



**TEHAMA COUNTY FLOOD CONTROL &  
WATER CONSERVATION DISTRICT**

9380 SAN BENITO AVENUE, GERBER, CA 96035

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[HTTP://WWW.TEHAMACOUNTYWATER.CA.GOV](http://www.tehamacountywater.ca.gov)

## REQUEST FOR QUALIFICATIONS

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# Tehama County Flood Management Feasibility Studies for Gerber and Vina

**PROPOSALS ARE TO BE SUBMITTED TO:**

Ryan Teubert, Flood Control and Water Resources Manager

Attn: Feasibility Studies

Tehama County Public Works

9380 San Benito Avenue

Gerber, CA 96035

**SUBMISSION DUE DATE:**

No later than 4PM (PST)

October 17, 2017

**QUESTIONS MAY BE DIRECTED TO BOTH:**

Ryan Teubert, CFM  
(530) 385-1462 ext. 3020  
[RTeubert@tcpw.ca.gov](mailto:RTeubert@tcpw.ca.gov)

Nichole Bethurem (for process)  
(530) 385-1462 ext. 3045  
[NBethurem@tcpw.ca.gov](mailto:NBethurem@tcpw.ca.gov)

**REQUEST FOR QUALIFICATIONS**  
**FOR**  
**Tehama County**  
**FLOOD MANAGEMENT FEASIBILITY STUDIES**

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## **A. GENERAL INFORMATION**

### **Purpose**

This Request for Qualifications (RFQ) is being issued to interested consultants who wish to be considered for selection to provide services to Tehama County to prepare feasibility studies to evaluate structural and nonstructural actions to reduce the flood risk for the small communities of Vina and Gerber. Figure 1 is a location map for these communities.

Interested consultants are invited to submit a Statement of Qualifications (SOQ) for preparation of the feasibility studies and associated tasks listed in Section D, Consultant Services. All SOQs shall be submitted in accordance with the format and information listed in Section E, SOQs for Professional Services – Submittal Requirements.

Tehama County reserves the right to issue additional RFQ(s) for the performance of any or all of these services during the service period specified below. Tehama County may select qualified consultants that submit SOQs in response to this RFQ, and/or any subsequent RFQ, to perform all, some, or any of the consultant services required by Tehama County.

The issuance of this RFQ shall not be interpreted as, and does not constitute, a representation by Tehama County that any specific consultant or consultants will be retained to perform any of the services described herein, and a consultant shall not acquire any right or entitlement to be retained for such purpose by virtue of submitting an SOQ in response to this RFQ.

### **Selection Process**

After the submittal deadline has passed, a selection committee comprised of representatives from Tehama County, and others as appropriate, will review and rate each of the consultant(s) based on the SOQs received for the subject areas listed in Section D. Consultants will be rated according to Attachment 1, SOQ Rating Form. Interviews may be held at the discretion of the selection committee.

County employees will not participate in the selection process when those employees have a relationship with a person or business entity submitting a proposal which would subject those employees to the prohibition of Sections 1090, 4523.12 and 87100 of the Government Code. Any person or business entity submitting a proposal who has such a relationship with a County or City employee who may be involved in the selection process shall advise the County of the name of the employee in the proposal.

The County reserves the right to seek clarification or additional information from any vendor throughout the solicitation process. The County may require a vendor's representative to answer questions, present a demonstration and/or samples to the Evaluation Committee. The County reserves the right to select the firm which in its sole judgment, best meets the needs of the County. The order of ranking is not the sole criterion for recommending contract award.

After considering the factors outlined in Sections D and E, a recommendation will be made to the Tehama County Board of Supervisors to enter into a contract with a

consulting firm. Upon approval of a consultant by the Board of Supervisors, all applicants will be notified by mail of the County's selection.

Evaluation factors for the consultant teams will include the following:

- Experience in preparing flood management feasibility studies;
- Experience working on levees regulated by the Central Valley Flood Protection Board (CVFPB) and the U.S. Army Corps of Engineers (USACE);
- Knowledge of the Central Valley Flood Protection Plan, Mid and Upper Sacramento River Regional Flood Management Plan, and Sacramento River Basin-Wide Feasibility Study; and
- Qualifications, experience, and client service of key personnel, as well as ability to provide high-quality deliverables and cost-efficient service within the specified time parameters.

