing flood control structures, pursuant to Cal. Code Regs, tit. 14, § 15301, and because the assessment is for the purpose of meeting operating expenses, purchasing or leasing supplies, equipment or materials, meeting financial reserve needs, and obtaining funds for capital projects necessary to maintain service within existing service areas, pursuant to Cal. Code Regs, tit. 14, § 15273. Three Rivers staff is directed to prepare and file or cause to be filed a Notice of Exemption to that effect with the Yuba County Clerk.

ADOPTED as a resolution of the Board of Directors of the Three Rivers Levee Improvement Authority at a regular meeting duly held on the 2nd day of June, 2009:

_____________________________
CHAIRMAN

APPROVED AS TO FORM:         ATTEST:

_____________________________
DONNA STOTTLEMEYER, SECRETARY

STATE OF CALIFORNIA  )
COUNTY OF YUBA  ) ss
THREE RIVERS LEVEE IMPROVEMENT AUTHORITY  )

I, Donna Stottlemeyer, Secretary of the Board of Directors of Three Rivers Levee Improvement Authority, do hereby certify that the foregoing is a true and correct copy of Resolution No. _____ adopted by the Board of Directors of the Three Rivers Levee Improvement Authority, Yuba County, California, at a regular meeting thereof, held on the 2nd day of June, 2009 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

_____________________________
DONNA STOTTLEMEYER, SECRETARY
THREE RIVERS LEVEE IMPROVEMENT
AUTHORITY (TRLIA)
LEVEE AND FLOOD CONTROL FACILITIES ASSESSMENT DISTRICT

ENGINEER'S REPORT

MAY 28, 2009

Pursuant to California Government Code Section 54710 et seq., and Article XIIIID of the California Constitution

ENGINEER OF WORK:
SCI Consulting Group
4745 MANGELS BOULEVARD
FAIRFIELD, CALIFORNIA 94534
PHONE 707.430.4300
Fax 707.430.4319
www.sci-cg.com

Exhibit A
THREE RIVERS LEVEE IMPROVEMENT AUTHORITY

BOARD OF DIRECTORS
Mary Jane Griego, Chair
Rick Brown
Jerry Crippen
Don Graham
John Nicoletti

EXECUTIVE DIRECTOR
Paul Brunner

SECRETARY
Donna Stottlemeyer

GENERAL COUNSEL
Scott Shapiro

ENGINEER OF WORK
SCI Consulting Group
Lead Assessment Engineer, John Bliss, M.Eng, P.E.
TABLE OF CONTENTS

INTRODUCTION .......................................................................................................................... 1
PROPOSITION 218 ......................................................................................................................... 3
SILICON VALLEY TAXPAYERS ASSOCIATION, INC. v SANTA CLARA COUNTY OPEN SPACE
AUTHORITY ................................................................................................................................. 4
ASSESSMENT PROCESS ................................................................................................................ 4

CERTIFICATES .................................................................................................................................. 6

DESCRIPTION OF SERVICES ......................................................................................................... 7
OPERATIONS AND MAINTENANCE SERVICES ........................................................................... 7
INTERNAL DRAINAGE ..................................................................................................................... 8
REPAYMENT OF LOCAL-SHARE CAPITAL FUNDING ACTIVITIES .............................................. 10

COST AND BUDGET ....................................................................................................................... 12
OPERATIONS AND MAINTENANCE SERVICES COSTS ................................................................. 12
CAPITAL SERVICES COSTS .......................................................................................................... 13
TOTAL SERVICES COSTS .............................................................................................................. 15

METHOD OF APPORTIONMENT ................................................................................................. 16

METHOD OF APPORTIONMENT .................................................................................................. 16
DISCUSSION OF BENEFIT ............................................................................................................. 16
FLOOD CONTROL IS A SPECIAL BENEFIT TO PROPERTIES ......................................................... 18
BENEFIT FACTORS ....................................................................................................................... 18
GENERAL BENEFITS .................................................................................................................... 21
BENEFIT FINDING AND ZONES OF BENEFIT .............................................................................. 22

Benefit Finding ................................................................................................................................ 22
Zones of Benefit .............................................................................................................................. 23
ASSESSMENT APPORTIONMENT .................................................................................................. 25
METHOD OF ASSESSMENT .............................................................................................................. 25
FLOOD RISK FACTORS .................................................................................................................. 27
FLOOD DAMAGE FACTORS ......................................................................................................... 27
VALUE FACTORS BY PROPERTY TYPE ........................................................................................ 28

Residential Properties .................................................................................................................. 29
Commercial/Industrial & Office Properties .................................................................................... 30
Vacant/Undeveloped and Agricultural Properties ........................................................................ 30
Publicly Owned Parcels ................................................................................................................... 30
Other Properties ............................................................................................................................ 30
Summary of Benefits for Each Property Type .............................................................................. 30

RATES ............................................................................................................................................. 31

THREE RIVERS LEVEE IMPROVEMENT AUTHORITY
LEVEE AND FLOOD CONTROL FACILITIES ASSESSMENT
ENGINEER'S REPORT, FY 2009-10
Assessment Rate Summary 32
Example Rates for Selected Property Types 33
Appeals of Assessments Levied to Property 34
Duration of the Assessment 34

Criteria and Policies 35

Assessment Funds Must Be Expended Within the Proposed Assessment District 35
Reserve Fund 35
Existing Funds 35
Senior and Low-Income Exemptions 35

Assessment 36

Assessment Diagram 39

Appendices 41

Appendix A – Assessment Roll, FY 2009-10 41
LIST OF TABLES

TABLE 1 - MAJOR FLOODS AFFECTING SOUTH YUBA COUNTY ........................................ 3
TABLE 2 - LEVEES JOINTLY MAINTAINED BY TRLIA AND RD 784 .................................. 8
TABLE 3 - OPERATIONS AND MAINTENANCE SERVICES COSTS ......................................... 13
TABLE 4 - CAPITAL COSTS ................................................................................................. 14
TABLE 5 - TOTAL SERVICES COSTS .................................................................................. 15
TABLE 6 - EQUATIONS ........................................................................................................ 26
TABLE 7 - FACTORS ........................................................................................................... 26
TABLE 8 - FLOOD RISK FACTORS .................................................................................... 27
TABLE 9 - AVERAGE FLOOD DEPTHS AND DAMAGE FACTORS ....................................... 28
TABLE 10 - NORMALIZED VALUE FACTORS BY PROPERTY TYPE ..................................... 29
TABLE 11 - LAND USE FACTORS FOR PROPERTY TYPES ................................................. 31
TABLE 12 - ADJUSTED SFES .............................................................................................. 31
TABLE 13 - CALCULATION OF O&M BASE RATE ......................................................... 32
TABLE 14 - ZONE RATES .................................................................................................... 33
TABLE 15 - ASSESSMENT RATES BY PROPERTY TYPE AND ZONE .................................... 33
TABLE 16 - EXAMPLE RATES FOR SELECTED PROPERTY TYPES .................................... 34

LIST OF FIGURES

FIGURE 1 - LEVEES JOINTLY MAINTAINED BY TRLIA AND RD 784 ................................ 2
FIGURE 2 - LOCATION OF CAPITAL PROJECTS .................................................................. 11
FIGURE 3 - ZONES OF BENEFIT ...................................................................................... 24
INTRODUCTION

The Three Rivers Levee Improvement Authority (TRLIA) is a joint powers authority formed by Reclamation District 784 (RD 784) and Yuba County to finance, construct, and jointly maintain with RD 784 significant levee improvements surrounding the South Yuba County area. A four-phase, $405 million, comprehensive improvement program has been initiated and is being managed by TRLIA. This program is designed to bring levees along the Yuba, Feather, and Bear Rivers and the Western Pacific Interceptor Canal up to an urban level of flood control protection and provide enhanced maintenance and inspection based on more stringent urban levee standards. The first three phases have been completed, and construction of the fourth phase is anticipated to be completed in 2009.

Approximately 27,000 acres of land, including the communities of Linda, Olivehurst, Arboga, and Plumas Lake, are protected by the upgraded levees and flood control systems jointly maintained by TRLIA and RD 784.

TRLIA has implemented this benefit assessment process, and the underlying engineering, to establish a reliable long-term funding source supporting the maintenance and repair of the improved levees and, potentially, the repayment of certain local-share capital obligations for the repair and reconstruction of the levees.
South Yuba County, characterized by relatively flat terrain and surrounded on three sides by rivers, has a history of devastating floods. Listed below are some of the major floods that have occurred since 1950.
South Yuba County is at a high risk of flooding due to the following factors:

- **Topography.** South Yuba County is relatively flat. Runoff from the Sierra Nevada Mountains to the north and east drains into the Feather, Yuba and Bear Rivers which have a natural tendency to overflow their banks in the flat valley.

- **Local Soil Conditions.** Levees were traditionally constructed by farmers and other early settlers with readily available local materials. Early levee improvements focused on the levee materials and construction but neglected the levee foundations which were built on permeable materials common in South Yuba County. This permeable material allows water from the flood-swollen rivers to seep under the levees. The most recent improvements address the levee construction as well as the foundation and potential for under-seepage.

- **Low Interior Elevations.** Local runoff collected behind the levees must be pumped over levees to be discharged into the rivers.

**Proposition 218**

This proposed assessment is to be formed consistent with Proposition 218, The Right to Vote on Taxes Act, which was approved by the voters of California on November 6, 1996, and is now Articles XIIIC and XIIIID of the California Constitution. Proposition 218 provides for benefit assessments to be levied to fund the cost of providing services and improvements as well as maintenance and operation expenses to a public improvement which provides special benefits to the assessed property.

Proposition 218 describes a number of important requirements, including property-owner balloting, for the formation and continuation of assessments, and these requirements are satisfied by the process used to establish this proposed assessment.
In July of 2008, the California Supreme Court issued its ruling on the Silicon Valley Taxpayers Association, Inc. v. Santa Clara County Open Space Authority ("SVTA v. SCCOSA"). This is a significant ruling regarding Proposition 218 and benefit assessment districts. Several of the most important elements of the ruling included further emphasis that:

- Benefit assessments are for benefit to property, not just people.
- Improvements and services funded by benefit assessments must be clearly identified.
- Benefit assessments are for special, not general, benefit.

This Engineer's Report and the process used to establish this proposed assessment are consistent with the SVTA v. SCCOSA decision.

**Assessment Process**

This Engineer's Report (the "Report") was prepared to: 1) contain the information required by Government Code Section 54716, including: a) a description of the services proposed to be financed through the revenue derived from the assessment, b) a description of each lot or parcel of property to be subject to the assessment, c) the amount of the proposed assessment for each lot or parcel, d) the basis of the assessment, e) the schedule of the assessment; 2) establish a budget to fund the installation, improvement, maintenance and operation of levee and other flood control improvements on the Feather and Yuba Rivers and to provide services to reduce the potential for levee failure and flooding on the Feather River, Yuba River, Bear River, and Western Interceptor Canal, and to provide other flood control services (the "Services"); 3) determine the special benefits received from the Services by property within the proposed Three Rivers Levee Improvement Authority Levee and Flood Control Facilities Assessment District (the "Assessment District") and; 4) assign a method of assessment apportionment to lots and parcels within the proposed Assessment District. This Report and the proposed assessments have also been made pursuant to the California Government Code Section 53750 et seq. (the "Code") and Article XIIIID of the California Constitution (the "Article").

Following submittal of this Report to the Three Rivers Levee Improvement Authority Board of Directors (the "Board") for preliminary approval, the Board may, by Resolution, call for
an assessment ballot proceeding and public hearing on the proposed establishment of a
flood control assessment.

If the TRLIA approves such Resolution, the Secretary of the Board of Directors of the
Three Rivers Levee Improvement Authority shall cause the notice, protest, and hearing
procedures to comply with Section 53753 of the Code and the Article. A notice of
assessment and assessment ballot shall be mailed to property owners within the proposed
Assessment District boundaries. Such notice would include a description of the Services to
be funded by the proposed assessments, a proposed assessment amount for each parcel
owned, an explanation of the method of voting on the assessments and the name and
telephone number of the person designated by TRLIA to answer inquiries regarding the
protest hearing. Each notice would specify the date, time, and place of the public hearing,
a summary of the return procedures, the tabulation procedures, and the total amount and
duration of payments. Each notice would also include a ballot on which the property owner
can mark his or her approval or disapproval of the proposed assessments as well as affix
his or her signature, and a postage prepaid envelope in which to return the ballot.

After the ballots are mailed to property owners in the Assessment District, a minimum 45­
day time period must be provided for the return of the assessment ballots. Following this
45-day time period, a public hearing must be held for the purpose of allowing public
testimony regarding the proposed assessments. At the public hearing, the public would
have the opportunity to speak on the issue.

If it is determined that the assessment ballots submitted in opposition to the proposed
assessments do not exceed the assessment ballots submitted in favor of the assessments
(weighted by the proportional financial obligation of the property for which ballots are
submitted), the Board may take action to approve the levying of assessments for fiscal
year 2009-10. If the assessments are so confirmed and approved, the levies would be
submitted to the Yuba County Auditor/Controller for inclusion on the property tax roll for
Fiscal Year 2009-10. The Board may levy the assessment in future years, without
conducting a new vote procedure, if the assessments are within the amounts authorized in
the original balloting procedure.
1. The undersigned respectfully submits the enclosed Engineer's Report.

   John W. Blue
   Engineer of Work, License No. C052019

2. I, the Secretary of the Board of Directors of the Three Rivers Levee Improvement Authority, hereby certify that the enclosed Engineer's Report, together with the Assessment and Assessment Diagram thereto attached, was filed and recorded with me on ______________.__________________.

   ________________
   Secretary of the Board

3. I, the Secretary of the Board of Directors of the Three Rivers Levee Improvement Authority, hereby certify that the Assessment in this Engineer's Report was approved and confirmed by the Board on ______________.__________________, by Resolution No. ________________

   ________________
   Secretary of the Board

4. I, the Secretary of the Board of Directors of the Three Rivers Levee Improvement Authority, hereby certify that a copy of the Assessment and Assessment Diagram was filed in the office of the County Auditor of Yuba County, California, on ________________

   ________________
   Secretary of the Board

5. I, the County Auditor of Yuba County, California, hereby certify that a copy of the Assessment Roll and Assessment Diagram for fiscal year 2009-10 was filed with me on ________________.

   ______________________
   County Auditor, Yuba County

THREE RIVERS LEVEE IMPROVEMENT AUTHORITY
LEVEE AND FLOOD CONTROL FACILITIES ASSESSMENT
ENGINEER'S REPORT, FY 2009-10

SciConsultingGroup
DESCRIPTION OF SERVICES

The Three Rivers Levee Improvement Authority (TRLIA) provides a range of levee construction, repair, maintenance, finance and flood control prevention activities and services to South Yuba County and its residents. These services protect the usefulness, utility, desirability and livability of property and the inhabitants of property within its jurisdictional area by preventing flooding. TRLIA's services are currently limited to southern Yuba County, as shown in Figure 1 above.

The additional services (the "Services") proposed to be undertaken by TRLIA and the cost thereof to be paid from the levy of the annual assessment provide special benefit to Assessor Parcels within the Assessment District as defined in the Method of Assessment herein. These proposed Services are over and above the current services. The formula below describes the relationship between the final level of service, the existing baseline level of service, and the enhanced level of service to be funded by the proposed assessment.

\[
\text{Final Level of Service} = \text{Baseline Level of Service (not funded by this assessment)} + \text{Enhanced Level of Service (funded by this assessment)}
\]

In this case, the baseline level of service is the current maintenance services provided by RD 784. The enhanced level of service is the ultimate level of service, described below, that will be provided by TRLIA and RD 784 to meet urban levee maintenance standards as well as the repayment of local-share capital funding for the repair and reconstruction of levees to meet urban levee standards.

In addition to the definitions provided by the California Government Code Section 54710 et seq., (the "Code") the Services are generally described in the following sections.

OPERATIONS AND MAINTENANCE SERVICES

TRLIA and RD 784 have joint maintenance responsibilities for approximately 29 miles of levees, as described in the September 23, 2008 memo "TRLIA O&M Needs for Assessment District" prepared by MBK Engineers and as shown previously in Figure 1. The table below summarizes the lengths of these levees.
Existing (baseline) flood control services include:

- Regular inspection of levees for signs of erosion, seepage, rodent infestation, slide, or other conditions that could indicate structural deficiencies.

- Vegetation management, often by burning accumulated vegetative matter in place.

- The repair of levees and foundations with engineered fill, rock rip-rap, and other materials, or other levee repair work, as needed to repair damage, maintain or improve levees and flood control systems.

- Trapping and removal of problematic rodents such as beavers.

The costs to provide these services is $247,500 per year.

The proposed increased flood control Services would materially increase the usefulness, utility, livability, and desirability of properties within the proposed assessment district. The proposed increased flood control Maintenance and Operation Services include:

- Increased inspection of levees for signs of erosion, seepage, rodent infestation, slide, or other conditions that could indicate structural deficiencies. Inspection of additional lands adjacent to levees, such as seepage berms and additional areas cleared of trees and dense vegetation as required by urban levee standards, for indications of under-seepage.

- Surveying for levee settlement, slope slumping, or erosion problems.

- Regular review and maintenance of vegetation including the installation of ground cover as erosion protection and the removal of excess vegetation using mowing, herbicide or other methods when such growth prevents the accurate inspection of facilities or hinders flood flows.
- Increased and more frequent repair of levees and foundations with engineered fill, rock rip-rap, and other materials, or other levee repair work, as needed to repair damage, maintain or improve levees and flood control systems.

- Increased monitoring and maintenance of additional relief wells, monitoring wells, stability berms, seepage berms, and discharge pipes for pumping stations adjacent to levees.

- Tracking or dragging levees as required to allow for mowing or to eliminate rodent dens.

- Trapping and removal of problematic rodents such as beavers, as well as consultation with a pest control advisor (PCA) to develop and implement control programs for other harmful rodents.

- Periodic resurfacing and regrading of gravel patrol roads.

- Replacement of equipment at Pump Stations necessary to move runoff over levees.