The selected consultant team shall have the appropriate resources to conduct work as outlined in the Agreement under the Consultant Services, including but not limited to availability to provide services on short notice. **The selected consultant will be required to prepare the final scope of work for the contract between DWR and the County at no cost to the County.**

All submittals will remain in effect for at least ninety (90) days after submission deadline. The selected vendor will be required to execute an agreement with the County for the services requested within ninety (90) days of the County's notice of intent to award. If agreement on terms acceptable to the County cannot be achieved within that timeframe, or if, after reasonable attempts to negotiate such terms, it appears that an agreement will not be possible, as determined at the sole discretion of the County, the County reserves the right to retract any notice of intent to award and proceed with awards to other vendors.

A respondent may withdraw a submittal at any time prior to the submission deadline with a written notification of withdrawal signed by the respondent or his/her authorized agent. The respondent must, in person, retrieve the entire sealed submission package. Another proposal may be submitted prior to the deadline but may not be changed after the designated submission deadline.

### **Service Period**

The selected contractor will be expected to begin work immediately upon Task 1 identified in Section D upon receipt of Notice to Proceed. After the County's execution of an agreement with DWR, the County will negotiate and execute a contract with the selected consultant and issue a Notice to Proceed. The period during which the consultant services described herein will be performed will extend from approximately November 2017 through December 2018. All proposals received must address the scope of work for administering the program in a timely fashion.

## B. BACKGROUND INFORMATION

Tehama County has received from the State of California, Department of Water Resources (DWR), Small Communities Flood Risk Reduction Program (SCFRRP) grants for the small communities of Vina and Gerber. These grants are intended to fund feasibility studies to evaluate alternatives to reduce flood risk in these small communities. Tehama County's goal is to develop flood control alternatives to protect these communities in manner which meets the Federal Emergency Management Agency (FEMA) 100-year level of flood protection requirements, and/or to identify nonstructural actions to further reduce the consequences in the event of flooding. Where structural improvements are not feasible, nonstructural actions will be evaluated. Flood Management information for these small communities is documented in the Mid and Upper *Sacramento River Regional Flood Management Plan*, available for download at [www.musacrfmp.com](http://www.musacrfmp.com). **Figure 1** shows the location of the small communities and the levee systems that protect them.

## C. TENTATIVE SCHEDULE

RFQ issued.....	September 21, 2017
SOQs due.....	October 17, 2017
Selection Panel review.....	October 20, 2017
Selection of Consultant.....	October 25, 2017
Notice to Proceed.....	October 30, 2017

It is important that the consultant team(s) selected be able to respond quickly during agreement negotiations and initiate work as soon as possible after full execution of the agreement(s).

## D. CONSULTANT SERVICES

The following is a general task list of services to be provided by the consultant team(s):

1. Consultant will be required to prepare a scope of work for DWR approval at **NO** cost to the County. Once the County has received a signed contract from DWR, the County will enter into negotiations with the selected consultant to negotiate a contract scope of work and cost.
2. Provide support to manage the SCFRRP grants.
3. Coordinate with DWR as necessary.
4. Develop and maintain project-specific budgets and schedules.
5. Provide support in development of a Communication and Engagement Plan that identifies and encourages active participation from local citizens and stakeholders.
6. Provide support to hold public meetings and stakeholder outreach.
7. Provide support to seek community input on the development of the feasibility study and defining project goals and objectives, describe problems and opportunities, identify constraints and prepare an inventory of present and future

conditions.

8. Coordinate on the development of project-specific feasibility study scopes and budgets with DWR.
9. Assemble existing flood management data and make recommendations regarding additional data needs.
10. Collect additional data and perform analysis necessary to develop feasibility-level information to support alternative development and evaluation, and perform trade-off analyses.
11. Develop structural and nonstructural actions to reduce flood risk.
12. Assess opportunities to efficiently integrate multiple benefits into the project alternatives.
13. Conduct screening-level analysis of alternatives to determine alignment with the framework for planning implementation in accordance with the principals of Integrated Water Management and development of multi-benefit projects.
14. Conduct 'constraints analysis' screening level environmental analysis of proposed alternatives.
15. Identify regulatory permits required to complete proposed alternatives.
16. Develop finance plans that identify options for funding the recommended alternative for each community including possible partnerships and methodologies for cost-sharing based on identified project beneficiaries.
17. Prepare draft & final feasibility studies.

The consultant team selected shall have a project manager with experience in the above activities and will be responsible for ensuring high-quality deliverables and service. All work completed by the contractor under this project will be the property of the County of Tehama.

The consultant shall review, and be able to complete all the tasks included in the initial Vina and Gerber Grant Applications in Attachment's 4 and 5.

## **E. SOQS FOR PROFESSIONAL SERVICES – SUBMITTAL REQUIREMENTS**

Consultants interested in responding to this RFQ shall submit in writing an SOQ providing all the information requested within Section D. CONSULTANT SERVICES in the format specified below. The consultant's SOQ will be considered complete if all requested information is provided.

Please direct all questions regarding this RFQ in writing via email to Ryan Teubert at [RTeubert@tcpw.ca.gov](mailto:RTeubert@tcpw.ca.gov) and Nichole Bethurem at [NBethurem@tcpw.ca.gov](mailto:NBethurem@tcpw.ca.gov). The deadline to submit questions is 12:00 PM on October 10, 2017, any questions submitted after that date will not be answered. Questions will be answered by addenda sent via e-mail by October 12, 2017, **the respondent is solely responsible for providing their e-mail address to the County by October 10, 2017.** All respondents are bound by the addenda, whether or not actually received by the respondent.

If a respondent discovers any ambiguity, conflict, discrepancy, omission, or other error in this RFQ, the respondent shall immediately notify the contact person of such error in writing and request clarification or modification of the document. Modifications will be made by addenda as indicated below to all parties in receipt of this RFQ.

If a respondent fails to notify the contact person prior to the date fixed for submission of proposals or a known error in the RFQ, or an error that reasonably should have been known, the respondent shall submit a response at their own risk, and if the respondent is awarded a contract they shall not be entitled to additional compensation or time by reason of the error or its subsequent correction.

Addenda issued by the County interpreting or changing any of the items in this RFQ including all modifications thereof, shall be incorporated in the submittal. The respondent shall sign and date the addenda cover sheet and submit the sheet along with the proposal. Any oral communication by the County's designated contact person or any other County staff member concerning this RFQ is not binding on the County and shall in no way modify this RFQ or any obligations arising thereunder.

To be considered, SOQs must be submitted by **4:00 pm on October 17, 2017**. Four (4) bound hard copies of the SOQ (one with an original signature) must be submitted to:

### **Tehama Flood Management Feasibility Studies**

Attention: Ryan Teubert  
Flood Control and Water Resources Manager  
Tehama County Public Works  
9380 San Benito Ave.  
Gerber, CA 96035

Please provide and present the following information in the order listed, in a clear and concise format (limited to eight single-sided pages, not including resumes, cover letter, and hourly rates):

1. Consultant(s) name.
2. Corporate office(s) and local address, city, state, zip code, phone number, and fax number.
3. SOQ contact person, address, phone number, and e-mail.
4. Consultant firm(s) history, background, and ownership (brief).
5. Identify the office location or locations where the work will be accomplished by the consultant and any sub-consultants.
6. Briefly describe consultant/project team.
7. Provide information identifying key members of consultant/project team who will be assigned to project through completion of the project, and their availability during the project timeframe. The project timeframe will likely start around November 1, 2017 and extend for 12-14 months. The identification and use of specific key throughout the life of the project are important factors in Tehama

County's consideration and selection of a consultant/project team. Any changes in identified key personnel after the award of the Agreement must be approved by Tehama County in writing before the change is made.

8. Summarize expertise and qualifications of key project team members to provide services described in Section D above. Of particular interest will be a demonstrated understanding of the flood management challenges these small communities face in reducing flood risk. Indicate the roles of consultant/project team members in the projects listed.
9. Provide one page resumes with applicable experience of key individuals.
10. Provide hourly rates for key staff.
11. Consultant shall provide a disclosure stating any conflicts of interest. These may include any actual, apparent, direct, or potential conflicts of interest that may exist with respect to the firm, employees, or other persons relative to the provided service.
12. Consultant shall limit SOQ length to no more than eight single-sided pages. The eight page limit does not include cover letter, resumes or and hourly rate sheets.

## **F. CONSULTANT CONTRACT AND INSURANCE REQUIREMENTS**

The contents of the proposal submitted by the successful firm and accepted by the County will become part of the successful proposer's contractual obligations and will be included in the professional services agreement with Tehama County. The successful vendor shall be required to execute and agreement on the County's approved form. A draft of this agreement is included with this RFQ as "Attachment 2": Sample Agreement & "Attachment 3" Insurance Requirements." The agreement is subject to the satisfactory negotiation of terms, approval of the County Board of Supervisors and the annual availability of an appropriation.

As set forth in the Standard Form of Agreement, the selected vendor will be required to provide the County a certificate of insurance as evidence of insurance protection. The vendor shall also provide and maintain an errors and omissions liability policy (also known as professional liability). The Standard Form of Agreement requires single limits of liability not less than \$1,000,000 per claim and \$2,000,000 aggregate.