- Maintenance, repair, replacement or improvement of other flood control systems and improvements.

- Additional electrical costs

**INTERNAL DRAINAGE**

RD 784 has maintenance responsibilities for an internal drainage system that consists of drainage canals, ditches, and pumping stations to pass the internal runoff over the levees. These are important features to prevent interior flooding. Funding for the internal drainage features is not part of the Services described in this Engineer's Report and is not part of the baseline services described above.

1 all-weather gravel roads typically found along the top of levees that allow maintenance personnel to inspect the top and sides of levees, patrol the levees during flood events, and access the levees during flood fights when needed
Repayment of Local-Share Capital Funding Services

In 2007, TRLIA embarked on a four-phase program to provide 200-year flood protection to South Yuba County. This improvement program includes levee reconstruction, the installation of cutoff walls, and seepage berms. The location of these improvements is shown in the figure below and is the same as the extents of the operation and maintenance Services.
FIGURE 2 - LOCATION OF CAPITAL PROJECTS
COST AND BUDGET

OPERATIONS AND MAINTENANCE SERVICES COSTS

Estimated operation and maintenance Services costs for the levees jointly maintained by TRLIA and RD 784 were developed by MBK Engineers in consultation with RD 784 and TRLIA. These costs were presented in a September 23, 2008 memo titled “TRLIA O&M Needs for Assessment District”. This memo develops an estimated O&M budget using two approaches. The first approach results in a total O&M budget of $996,000 and the second approach results in a total O&M budget of $1,076,000. The memo concludes with a total recommended O&M budget of $1,047,500.

The costs shown in the table below were taken from the detailed budget breakdown of Approach 1 in the MBK memo and were adjusted slightly to match total O&M budget of $1,047,500.

\[ \text{Total O&M Budget} = \$800,000 \text{ (conclusion of MBK memo)} + \$247,500 \text{ (Table 3 MBK memo)} = \$1,047,500 \]
### Table 3 - Operations and Maintenance Services Costs

<table>
<thead>
<tr>
<th>Costs</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration, Engineering, Legal</td>
<td>$302,900</td>
</tr>
<tr>
<td>Operations</td>
<td>$378,600</td>
</tr>
<tr>
<td>Equipment Replacement Allowance</td>
<td>$50,500</td>
</tr>
<tr>
<td>Allowance for land acquisition for maintenance purposes</td>
<td>$105,200</td>
</tr>
<tr>
<td>Emergencies/Contingencies</td>
<td>$210,300</td>
</tr>
<tr>
<td>Subtotal</td>
<td>$1,047,500</td>
</tr>
<tr>
<td>Less Cost of Baseline Services</td>
<td>($247,500)</td>
</tr>
<tr>
<td>Net Operations and Maintenance Services to be Funded by Assessment</td>
<td>$800,000</td>
</tr>
</tbody>
</table>

### Capital Services Costs

Total capital costs for the TRLIA levee program are approximately $405 million, of which approximately $263 million is provided from non-local funding. The capital costs and a summary of the capital improvements are summarized in the table below.
### TABLE 4 - CAPITAL SERVICES COSTS

<table>
<thead>
<tr>
<th>Phase/Description</th>
<th>Total Costs</th>
<th>Non-Local Funding</th>
<th>Net Local Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yuba River Cutoff Wall</td>
<td>$4,000,000</td>
<td>50</td>
<td>$4,000,000</td>
</tr>
<tr>
<td>Phase 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yuba Seepage Berm</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olivehurst Detention Basin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WPC Slurry Wall &amp; Ditch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Bear Levee Reconstruction &amp; Erosion Protection</td>
<td>$46,600,000</td>
<td>$20,900,000</td>
<td>$20,900,000</td>
</tr>
<tr>
<td>Phase 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bear River Setback Levee</td>
<td>$72,300,000</td>
<td>$30</td>
<td>$72,200,000</td>
</tr>
<tr>
<td>Phase 4[1]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yuba River Cutoff Wall from UPRR to Simpson Lane</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feather River Segments 1 &amp; 3 Strengthen-in-Place</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feather River Segment 2 Setback Levee</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feather River Degraded Existing Segment 2 Levee</td>
<td>$210,600,000</td>
<td>$74,800,000</td>
<td>$135,800,000</td>
</tr>
<tr>
<td>Phase 4[2]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yuba River Simpson Lane to Goldfields</td>
<td>$60,100,000</td>
<td>$3,000,000</td>
<td>$57,100,000</td>
</tr>
<tr>
<td>Overhead and Administrative Expenses</td>
<td>$11,800,000</td>
<td>$9,100,000</td>
<td>$2,700,000</td>
</tr>
<tr>
<td>Totals</td>
<td>$405,400,000</td>
<td>$283,400,000</td>
<td>$142,000,000</td>
</tr>
</tbody>
</table>

[1] Includes work currently underway. Non-local funding includes an estimated $10,085,259 of additional future Prop 1E funding
[2] Includes work currently being planned

Source: TRUA Cash Flow 2008 Scenario 01-27-19, Staff Agreement prepared by EFS

As development occurs within the proposed assessment district, the newly developed properties' new land use classification will typically result in higher assessments and it is anticipated that assessment revenues will increase. Some of this additional future revenue may be used to repay obligations that were incurred in obtaining the net local funding listed above.

The repayment of obligations for local-share capital funding is a component of the Services funded by this assessment.
**Total Services Costs**

For fiscal year 2009-10, the total cost for Services for fiscal year 2009-10 is estimated to be $1,047,500 as shown in the table below.

**Table 5 - Total Services Costs**

<table>
<thead>
<tr>
<th>Description</th>
<th>Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations and Maintenance Services Costs</td>
<td>$1,047,500</td>
</tr>
<tr>
<td>Less Costs of Baseline Services</td>
<td>($247,500)</td>
</tr>
<tr>
<td>Repayment of Local-Share Capital Funding</td>
<td>$0</td>
</tr>
<tr>
<td>Total Cost of Services to be Funded by This Assessment</td>
<td>$800,000</td>
</tr>
</tbody>
</table>

At present, the repayment of local-share capital portion of the services is not funded.

As previously noted, it is anticipated that assessment revenues will increase due to development within the assessment district. The resulting additional incremental revenue may be used for repayment of local-share capital funding, including the issuance of bonds or other debt based on the additional revenue stream.
METHOD OF APPORTIONMENT

This section includes an explanation of the special benefits to be derived from the Services, the criteria for the expenditure of assessment funds and the methodology used to apportion the total assessments to properties within the proposed Assessment District.

The proposed Assessment District area consists of all Assessor Parcels delineated on the assessment diagram. The Assessment District boundary was determined using MBK Engineers’ memo dated January 27, 2009 titled, “Development of TRLIA Assessment District Boundaries” as well as the MBK Technical Memo dated November 3, 2005 titled “Lands Benefited by TRLIA Program” and “Appendix VI Inundation Reduction Analysis of the Alternatives Analysis Report for the Phase 4 Feather River Levee Repair Project” dated December 2006 prepared by David Ford Consulting Engineers/Bookman—Edmonton. These engineering documents were used to narrowly draw the assessment district boundary to include only those parcels that receive special benefit from the levees that would receive increased maintenance Services under this assessment and for which local-share capital funds may potentially be repaid.

The method used for apportioning the assessment is based upon the proportional special benefits from the Services to be derived by the properties in the assessment area over and above general benefits conferred on real property in the assessment area or to the public at large. The apportionment of special benefit is a multi step process: the first step is to identify the types of special benefit arising from the Services, the second step is to estimate the general and special benefits, and the third step is to allocate the assessments to property based on the estimated relative special benefit for each type of property.

DISCUSSION OF BENEFIT

California Government Code Section 54710 et seq. allows agencies which provide flood control services, such as the Three Rivers Levee Improvement Authority, to levy assessments for flood control services. Section 54710 states that:

Any local agency which is authorized by law to provide one or more of the following services may impose a benefit assessment pursuant to this chapter to finance the maintenance and operation costs of these services:

(1) Drainage.
(2) Flood control.
Moreover, Government Code Section 54710.5 stipulates that any local agency which is authorized by law to provide drainage services or flood control services may, in addition to imposing a benefit assessment for the purposes authorized pursuant to Section 54710, impose such an assessment to finance the cost of installation and improvement of facilities.

In addition, California Government Code Section 53750 defines the terms "flood control" as follows:

(f) "Flood control" means any system of public improvements that is intended to protect property from overflow by water.

Therefore, the Services to be provided by the proposed Assessment District fall within the scope of services that may be funded by assessments under the Code.

The assessments can only be levied based on the special benefit to property. This benefit is received by property over and above any general benefits from the proposed Services. Moreover, such benefit is not based on any one property owner's specific use of the Services or a property owner's specific demographic status. With reference to the requirements for assessments, Section 54711 of the California Government Code states:

"The amount of the assessment imposed on any parcel of property shall be related to the benefit to the parcel which will be derived from the provision of the service."

Proposition 218, as codified in Article XIIIID of the California Constitution, has confirmed that assessments must be based on the special benefit to property:

"No assessment shall be imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel."

Since assessments are levied on the basis of special benefit, they are not a tax and are not governed by Article XIIIA of the California Constitution.