## **G. COUNTY'S RIGHTS, OPTIONS AND POLICIES**

1. Successful firms will be required to participate in negotiations and to submit such pricing, technical or other revisions to their proposals as may result from negotiations. Accordingly, each initial proposal should be submitted on the most favorable terms from an economic and technical viewpoint.
2. The County reserves the right to decide that one proposal is more favorable than all others.
3. The County reserves the right to declare a proposal as non-responsive if it fails to clearly and/or completely respond to all questions and requirements of this RFQ. All late submissions will be considered non-responsive and be returned unopened.
4. The County reserves the right to waive any irregularities and/or informalities in submitted proposals. Should the County elect to waive a right it will not constitute

an automatic waiver of that right in the future nor will it impact any other right or remedy.

5. The County reserves the right to modify, postpone, or cancel this RFQ at any time and/or reject any and all submissions without indicating any reason. No proposal documents will be returned.
6. The County reserves the right to reject individual team members, firms, consultants and/or request substitution(s). The County reserves the right to request changes to the staffing and/or scope of services contained in any of the proposals and to enter into negotiations with any of the firm(s) regarding their submittal.
7. The County reserves the right to terminate the consultant agreement if the proposed individual(s) is changed after selection and/or following the award of the consultant agreement.
8. If contract negotiations are unsuccessful with the preferred Consultant, County may, at its discretion, choose to negotiate with any other Consultant.
9. No compensation is offered for any of the work related to this selection process or the initial DWR Contract Development task 1 identified in Section D. The submissions are entirely voluntary. All original documents including electronic files become the property of the County.
10. Those submitting a proposal warrant and covenant that no official or employee of Tehama County, nor any business entity in which an official of the County has an interest, has been employed or retained to solicit or aid in procuring the contract for this project.
11. All proposals received in response to this RFQ may become public records under the laws of the State of California and the public may be given access to them after the formal selection process has been completed.
12. The County shall have the right to negotiate with and enter into agreements with others providing the same or similar services to those provided by the Vendor, or to perform such services with County's own forces, as County desires.
13. The successful proposer will have the status of an independent contractor and will not be either an officer or employee of Tehama County.
14. Consultants shall not discriminate on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age or sexual orientation in the performance of County contracts