The special benefit factors below that arise from the Services, when applied to property in the proposed Assessment District, confer special benefits to property and ultimately protect property in the Proposed Assessment District and improve the safety, utility and functionality of such property. These are tangible special benefits to the property in the
proposed assessment area in much the same way that sewer service or water service funded by assessments ultimately enhances the utility of property.

**FLOOD CONTROL IS A SPECIAL BENEFIT TO PROPERTIES**

The Engineer's Report concludes that flood control is a special benefit directly to the property that is being protected from flooding. The proposed Services, which would be over and above the Baseline Level of Service, have resulted in the levees being reconstructed to a higher standard and will result in the levees being maintained to a higher standard (an urban levee standard), and accordingly will reduce the risk of flooding and the associated damages to property.

The following Benefit Factors Section describes how and why the Services specially benefit properties. This benefit is particular and distinct from its effect on property in general or to the public at large.

**Benefit Factors**

The primary special benefit from the Services is the significantly reduced risk of damage to property from flooding. In addition, this section describes other special benefits conferred to residential, commercial, industrial, institutional and other lots and parcels resulting from the Services that will be provided. These types of special benefit are summarized as follows:

- **Reduced risk of damage to real property inside the narrowly drawn Assessment District boundaries**

  Properties in the proposed Assessment District are currently at significant risk for flood damage. The Assessment District boundaries have been narrowly drawn to include all properties with a significant risk of flooding, absent the Services. The proposed Assessment will fund specific new and enhanced Services to reduce the likelihood of levee failure and reduce the threat from flooding on property in the Assessment District, thereby significantly reducing the risk of property damage associated with floods. This is a tangible and direct special benefit from the Services to property in the Assessment District that will not be enjoyed by properties outside the Assessment District.

  The following citations illustrate the importance of the proposed Services:

  Dams and levees are designed to provide only a certain level of protection and can be overtopped and even fail in large flood events. Also, levees can and do decay over time, and maintenance can become a serious challenge. When levees do
fail, or are overtopped, they fail catastrophically. The flood damage after a levee failure can be more significant than if the levee was not there.3

[The one flood variable that is always expected to be associated with an increase in flood damages is the depth of flooding or flood stage. As the water gets deeper, damages increase.4

During and after Hurricane Katrina, many of those levees and floodwalls were overtopped and several were breached, allowing billions of gallons of water from the Gulf of Mexico, Lake Borgne, and Lake Pontchartrain to flow into New Orleans and flood major portions of the city. As of August 2, 2006, 1,118 people were confirmed dead in Louisiana as a result of Hurricane Katrina. Another 135 people are still missing and presumed dead. Thousands of homes were destroyed. Direct damage to residential and non-residential property is estimated at $21 billion, damage to public infrastructure another $6.7 billion. Nearly half the region's population has not yet returned after evacuating.5

The flood that followed inundated the town of Olivehurst and 15 square miles of farmland and towns. One man is known dead and two other people are missing, 180 homes and businesses were destroyed and another 480 were damaged, according to the state Office of Emergency Services, which put preliminary damage estimates at $200 million 6

After natural disasters such as hurricanes, tornadoes, and floods, excess moisture and standing water contribute to the growth of mold in homes and other buildings.7

- Reduced risk of loss of life or harm from flooding on property

The proposed Assessments will fund Services to reduce the likelihood of levee failure and reduce the threat from flooding specifically for the properties within the defined boundaries of the Assessment District. These Services will reduce the risk of loss of life, injuries, and other public health issues associated with flooding, which, thereby, increases the utility and usefulness of the underlying property.

---
3 FEMA FloodSmart website (http://www.floodsmart.gov/floodsmart/pages/ask_your_realestate_agent.jsp)
6 San Francisco Chronicle, January 12, 1997, Page C 1
7 Centers for Disease Control and Prevention, “Protect Yourself From Mold” (http://www.cdc.gov/disasters/mold/protect.asp)
These are tangible special benefits to property in the Assessment District that will not be received by the property outside the Assessment District or the public at large.

Annually, the nation experiences an average of 100 flood-related fatalities6.

Every effort should be made to limit contact with flood water due to potentially elevated levels of contamination associated with raw sewage and other hazardous substances.3

Six inches of water will reach the bottom of most passenger cars causing loss of control and possible stalling.

A foot of water will float many vehicles.

Two feet of rushing water can carry away most vehicles including sport utility vehicles (SUV's) and pick-ups10.

- Prevention from designation as Special Flood Hazard Area (SFHA) by FEMA

An adequately funded levee maintenance program is required as part of flood control prevention certification by FEMA. The Assessments will fund Services that will likely result in property in the Assessment District not being mapped in a SFHA flood zone. The proposed Assessment District will provide funding for the maintenance program for the flood control improvements protecting property in the Assessment District, which is part of the accreditation requirement. Without such funding for the Services, properties within the proposed Assessment District would likely be designated as being in a SFHA by FEMA. A SFHA designation would result in limitations on property development and would require property owners with federally-backed mortgages to purchase flood insurance. In addition, flood insurance rates would increase for all property types. Therefore, prevention of limitations on development and increased cost for insurance is another tangible and direct special benefit to property in the Assessment District.

Our findings support the hypothesis that increases in flood risk decrease values for residential properties within the 100-year floodplain. Unlike other studies which conclude that there are

---

7 US Environmental Protection Agency, "Response to 2005 Hurricanes – Health Precautions" (http://www.epa.gov/katrina/precautions.html)
8 FEMA FloodSmart website (http://www.fema.gov/hazard/floods/floodsmart)

THREE RIVERS LEVEE IMPROVEMENT AUTHORITY
LEVEE AND FLOOD CONTROL FACILITIES ASSESSMENT
ENGINEER'S REPORT, FY 2009-10

SCI Consulting Group
uniform impacts within the floodplain, we find declining effects with reduced risk. Furthermore, there is evidence suggesting that flooding events heighten sensitivity to such risks and raise the property price premium associated with a given level of flood risk.

**GENERAL BENEFITS**

Proposition 218 requires any local agency proposing to increase or impose a special assessment to “separate the general benefits conferred on a parcel.” The rationale for separating special and general benefits is to ensure that property owners are not charged a benefit assessment in order to pay for general benefits. Thus, a local agency carrying out a project that provides both special and general benefits may levy an assessment to pay for the special benefits, but must acquire separate funding to pay for the general benefits.

However, flood control operations such as the Services provide only special benefits. Special benefits are benefits that are “peculiar and distinct over and above general benefits located in the district or to the public at large.” Because flood control infrastructure protects particular identifiable parcels (including residents of the parcel and any appurtenant facilities or improvements) from damage due to inundation or force by rising floodwaters, the benefits are provided directly to those parcels, and to none other. By contrast, general benefits provided to the public at large are discussed in terms of general enhanced property values, provision of general public services such as police and fire protection, and recreational opportunities that are available to people regardless of their location.

The issue of general benefits merits further discussion, however, because flood control services and improvements have an obvious indirect relationship to the provision of general benefits. For example, the Services will protect parks in the Assessment District that may be used by people regardless of whether they own property in the District. But this indirect relationship does not mean that the Services will themselves provide any

---

12 California Constitution Article XII D 4.
14 California Constitution Article XII D 2(i).
15 Silicon Valley Taxpayers’ Association, Inc v. Santa Clara County Open Space Authority, 44 Cal 4th 450-56.
general benefits. Rather, the Services will provide direct special benefits to public parcels (such as parks and police facilities) that may themselves be used in the provision of general benefits.

More to the point, the public at large will be paying for the special benefits provided to benefiting public property, and specially-benefited property owners' assessments will not be used to subsidize general benefits provided to the public at large or to property outside the Assessment District. All property that is specially benefited by the Services will be assessed, including the police, fire, parks and other parcels used in the provision of general benefits. Thus, the general public will pay for a portion of the provision of the flood control Services because the assessed public agencies will use general taxes and other public revenue to pay their Assessments.

In conclusion, the Assessment Engineer finds that the Services are of distinct and direct special benefit to the property within the Assessment District. However, since the determination of special benefits is not well defined by law or industry practice, the Assessment Engineer establishes a minimum 5% requirement of funds and contributions from other sources for flood control Services and improvements within the Assessment District. This requirement for a minimum contribution from sources other than the Assessment will serve to cover any possible general benefits that may subsequently be determined to exist beyond those already paid for with Assessments to be levied on publicly owned parcels to be included in the Assessment District.

The proposed Assessment District's total budget for 2009-10 is $1,047,500. Therefore, TRILIA would need to obtain funding for the Services from sources other than the assessment in the amount of at least $52,365 (x 5%) to cover this requirement for a contribution from other sources.

**Benefit Finding and Zones of Benefit**

**Benefit Finding**

As noted, the assessment funds will be used to reduce the potential of damage and harm from levee failure and flooding throughout the proposed Assessment District. The cost of property damage alone from flooding is many times more than the present value of the annual Assessment rate. Therefore, this Engineer's Report finds that the Services are a...
significant, tangible benefit that should reasonably and rationally confer more special benefit to properties in the Assessment District than the proposed base assessment rate.\(^\text{17}\)

**ZONES OF BENEFIT**

Four zones of benefit have been established to support the proposed assessment. Parcels are grouped by zone with similar flood probability and flood depth characteristics as identified through a review of previously published engineering studies of the South Yuba County Area and consultation with MBK Engineers. These studies include MBK Engineers' memo dated January 27, 2009 titled, "Development of TRLIA Assessment District Boundaries" as well as the MBK Technical Memo dated November 3, 2005, titled "Lands Benefited By The TRLIA Program" and "Appendix VI Inundation Reduction Analysis of the Alternatives Analysis Report for the Phase 4 Feather River Levee Repair Project".

The zones of benefit have been designated:

- South
- Central A
- Central B
- East

and are shown in the figure below.

\(^{17}\) See benefit calculation under the previous footnote and Table 11 for calculation of the Base Assessment Rate.
These zones are used to apply appropriate policies and actions based upon hazard and risk. Accordingly, "Zones of Benefit" corresponding to the flood risk zones are used to assign special benefit by parcel within each Zone.
The zones of benefit are generally consistent with the zones used for the revised Three Rivers Levee Fee Nexus Study dated October 13, 2008 with the "South Zone" for this assessment corresponding to the "Plumas Lake" Zone from the nexus study. The "Central A", "Central B", and "East" zones for this assessment are generally consistent with the "Linda" zone from the nexus study.

**Assessment Apportionment**

The Assessment Engineer determined that the appropriate method of assessment should be based on the type of property, the relative size of the property and the level of potential damage to property. This method is further described below.

**Method of Assessment**

The next step in apportioning assessments is to determine the relative special benefit for each property. This process involves determining the relative benefit received by each property in relation to a "benchmark" property, a single family detached dwelling on one parcel of one acre or less in the South Zone\(^\text{18}\) (one "Single Family Equivalent Benefit Unit" or "SFE"). This SFE methodology is commonly used to distribute assessments in proportion to estimated special benefits. In this Engineer's Report, all properties are assigned an SFE value, which is each property's relative benefit in relation to a single family home on one parcel.

The relative benefit to properties from Services that reduce the potential for levee failure and flooding is described by the following equations:

\(^\text{18}\) Any of the four zones could be used as the benchmark.
Table 6 - Equations

<table>
<thead>
<tr>
<th>Equation</th>
<th>Results Table</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Total Benefit = Total Assessment</td>
<td></td>
</tr>
<tr>
<td>2 Assessment_{parcel} = Rate_{zone} \times \text{Landuse}_{parcel}</td>
<td>Table 15</td>
</tr>
<tr>
<td>3 Rate_{zone} = \text{Base Rate} \times \text{Flood Risk Factor}<em>{zone} \times \text{Flood Damage Factor}</em>{zone}</td>
<td>Table 14</td>
</tr>
<tr>
<td>4 \text{Base Rate} = \frac{\sum \text{Cost}}{\sum \text{SFE}_{adj.}}</td>
<td>Table 13</td>
</tr>
</tbody>
</table>

Table 7 - Factors

<table>
<thead>
<tr>
<th>Factor</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate_{zone}</td>
<td>Table 14, Equation 3</td>
</tr>
<tr>
<td>Landuse_{parcel}</td>
<td>Table 11</td>
</tr>
<tr>
<td>\text{BaseRate}</td>
<td>Table 13, Equation 4</td>
</tr>
<tr>
<td>\text{Flood Risk Factor}_{zone}</td>
<td>Table 8</td>
</tr>
<tr>
<td>\text{Flood Damage Factor}_{zone}</td>
<td>Table 9</td>
</tr>
<tr>
<td>\sum \text{Cost}</td>
<td>Table 5</td>
</tr>
<tr>
<td>\sum \text{SFE}_{adj.}</td>
<td>Table 12</td>
</tr>
</tbody>
</table>

That is, the special benefit conferred to property is a function of flood risk factors, flood damage factors, and landuse factors. The derivation of these factors is described in the sections below.
FLOOD RISK FACTORS

Flood risk factors were derived from Annual Exceedance Probabilities (AEPs) contained in the Inundation Reduction Analysis. The AEPs from this report were calculated for levees at several locations throughout the proposed Assessment District and represent the annual probability at which the flow in the adjacent river or canal will exceed the levee’s ability to hold back the flow. Each AEP is based on geotechnical and hydraulic data for that location, called an “index point.”

Each Zone of Benefit has multiple index points at which a levee failure would affect the zone. Conversely, a number of index points are located at points where a levee failure would affect more than one Zone of Benefit.

AEPs for each index point were multiplied by the number of miles for the corresponding length of levee. This process assumes that overall, the AEP for the entire length of levee associated with that index point is quite similar to the AEP for the index point effectively estimating the AEP for each mile of levee. Each mile of levee was then allocated to a Zone of Benefit using USGS topographic maps and flow patterns from the Inundation Reduction Analysis. The results were summed for each Zone of Benefit and then normalized so that the largest result was 1.0, thereby producing a Flood Risk Factor.

The resulting relative flood risk factors are shown in the table below.

<table>
<thead>
<tr>
<th>Zone</th>
<th>O&amp;M Flood Risk Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>1.000</td>
</tr>
<tr>
<td>Central A</td>
<td>0.290</td>
</tr>
<tr>
<td>Central B</td>
<td>0.290</td>
</tr>
<tr>
<td>East</td>
<td>0.140</td>
</tr>
</tbody>
</table>

FLOOD DAMAGE FACTORS

Flood damage is generally a function of the depth of flooding, with higher water levels causing greater damage to structures and property. Several sources of depth information were used, including the “Lower Feather River Floodplain Mapping Study” prepared by the
US Army Corps of Engineers (February 2005) and exterior-interior relationships and other data contained in the Inundation Reduction Analysis. Flood depth data from these different sources was superimposed on USGS topographic maps using GIS software where a uniform grid was created and flood depth at each point was calculated. The GIS software was then used to calculate an average depth for each Zone of Benefit.

The relationship between depth and damage was taken from Attachment VI.4 of the Inundation Reduction Analysis which contains a summary of damage factors taken from the US Army Corps of Engineers “Economic Guidance Memorandum.” The average flood depths and damage factors are shown in the table below.

### Table 9 - Average Flood Depths and Damage Factors

<table>
<thead>
<tr>
<th>Zone</th>
<th>Average Flood Depth (feet)</th>
<th>Flood Damage Factor</th>
<th>Normalized Flood Damage Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>5</td>
<td>0.532</td>
<td>1.000</td>
</tr>
<tr>
<td>Central A</td>
<td>4</td>
<td>0.471</td>
<td>0.885</td>
</tr>
<tr>
<td>Central B</td>
<td>2</td>
<td>0.321</td>
<td>0.603</td>
</tr>
<tr>
<td>East</td>
<td>1</td>
<td>0.230</td>
<td>0.432</td>
</tr>
</tbody>
</table>

**Value Factors by Property Type**

Relative value factors have been developed for various property use types, for both land and the structural improvements on land. These estimates are based primarily upon regional real estate values and replacement construction costs for recently constructed or sold properties, derived from County Assessor, real estate sales and other real property transaction data.

In order to adjust for the relative greater damage risk from flooding to structures and improvements versus raw land, a weighting factor has been applied to each component, with improvements assigned three times the weight as the underlying land.

Overall relative land use values are determined using the following formula:

\[
\text{Relative Land use Value} = (\text{Raw Land Weighting Factor} \times \text{Average Raw Land Value}) + (\text{Structure Replacement Weighting Factor} \times \text{Average Structure Replacement Value})
\]
Where

Raw Land Weighting Factor = 1.0
Structure Replacement Weighting Factor = 3.0

Table 10 below presents the factors used to calculate the normalized relative land use values by property type and the section below provides an additional textual discussion and summary of the value factors.

**TABLE 10 - NORMALIZED VALUE FACTORS BY PROPERTY TYPE**

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Average Raw Land Value (per acre)</th>
<th>Average Replacement Value (per acre)</th>
<th>Weighted Total Value</th>
<th>Normalized Relative Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>$50,000</td>
<td>$200,000</td>
<td>$650,000</td>
<td>1.0000</td>
</tr>
<tr>
<td>Premium for Residential over 1ac</td>
<td>$20,000</td>
<td>$5,000</td>
<td>$35,000</td>
<td>0.0538</td>
</tr>
<tr>
<td>Multi Family</td>
<td>$75,000</td>
<td>$300,000</td>
<td>$975,000</td>
<td>1.5000</td>
</tr>
<tr>
<td>Commercial/Industrial</td>
<td>$75,000</td>
<td>$350,000</td>
<td>$1,125,000</td>
<td>1.7308</td>
</tr>
<tr>
<td>Office</td>
<td>$100,000</td>
<td>$500,000</td>
<td>$1,600,000</td>
<td>2.4615</td>
</tr>
<tr>
<td>Institutional</td>
<td>$50,000</td>
<td>$200,000</td>
<td>$650,000</td>
<td>1.0000</td>
</tr>
<tr>
<td>Storage</td>
<td>$30,000</td>
<td>$50,000</td>
<td>$180,000</td>
<td>0.2759</td>
</tr>
<tr>
<td>Agricultural+Rangeland</td>
<td>$10,000</td>
<td>$5,000</td>
<td>$25,000</td>
<td>0.0385</td>
</tr>
<tr>
<td>Golf Course</td>
<td>$25,000</td>
<td>$25,000</td>
<td>$100,000</td>
<td>0.1638</td>
</tr>
<tr>
<td>Vacant</td>
<td>$50,000</td>
<td>$10,000</td>
<td>$80,000</td>
<td>0.1231</td>
</tr>
</tbody>
</table>

\[ c = (1.0 \times a) + (3.0 \times b) \]

**RESIDENTIAL PROPERTIES**

All improved residential properties with a single residential dwelling unit on one acre or less are assigned a land use factor of 1.0 SFE. Detached or attached houses, zero-lot line houses, town homes and condominiums are included in this category. Residential properties on parcels that are larger than 1 acre receive additional benefit and are assigned an increased land use factor on a "per acre" basis.