FIGURE 1

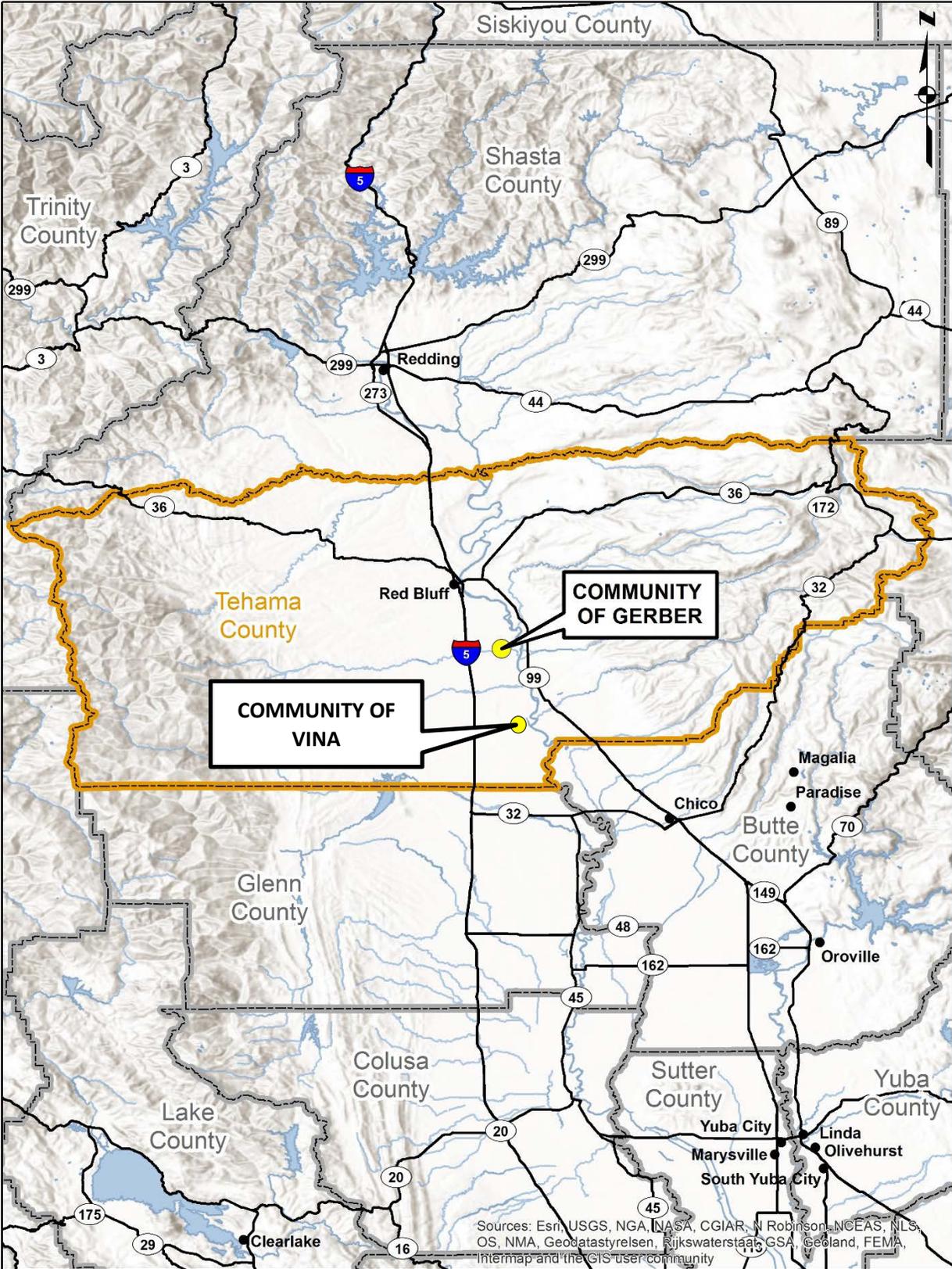


Figure 1. Tehama County Small Communities Location Map

**STATEMENT OF QUALIFICATIONS RATING FORM**

Tehama County Small Community Feasibility Study

Proposer: \_\_\_\_\_

Selection Committee Member: \_\_\_\_\_

Date of Review: \_\_\_\_\_

- Experience in preparing flood management feasibility studies  $\frac{\text{Score}}{\text{Score}} \times \frac{0.25}{\text{Weight}} = \frac{\text{Rating}}{\text{Rating}}$
  
  - Experience working on levees regulated by the Central Valley Flood Protection Board (CVFPB) and the U.S. Army Corps of Engineers (USACE)  $\frac{\text{Score}}{\text{Score}} \times \frac{0.25}{\text{Weight}} = \frac{\text{Rating}}{\text{Rating}}$
  
  - Knowledge of the Central Valley Flood Protection Plan, Mid & Upper Sacramento River Regional Flood Management Plan and Sacramento River Basinwide Feasibility Study  $\frac{\text{Score}}{\text{Score}} \times \frac{0.25}{\text{Weight}} = \frac{\text{Rating}}{\text{Rating}}$
  
  - Qualifications, experience, and client service of key personnel and ability to provide high-quality deliverables and cost-efficient service within the specified time parameters  $\frac{\text{Score}}{\text{Score}} \times \frac{0.25}{\text{Weight}} = \frac{\text{Rating}}{\text{Rating}}$
- Total Points = \_\_\_\_\_

Please evaluate the proposals using the following cumulative point system (maximum of 5.00 points):

**Scoring**

Outstanding	=	5
Very Good	=	4
Good	=	3
Average	=	2
Poor	=	1
Not Addressed or Unacceptable	=	0

Additional review factors include:

- References
- Interviews – If the Selection Committee determines to include interviews in the selection process

**AGREEMENT BETWEEN THE COUNTY OF TEHAMA AND**  
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This agreement is entered into between the County of Tehama, through its Department of -----, (“County”) and ----- (“Contractor”) for the purpose of provide services to Tehama County to prepare feasibility studies to evaluate structural and nonstructural actions to reduce the flood risk for the small communities of Vina and Gerber

1. **RESPONSIBILITIES OF CONTRACTOR**

During the term of this agreement, Contractor shall prepare a scope of work for DWR approval at NO cost to the County. Once the County has received a signed contract from DWR, the County will enter into negotiations with the selected consultant to negotiate a contract scope of work and cost. The consultant prepare feasibility studies to evaluate structural and nonstructural actions to reduce the flood risk for the small communities of Vina and Gerber

2. **RESPONSIBILITIES OF THE COUNTY**

County shall compensate Contractor for said services pursuant to Section 3 and 4 of this agreement -----.

3. **COMPENSATION**

Contractor shall be paid in accordance with the rates set forth in the Fee Schedule, attached hereto as Exhibit “-----” after satisfactorily completing the duties described in this Agreement. In addition, County shall reimburse Contractor for the actual and reasonable expenses for travel, postage, and ----- << list other specific expenses if any >> -----, incurred by Contractor in the performance of the work hereunder. The rates set forth in the Fee Schedule are inclusive of all other expenses. Reimbursement for actual travel expenses will not exceed the currently authorized rates and per diem for County employees. The Maximum Compensation (including expense reimbursement) payable under this Agreement shall not exceed \$-----. Contractor shall not be entitled to payment or reimbursement for any tasks or services performed except as specified herein. Contractor shall have no claim against County for payment of any compensation or reimbursement, of any kind whatsoever, for any service provided by Contractor

after the expiration or other termination of this Agreement. Contractor shall not be paid any amount in excess of the Maximum Compensation amount set forth above, and Contractor agrees that County has no obligation, whatsoever, to compensate or reimburse Contractor for any expenses, direct or indirect costs, expenditures, or charges of any nature by Contractor that exceed the Maximum Compensation amount set forth above. Should Contractor receive any such payment it shall immediately notify County and shall immediately repay all such funds to County. This provision shall survive the expiration or other termination of this Agreement

4. **BILLING AND PAYMENT**

On or before the 15th of each month, Contractor shall submit to County an itemized invoice for all services rendered, as well as expense reimbursement requested, during the preceding calendar month. County shall make payment of all undisputed amounts within 30 days of receipt of Contractor's invoice. County shall be obligated to pay only for services properly invoiced in accordance with this section.

5. **TERM OF AGREEMENT**

This agreement shall commence on the date of signing and shall terminate -----, unless terminated in accordance with section 6 below.

6. **TERMINATION OF AGREEMENT**

If Contractor fails to perform his/her duties to the satisfaction of the County, or if Contractor fails to fulfill in a timely and professional manner his/her obligations under this agreement, or if Contractor violates any of the terms or provisions of this agreement, then the County shall have the right to terminate this agreement effective immediately upon the County giving written notice thereof to the Contractor. Either party may terminate this agreement on 30 days' written notice. County shall pay contractor for all work satisfactorily completed as of the date of notice. County may terminate this agreement immediately upon oral notice should funding cease or be materially decreased, or should the Tehama County Board of Supervisors fail to appropriate sufficient funds for this agreement in any fiscal year.

The County's right to terminate this agreement may be exercised by -----.

7. **ENTIRE AGREEMENT; MODIFICATION**

This agreement for the services specified herein supersedes all previous agreements for these services and constitutes the entire understanding between the parties hereto. Contractor shall be entitled to no other benefits other than those specified herein. No changes, amendments or alterations shall be effective unless in writing and signed by both parties. Contractor specifically acknowledges that in entering into and executing this agreement, Contractor relies solely upon the provisions contained in this agreement and no other oral or written representation.

8. **NONASSIGNMENT OF AGREEMENT**

Inasmuch as this agreement is intended to secure the specialized services of Contractor, Contractor may not assign, transfer, delegate or sublet any interest herein without the prior written consent of the County.

9. **EMPLOYMENT STATUS**

Contractor shall, during the entire term of this agreement, be construed to be an independent contractor and nothing in this agreement is intended nor shall be construed to create an employer-employee relationship, a joint venture relationship, or to allow County to exercise discretion or control over the professional manner in which Contractor performs the services which are the subject matter of this agreement; provided always, however, that the services to be provided by Contractor shall be provided in a manner consistent with the professional standards applicable to such services. The sole interest of the County is to insure that the services shall be rendered and performed in a competent, efficient and satisfactory manner. Contractor shall be fully responsible for payment of all taxes due to the State of California or the Federal government, which would be withheld from compensation of Contractor, if Contractor were a County employee. County shall not be liable for deductions for any amount for any purpose from Contractor's compensation. Contractor shall not be eligible for coverage under County's Workers Compensation Insurance Plan nor shall Contractor be eligible for any other County benefit.

10. **INDEMNIFICATION**

Contractor shall defend, hold harmless, and indemnify Tehama County, its elected officials, officers, employees, agents, and volunteers against all claims, suits, actions, costs, expenses (including but not limited to reasonable attorney's fees of County), damages, judgments, or decrees by reason of any person's or persons' injury, including death, or property (including property of County) being damaged, arising out of contractor's performance of work hereunder or its failure to comply with any of its obligations contained in this agreement, whether by negligence or otherwise. Contractor shall, at its own expense, defend any suit or action founded upon a claim of the foregoing. Contractor shall also defend and indemnify County against any adverse determination made by the Internal Revenue Service or the State Franchise Tax Board and/or any other taxing or regulatory agency against the County with respect to Contractor's "independent contractor" status that would establish a liability for failure to make social security or income tax withholding payments, or any other legally mandated payment.