Properties with more than one residential unit are designated as multi-family residential properties and are assigned land use factors on a per acre basis, since there is a relationship between parcel size, structure size and relative benefits. The land use factor for multi-family properties was determined to be 1.500 SFEs per acre.
COMMERCIAL/INDUSTRIAL & OFFICE PROPERTIES

Commercial and industrial properties are assigned a land use factor on a per acre basis, since there is a relationship between parcel size, structure size and relative benefits. The land use factor for commercial and industrial properties was determined to be 1.7308 SFES per acre. The land use factor for office properties was determined to be 2.4615 SFES per acre.

VACANT/UNDEVELOPED AND AGRICULTURAL PROPERTIES

The land use factor for vacant properties was determined to be 0.1231 SFES per acre. Agricultural land has minimal improvements and few, if any, structures that would be damaged by flooding, and is assigned benefit "per acre." The land use factor for agricultural properties was determined to be 0.0385 SFES per acre.

PUBLICLY OWNED PARCELS

Publicly owned parcels were individually reviewed and assigned the most appropriate property type. For example, publicly owned office buildings were assigned to the Office property type.

Article XIIIID, Section 4 of the California Constitution states that publicly owned properties shall not be exempt from assessment unless there is clear and convincing evidence that those properties receive no special benefit.

All public properties that are specially benefited are assessed. Publicly owned property that is used for purposes similar to private residential, commercial, industrial or institutional uses is benefited and assessed at the same rate as such privately owned property.

OTHER PROPERTIES

The land use factor for institutional properties and, for example, churches, is determined to be assessed at 1.0 per parcel. The land use factor for storage properties was determined to be 0.2769 SFES per acre.

SUMMARY OF BENEFITS FOR EACH PROPERTY TYPE

Land use factors for each property type are summarized in the table below.
**TABLE 11 - LAND USE FACTORS FOR PROPERTY TYPES**

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Landuse Factor (SFEs)</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>1.0000</td>
<td>per parcel</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>1.5000</td>
<td>per acre</td>
</tr>
<tr>
<td>Commercial/Industrial</td>
<td>1.7308</td>
<td>per acre</td>
</tr>
<tr>
<td>Office</td>
<td>2.4615</td>
<td>per acre</td>
</tr>
<tr>
<td>Institutional</td>
<td>1.0000</td>
<td>per parcel</td>
</tr>
<tr>
<td>Storage</td>
<td>0.2769</td>
<td>per acre</td>
</tr>
<tr>
<td>Agricultural</td>
<td>0.0385</td>
<td>per acre</td>
</tr>
<tr>
<td>Range Land</td>
<td>0.0385</td>
<td>per acre</td>
</tr>
<tr>
<td>Vacant</td>
<td>0.1231</td>
<td>per acre</td>
</tr>
</tbody>
</table>

**RATES**

Assessment rates are determined by dividing the total benefit by the number of Single Family Equivalents (SFEs) in order to determine an assessment rate per SFE. In order to account for the differing flood risks and flood damages for each of the four zones of benefit, an “adjusted” SFE total is used for this calculation. The Adjusted SFE total is calculated by multiplying the total SFEs for each zone by the flood risk factor and the flood damage factor for that particular zone.

The calculation of adjusted SFEs is shown in the table below.

**TABLE 12 - ADJUSTED SFEs**

<table>
<thead>
<tr>
<th>Zone</th>
<th>SFEs</th>
<th>Flood Risk Factor</th>
<th>Flood Damage Factor</th>
<th>Adjusted SFEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>3,982.11</td>
<td>1.000</td>
<td>1.000</td>
<td>3,982.11</td>
</tr>
<tr>
<td>Central A</td>
<td>2,918.84</td>
<td>0.290</td>
<td>0.885</td>
<td>749.12</td>
</tr>
<tr>
<td>Central B</td>
<td>5,183.27</td>
<td>0.290</td>
<td>0.603</td>
<td>906.40</td>
</tr>
<tr>
<td>East</td>
<td>964.92</td>
<td>0.140</td>
<td>0.432</td>
<td>58.36</td>
</tr>
<tr>
<td>Total</td>
<td>5,695.99</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The calculation of a base assessment rate is shown in the table below. This base rate is then multiplied by the appropriate flood risk, the flood damage factor and, if applicable, a
credit for the existing RD 784 assessment is added to derive assessment rates for each zone.

**TABLE 13 – CALCULATION OF O&M BASE RATE**

<table>
<thead>
<tr>
<th>Services to be Funded by Assessment</th>
<th>$800,000.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost to Provide Baseline Level of Service</td>
<td>247,500.00</td>
</tr>
<tr>
<td><strong>Total Services Cost</strong></td>
<td><strong>$1,047,500.00</strong></td>
</tr>
<tr>
<td><strong>Total Adjusted Single Family Equivalents (SFEs)</strong></td>
<td>5,695.99</td>
</tr>
<tr>
<td><strong>Total Assessment per SFE for Services (Base Rate)</strong></td>
<td><strong>$183.90</strong></td>
</tr>
</tbody>
</table>

1 from Table 3, Operations and Maintenance Costs

ASSESSMENT RATE SUMMARY

For each of the Zones of Benefit, the base rates were multiplied by the Relative Benefit Unit Factors and a credit for the existing RD 784 assessment was added where appropriate to obtain the Total Assessment Rate for each Zone of Benefit. These Total Assessment Rates are summarized in the table below.

Properties within two of the zones of benefit, South and Central A, pay an existing assessment to RD 784. A portion of this existing assessment covers maintenance of levees that benefit the proposed Assessment District. The September 23, 2008 MBK budget memo indicates that $247,500 is currently spent on levee maintenance. Therefore, an adjustment of $35.86 per SFE\(^{10}\) is credited to the South and Central A rates, as shown in the table below.

\(^{10}\) $247,500 divided by 6,900.95 SFEs in the South and Central A zones = $35.86/SFE
### TABLE 14 - ZONE RATES

<table>
<thead>
<tr>
<th>Zone</th>
<th>Flood Risk</th>
<th>Flood Damage</th>
<th>Benefit ($ SFE)</th>
<th>RD 784 Credit ($ SFE)</th>
<th>Zone Rate ($ SFE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>South</td>
<td>1.000</td>
<td>1.000</td>
<td>$183.90</td>
<td>($35.86)</td>
<td>$148.04</td>
</tr>
<tr>
<td>Central A</td>
<td>0.290</td>
<td>0.885</td>
<td>$47.20</td>
<td>($35.86)</td>
<td>$11.33</td>
</tr>
<tr>
<td>Central B</td>
<td>0.290</td>
<td>0.603</td>
<td>$32.16</td>
<td>($35.86)</td>
<td>$32.16</td>
</tr>
<tr>
<td>East</td>
<td>0.140</td>
<td>0.432</td>
<td>$11.12</td>
<td>($35.86)</td>
<td>$11.12</td>
</tr>
</tbody>
</table>

The rates for each property type and zone are summarized in the table below.

### TABLE 15 - ASSESSMENT RATES BY PROPERTY TYPE AND ZONE

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Landuse Factor</th>
<th>South Zone</th>
<th>Central A</th>
<th>Central B</th>
<th>East</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single Family</td>
<td>1.0000</td>
<td>$148.04</td>
<td>$11.33</td>
<td>$32.16</td>
<td>$11.12</td>
<td>per parcel</td>
</tr>
<tr>
<td>Multi-Family</td>
<td>1.5000</td>
<td>$222.06</td>
<td>$17.00</td>
<td>$48.24</td>
<td>$16.68</td>
<td>per acre</td>
</tr>
<tr>
<td>Commercial/Industrial</td>
<td>1.7308</td>
<td>$256.22</td>
<td>$19.62</td>
<td>$55.66</td>
<td>$19.25</td>
<td>per acre</td>
</tr>
<tr>
<td>Office</td>
<td>2.4615</td>
<td>$364.39</td>
<td>$27.90</td>
<td>$79.16</td>
<td>$27.38</td>
<td>per acre</td>
</tr>
<tr>
<td>Institutional</td>
<td>1.0000</td>
<td>$148.04</td>
<td>$11.33</td>
<td>$32.16</td>
<td>$11.12</td>
<td>per parcel</td>
</tr>
<tr>
<td>Storage</td>
<td>3.2789</td>
<td>$40.99</td>
<td>$3.14</td>
<td>$8.90</td>
<td>$3.08</td>
<td>per acre</td>
</tr>
<tr>
<td>Agricultural</td>
<td>0.0385</td>
<td>$5.70</td>
<td>$0.44</td>
<td>$1.24</td>
<td>$0.43</td>
<td>per acre</td>
</tr>
<tr>
<td>Range Land</td>
<td>0.0385</td>
<td>$5.70</td>
<td>$0.44</td>
<td>$1.24</td>
<td>$0.43</td>
<td>per acre</td>
</tr>
<tr>
<td>Vacant</td>
<td>0.1231</td>
<td>$18.22</td>
<td>$1.40</td>
<td>$3.96</td>
<td>$1.37</td>
<td>per acre</td>
</tr>
</tbody>
</table>

**EXAMPLE RATES FOR SELECTED PROPERTY TYPES**

Example rates for selected property types are shown in the table below.
TABLE 16 - EXAMPLE RATES FOR SELECTED PROPERTY TYPES

<table>
<thead>
<tr>
<th>Property Type</th>
<th>Annual Assessment ($ per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Zone</td>
</tr>
<tr>
<td></td>
<td>South</td>
</tr>
<tr>
<td>Existing Single Family Residence on 1 acre or less</td>
<td>$148.04</td>
</tr>
<tr>
<td>5 acre ranchette</td>
<td>$176.53</td>
</tr>
<tr>
<td>100 acre farm</td>
<td>$569.94</td>
</tr>
<tr>
<td>Business on a 1/4 acre parcel</td>
<td>$64.06</td>
</tr>
</tbody>
</table>

APPEALS OF ASSESSMENTS LEVIED TO PROPERTY

Any property owner who feels that the assessment levied on their property is in error as a result of incorrect information being used to apply the foregoing method of assessment may file a written appeal with the Executive Director of the Three Rivers Levee Improvement Authority or his or her designee. Any such appeal is limited to correction of an assessment during the then current fiscal year. Upon the filing of any such appeal, the Executive Director or his or her designee will promptly review the appeal and any information provided by the property owner. If the Executive Director or his or her designee finds that the assessment should be modified, the appropriate changes shall be made to the assessment roll. If any such changes are approved after the assessment roll has been filed with the County for collection, the Executive Director or his or her designee is authorized to refund to the property owner the amount of any approved reduction. Any dispute over the decision of the Executive Director or his or her designee shall be referred to the Board of Directors of the Three Rivers Levee Improvement Authority and the decision of the Board shall be final.

DURATION OF THE ASSESSMENT

If approved by property owners in an assessment ballot proceeding conducted pursuant to the Article and Government Code Section 53750 et seq., the assessments can be levied annually commencing with fiscal year 2009-10. Technically, the duration of the assessment is one year, but it may be renewed each year, without another assessment ballot proceeding, by a vote of the Three Rivers Levee Improvement Authority Board of Directors. The assessment cannot be increased in future years without approval from property owners in another assessment ballot proceeding, except for an annual adjustment.
tied to the change in the U.S. Department of Labor, Bureau of Labor Statistics Consumer Price Index for the San Francisco Bay Area, not to exceed 4% per year.

CRITERIA AND POLICIES
This sub-section describes the criteria that shall govern the expenditure of assessment funds and ensures equal levels of benefit for properties of similar type. The criteria established in this Report, as finally confirmed, cannot be substantially modified; however, the Board may adopt additional criteria to further clarify certain criteria or policies established in this Report or to establish additional criteria or policies that do not conflict with this Report.

ASSESSMENT FUNDS MUST BE EXPENDED WITHIN THE PROPOSED ASSESSMENT DISTRICT
The net available assessment funds, after incidental, administrative and other costs, shall be expended exclusively for Services provided to levees that protect property within the boundaries of the proposed Assessment District.

RESERVE FUND
The Services budget contains a provision for a reserve fund. Such reserve funds are typically used in Reclamation Districts as costs tend to fluctuate from year to year. The balance of the reserve fund should not exceed one year of Services costs for operations and maintenance. This maximum may be adjusted in future years by a resolution of the TRLIA Board of Directors.

EXISTING FUNDS
Levee maintenance and flood control services currently providing the Baseline Services are funded with approximately $247,500 from the existing annual RD 784 assessment. The intent of the Assessment is that this existing assessment revenue will be continued by RD 784 to fund Baseline Services and the proposed Assessment will pay for the additional Services identified above (including repayment of the local-share capital funding activities.)

SENIOR AND LOW-INCOME EXEMPTIONS
The Government Code does not provide for exemptions to assessments for senior citizen or low-income property owners. If such a program were desired, TRLIA or another agency could pay this assessment on behalf of the exempted property owners with funds collected from one or more non-assessment sources.
WHEREAS, the Board of Directors of the Three Rivers Levee Improvement Authority is proceeding with the proposed formation of the Levee and Flood Control Facilities Assessment District under the California Codes Government Code sections 54710 et seq. (the "Code") and Article XIIID of the California Constitution (the "Article"), to proceed with the proposed levy of assessments;

WHEREAS, the undersigned Engineer of Work has prepared and filed a report presenting an estimate of costs, a diagram for the Assessment District and an assessment of the estimated costs of the Services upon all assessable parcels within the Assessment District;

NOW, THEREFORE, the undersigned, by virtue of the power vested in me under said Code and Article and the order of said Board of Directors, hereby make the following assessment to cover the portion of the estimated cost of said Services, and the costs and expenses incidental thereto to be paid by the Assessment District.

The amount to be paid for said Services and the expense incidental thereto, to be paid by the Assessment District for the fiscal year 2009-10 is generally as follows:

**SUMMARY COST ESTIMATE**

<table>
<thead>
<tr>
<th>Services Costs</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration</td>
<td>$302,900</td>
</tr>
<tr>
<td>Operations &amp; Maintenance</td>
<td>$378,600</td>
</tr>
<tr>
<td>Equipment Replacement Allowance</td>
<td>$50,500</td>
</tr>
<tr>
<td>Allowance for land acquisition for maintenance purposes</td>
<td>$105,200</td>
</tr>
<tr>
<td>Emergencies/Contingencies</td>
<td>$210,300</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,047,500</strong></td>
</tr>
<tr>
<td>Less Funding for Baseline Services</td>
<td>($247,500)</td>
</tr>
<tr>
<td><strong>Net Amount to be Assessed</strong></td>
<td><strong>$800,000</strong></td>
</tr>
</tbody>
</table>
An Assessment Diagram is hereto attached and made a part hereof showing the exterior boundaries of said Assessment District. The distinctive number of each parcel or lot of land in said Assessment district is its Assessor Parcel Number appearing on the Assessment Roll.

I do hereby assess and apportion said net amount of the cost and expenses of said Services, including the costs and expenses incident thereto, upon the parcels and lots of land within said Assessment District, in accordance with the special benefits to be received by each parcel or lot, from the Services, and more particularly set forth in the Cost Estimate and Method of Assessment hereto attached and by reference made a part hereof.

The assessment is subject to an annual adjustment tied to the annual change in the US Department of Labor Consumer Price Index (CPI-U) for the San Francisco Bay Area as of December of each succeeding year the ("CPI"), with the maximum annual adjustment not to exceed 4%. Any change in the CPI in excess of 4% shall be cumulatively reserved as the “Unused CPI” and shall be used to increase the maximum authorized assessment rate in years in which the CPI is less than 4%. The maximum authorized assessment rate is equal to the maximum assessment rate in the first fiscal year the assessment was levied adjusted annually by the minimum of 1) 4% or 2) the change in the CPI plus any Unused CPI as described above.

If property owners, in an assessment ballot proceeding, approve the initial fiscal year benefit assessment for the special benefits to their property including the CPI adjustment schedule, the assessment may be levied annually and may be adjusted by up to the maximum annual CPI adjustment without any additional assessment ballot proceeding. In the event that in future years the assessments are levied at a rate less than the maximum authorized assessment rate, the assessment rate in a subsequent year may be increased up to the maximum authorized assessment rate without any additional assessment ballot proceeding.

Each parcel or lot of land is described in the Assessment Roll by reference to its parcel number as shown on the Assessor’s Maps of the County of Yuba for the fiscal year 2009-10. For a more particular description of said property, reference is hereby made to the deeds and maps on file and of record in the office of the County Recorder of Yuba County.