11. **INSURANCE**

Contractor shall procure and maintain insurance pursuant to Exhibit A, "Insurance Requirements For Contractor," attached hereto and incorporated by reference.

12. **PREVAILING WAGE**

Contractor certifies that it is aware of the requirements of California Labor Code Sections 1720 et seq. and 1770 et seq., as well as California Code of Regulations, Title 8, Section 16000 et seq. ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on certain "public works" and "maintenance" projects. If the Services hereunder are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Contractor agrees to fully comply with and to require its subcontractors to fully comply with such Prevailing Wage Laws, to the extent that such laws apply. If applicable, County will maintain the general prevailing rate of per diem wages and other information set forth in Labor Code section 1773 at its principal office, and will make this information available to any interested party upon request. Contractor shall defend, indemnify and hold the County, its elected officials, officers, employees and agents free and harmless from any claims, liabilities, costs, penalties, or interest arising out of any failure or alleged failure of the Contractor or its

subcontractors to comply with the Prevailing Wage Laws. Without limiting the generality of the foregoing, Contractor specifically acknowledges that County has not affirmatively represented to contractor in writing, in the call for bids, or otherwise, that the work to be covered by the bid or contract was not a “public work.” To the fullest extent permitted by law, Contractor hereby specifically waives and agrees not to assert, in any manner, any past, present, or future claim for indemnification under Labor Code section 1781.

Contractor acknowledges the requirements of Labor Code sections 1725.5 and 1771.1 which provide that no contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 (with limited exceptions from this requirement for bid purposes only under Labor Codes section 1771.1(a)).

Contractor acknowledges that no contractor or subcontractor may be awarded a contract for public works on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5

If the services are being performed as part of the applicable “public works” or “maintenance” project, as defined by the Prevailing Wage Laws, Contractor acknowledges that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

13. **NON-DISCRIMINATION**

Contractor shall not employ discriminatory practices in the treatment of persons in relation to the circumstances provided for herein, including assignment of accommodations, employment of personnel, or in any other respect on the basis of race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, marital status, sex, age, or sexual orientation.

14. **GREEN PROCUREMENT POLICY**

Tehama County Resolution No. 49-2002, the Green Procurement Policy (available upon request) supports recycling and waste reduction, and promotes the purchase of products made with

recycled materials when product fitness and quality are equal and they are available at no more than the total cost of non-recycled products. Contractor is encouraged to conform to this policy.

15. **COMPLIANCE WITH LAWS AND REGULATIONS**

All services to be performed by Contractor under to this Agreement shall be performed in accordance with all applicable federal, state, and local laws, ordinances, rules, and regulations. Any change in status, licensure, or ability to perform activities, as set forth herein, must be reported to the County immediately.

16. **LAW AND VENUE**

This agreement shall be deemed to be made in, and shall be governed by and construed in accordance with the laws of the State of California (excepting any conflict of laws provisions which would serve to defeat application of California substantive law). Venue for any action arising from this agreement shall be in Tehama County, California.

17. **AUTHORITY**

Each party executing this Agreement and each person executing this Agreement in any representative capacity, hereby fully and completely warrants to all other parties that he or she has full and complete authority to bind the person or entity on whose behalf the signing party is purposing to act.

18. **NOTICES**

Any notice required to be given pursuant to the terms and provisions of this agreement shall be in writing and shall be sent first class mail to the following addresses:

If to County:                   -----  
   -----  
   -----

If to Contractor:               -----  
   -----  
   -----

Notice shall be deemed to be effective two days after mailing.

19. **NON-EXCLUSIVE AGREEMENT:**

Contractor understands that this is not an exclusive agreement, and that County shall have the right to negotiate with and enter into agreements with others providing the same or similar services to those provided by Contractor, or to perform such services with County’s own forces, as County desires.

20. **RESOLUTION OF AMBIGUITIES:**

If an ambiguity exists in this Agreement, or in a specific provision hereof, neither the Agreement nor the provision shall be construed against the party who drafted the Agreement or provision.

21. **NO THIRD PARTY BENEFICIARIES:**

Neither party intends that any person shall have a cause of action against either of them as a third party beneficiary under this Agreement. The parties expressly acknowledge that is not their intent to create any rights or obligations in any third person or entity under this Agreement. The parties agree that this Agreement does not create, by implication or otherwise, any specific, direct or indirect obligation, duty, promise, benefit and/or special right to any person, other than the parties hereto, their successors and permitted assigns, and legal or equitable rights, remedy, or claim under or in respect to this Agreement or provisions herein.