I hereby place opposite the Assessor Parcel Number for each parcel or lot within the Assessment Roll, the amount of the assessment for the fiscal year 2009-10 for each parcel or lot of land within the said Assessment District.²⁰

²⁰ Each parcel has a calculated assessment based on the estimated level of special benefit to the property.
The Assessment District includes all properties within the proposed boundaries of the Levee and Flood Control Facilities Assessment. The boundaries of the Assessment District are displayed on the following Assessment Diagram. The lines and dimensions of each lot or parcel within the Assessment District are those lines and dimensions as shown on the maps of the Assessor of the County of Yuba, for fiscal year 2009-10, and are incorporated herein by reference, and made a part of this Diagram and this Report.
EXHIBIT A

Legend

- Assessment District Boundary
- Parcels
- Highways and Major Roads
- Three Rivers Levee Boundary

Three Rivers Levee Improvement Authority
Levee and Flood Control Facilities Assessment District

Assessment Diagram

Three Rivers Levee

Marysville

EXHIBIT A

Three Rivers Levee Improvement Authority
Levee and Flood Control Facilities Assessment District

Legend

- Assessment District Boundary
- Parcels
- Highways and Major Roads

Three Rivers Levee Boundary

Marysville
APPENDIX A – ASSESSMENT ROLL, FY 2009-10

The Assessment Roll is made part of this report and is available for public inspection during normal office hours. Each lot or parcel listed on the Assessment Roll is shown and illustrated on the latest County Assessor records and these records are, by reference, made part of this report. These records shall govern for all details concerning the description of the lots of parcels.
MEMORANDUM

DATE: May 11, 2009

TO: Paul Brunner, Executive Director Three Rivers Levee Improvement Authority

FROM: Larry Dacus

SUBJECT: TRLIA Assessment District Boundaries – Review of Northeast Boundary, South of Hammonton-Smartville Road

Mr. Don Staas wrote a letter to TRLIA dated April 14, 2009 (Attachment 1). In this letter, Mr. Staas questioned whether certain parcels that he owned located in the northeast portion (East Zone) of the proposed Assessment District and south of Hammonton-Smartville Road really would flood if the upper Yuba Levee were not present. On April 27, 2009, Paul Brunner and I met with Mr. Staas at the parcels in question. Mr. Staas provided a tour of the area and pointed out certain topographical features that would prevent shallow water from moving across the parcels. I had with me a map which indicated average flood depths in this area of the Assessment District (Attachment 2). The average flood depth on the Staas Parcels is indicated at less than 1 foot. These flood depths were determined using a finite element hydraulic model with a standard grid size of 500 feet by 500 feet. No attempt was made to model the impacts of minor roadways such as Hammonton-Smartville Road. Field observations indicate that this roadway would block flood depths of less than a foot from proceeding south at this location and would direct that flow to the southwest. Review of aerial photographs taken in 1950 after flood flows exited from the Goldfields in this location do not indicate that flows crossed Hammonton-Smartville Road at this location.

It is my opinion that the 2-Dimensional hydraulic model did not adequately model the impacts of the Hammonton-Smartville Road in this vicinity for very shallow flow depths. Flow depths less than a foot as indicated by the model would be deflected to the southwest in existing drainage channels and would not cross Hammonton-Smartville Road to continue to the south. I therefore recommend removing the parcels south of Hammonton-Smartville Road in the East Zone as shown in cross hatch on the attached map (Attachment 3).

Larry Dacus
Supervisory Civil Engineer
MBK Engineers

Cc: Mr. Don Staas
Mr. Paul Brunner, TRLIA
1114 Yuba Street, Suite 218
Marysville, Calif. 95901

Re: Yuba County Property Tax Assessment
Nos: 19-190-107, 19-190-083, 19-240-025
and 19-240-026

Dear Mr. Brunner:

The above parcels constitute an area which juts south of Hammonton-Smartsville Road and west of Brophy Road in the TRLIA East Assessment area.

I continue to be unable to understand how this area can be subject to flooding from a levee break which would be approximately 2,000 feet west of Brophy Road.

In seeking answers to my questions I was referred by Lucy Co to Larry Dacus of MDK Engineers. In a telephone conversation with Larry, he explained the type of modeling used to determine the inclusion of these parcels within the area. He stated that flood water would be very shallow, (inches to a foot or so) and probably only over a small portion of these parcels.

Questions which remain unanswered for me are:

1. What was the date of the map used to create the model?
2. Were on-site observations made to verify that present land conditions match those on the modeling map?
3. Was the Yuba River water depth used for the model anticipated to over top the existing patrol road, over top the scheduled rebuilt levee or some other depth?

Over the years the fields in these parcels have been leveled and re-leveled several times resulting in all the irrigation and winter drainage water moving from east to west. Therefore if there were areas covered by flood water, that water would also move southwest. This would indicate that the major portion, if not all, of the area encompassed by Hammonton Smartsville Rd., Brophy Rd., North Beale Rd. and Griffith Ave. should also be included in TRLIA Assessment East Area.

If the above cited parcels are indeed subject to a few inches or foot or so of flood water over some areas, this would not be a real impact because those areas are covered by as much
as 8 to 10 inches of water during the growing season, (May through August) and again with straw decomposition water during the winter months, (mid October through mid March). During winter storms the water depths sometimes gets a foot or more deep as it is now.

In order for me to truly understand if these parcels and therefore the entire area should be in TRLIA East Assessment area, I request that I meet with you and Larry Dacus on-site, with your maps so we can see exactly where the flood waters are modeled to cover. I can be reached by phone at (530) 743-5612 or cell (530) 300-5214. I suggest that we meet as soon as possible.

Sincerely,

Donald Staas

Cc: Larry Dacus, MBK Engineers
DS:fs
DATE: May 27, 2009

TO: Paul Brunner, Executive Director Three Rivers Levee Improvement Authority

FROM: Larry Dacus

SUBJECT: Revision of TRLIA Assessment District Boundary, East Boundary of Central B Zone

During the public information process for the proposed Maintenance Assessment District, TRLIA met with several landowners to discuss why their property was included in the assessment district. One group of landowners was located along the most eastern edge of the Central B Zone of the assessment district. After meeting with these landowners, TRLIA staff reviewed information on these parcels. Several of these parcels were included in the assessment district because more than 50% of the parcel received benefit from the levees to be maintained. However, upon closer investigation, it was determined that in many cases the portion of the parcel that was benefitted from the levees had a residual floodplain from either Reed’s Creek, Hutchinson’s Creek or the tributaries to these Creeks.

Since the entire parcel was not receiving levee protection benefit and the portion that was benefitted was still subject to flooding from other sources, an additional evaluation of these parcels was done. The portion of the parcel receiving benefit was determined. Then the residual floodplain on the parcel portion benefitted was determined. If the residual floodplain covered more than 50% of the portion benefitted, it was decided to remove that parcel from the assessment district since it was only receiving a limited benefit from the levees. This resulted in the removal of approximately 27 parcels as shown on the attached map. Because these parcels are still significantly impacted by residual floodplains, it is recommended that the eastern boundary of the Central B Zone be revised as indicated on the attached map.

Larry Dacus
Supervisory Civil Engineer
MBK Engineers

ATTACHMENT:
Map 1
THREE RIVERS LEVEE IMPROVEMENT AUTHORITY

MINUTES - BOARD OF DIRECTORS

MAY 26, 2009 - SPECIAL MEETING

A meeting of the Board of Directors of the Three Rivers Levee Improvement Authority was held on the above date, commencing at 1:50 p.m., within the Government Center, Marysville, California, with a quorum being present as follows: Directors Rick Brown, Jerry Crippen, Don L. Graham, Mary Jane Griego, and John Nicoletti. Also present were Executive Director Paul Brunner, Assistant Counsel Andrea Clark, and Clerk of the Board of Supervisors/Secretary Donna Stottlemyer. Chair Griego presided.

ACTION ITEMS

Upper Yuba River Levee Improvement Project: Executive Director Paul Brunner recapped improvements, funding request to the State, and responded to Board inquiries.

Mr. Tom Eres, Hofman Ranch, expressed concern regarding the local share and receiving credits from the State.

Upon motion of Director Crippen, seconded by Director Nicoletti, and unanimously carried, the Board took the following actions:

- Adopted Resolution No. 2009-06, which is entitled: "A RESOLUTION BY THE BOARD OF DIRECTORS OF THREE RIVERS LEVEE IMPROVEMENT AUTHORITY AUTHORIZING SPECIFIC ACTIONS IN REGARD TO THE FUNDING PROGRAM FOR THE UPPER YUBA RIVER LEVEE IMPROVEMENT PROJECT"; and

- Adopted Resolution No. 2009-07, which is entitled: "A RESOLUTION BY THE BOARD OF DIRECTORS OF THREE RIVERS LEVEE IMPROVEMENT AUTHORITY AUTHORIZING THE AUTHORITY TO ACCEPT FUNDS FROM THE STATE OF CALIFORNIA," in the amount of $47.475 million for the Upper River Levee Improvement Project, and authorizing the Executive Director to execute the funding agreement with the California Department of Water Resources and requests for disbursements to be made under the funding agreement; and
• Authorized the Executive Director to execute the agreement with Reclamation District 784 whereby the District agrees to execute an agreement with the State to ensure operation and maintenance of the levee system.

BOARD AND STAFF MEMBERS’ REPORTS

Reports were received on the following:

Director Griego: Ballot approval of Benefit Assessment District

Executive Director Paul Brunner: Status of funding from State and paperwork required to receive monies

ADJOURNMENT

There being no further business to come before the Three Rivers Levee Improvement Authority Chair Griego adjourned the meeting at 2:04 p.m.

__________________________
Chair

ATTEST: DONNA STOTTLEMEYER
CLERK OF THE BOARD OF SUPERVISORS
AND SECRETARY OF THE PUBLIC AUTHORITY

__________________________  __________________
Approved: __________________