22. ----- **OPTIONAL AND ADDITIONAL PARAGRAPHS (See Policy & Procedure, page 5, #D)**, as specifically required by the department and/or circumstances, may be inserted here. If none, delete this paragraph. -----

**IN WITNESS WHEREOF**, County and Contractor have executed this agreement on the day and year set forth below.

**COUNTY OF TEHAMA**

Date: \_\_\_\_\_

\_\_\_\_\_

----- **(Bold & Capital letters)**

Date: \_\_\_\_\_  
-----

-----  
Vendor Number

Approved as to form by  
Tehama County Counsel

\_\_\_\_\_  
By: -----

Standard Form of Agreement – Services adopted 4-27-10

## Exhibit A

### **INSURANCE REQUIREMENTS FOR CONTRACTOR**

Contractor shall procure and maintain, for the duration of the contract, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work described herein and the results of that work by Contractor, his/her agents, representatives, employees or subcontractors. At a minimum, Contractor shall maintain the insurance coverage, limits of coverage and other insurance requirements as described below.

Commercial General Liability (including operations, products and completed operations) \$1,000,000 per occurrence for bodily injury, personal injury and property damage. If coverage is subject to an aggregate limit, that aggregate limit will be twice the occurrence limit, or the general aggregate limit shall apply separately to this project/location.

#### Automobile Liability

Automobile liability insurance is required with minimum limits of \$1,000,000 per accident for bodily injury and property damage, including owned and non-owned and hired automobile coverage, as applicable to the scope of services defined under this agreement.

#### Workers' Compensation

If Contractor has employees, he/she shall obtain and maintain continuously Workers' Compensation insurance to cover Contractor and Contractor's employees and volunteers, as required by the State of California, as well as Employer's Liability insurance in the minimum amount of \$1,000,000 per accident for bodily injury or disease.

#### Professional Liability (Contractor/Professional services standard agreement only)

If Contractor is a state-licensed architect, engineer, contractor, counselor, attorney, accountant, medical provider, and/or other professional licensed by the State of California to practice a profession, Contractor shall provide and maintain in full force and effect while providing services pursuant to this contract a professional liability policy (also known as Errors and Omissions or Malpractice liability insurance) with single limits of liability not less than \$1,000,000 per claim and \$2,000,000 aggregate on a claims made basis. However, if

coverage is written on a claims made basis, the policy shall be endorsed to provide coverage for at least three years from termination of agreement.

If Contractor maintains higher limits than the minimums shown above, County shall be entitled to coverage for the higher limits maintained by Contractor.

All such insurance coverage, except professional liability insurance, shall be provided on an “occurrence” basis, rather than a “claims made” basis.

#### Endorsements: Additional Insureds

The Commercial General Liability and Automobile Liability policies shall include, or be endorsed to include “Tehama County, its elected officials, officers, employees and volunteers” as an additional insured.

The certificate holder shall be “County of Tehama.”

#### Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions of \$25,000 or more must be declared to, and approved by, the County. The deductible and/or self-insured retentions will not limit or apply to Contractor’s liability to County and will be the sole responsibility of Contractor.

#### Primary Insurance Coverage

For any claims related to this project, Contractor’s insurance coverage shall be primary insurance as respects the County, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officers, officials, employees or volunteers shall be excess of Contractor’s insurance and shall not contribute with it.

#### Coverage Cancellation

Each insurance policy required herein shall be endorsed to state that “coverage shall not be reduced or canceled without 30 days’ prior written notice certain to the County.”

#### Acceptability of Insurers

Contractor’s insurance shall be placed with an insurance carrier holding a current A.M. Best & Company’s rating of not less than A:VII unless otherwise acceptable to the County. The County

reserves the right to require rating verification. Contractor shall ensure that the insurance carrier shall be authorized to transact business in the State of California.

#### Subcontractors

Contractor shall require and verify that all subcontractors maintain insurance that meets all the requirements stated herein.

#### Material Breach

If for any reason, Contractor fails to maintain insurance coverage or to provide evidence of renewal, the same shall be deemed a material breach of contract. County, in its sole option, may terminate the contract and obtain damages from Contractor resulting from breach. Alternatively, County may purchase such required insurance coverage, and without further notice to Contractor, County may deduct from sums due to Contractor any premium costs advanced by County for such insurance.

#### Policy Obligations

Contractor's indemnity and other obligations shall not be limited by the foregoing insurance requirements.

#### Verification of Coverage

Contractor shall furnish County with original certificates and endorsements effecting coverage required herein. All certificates and endorsements shall be received and approved by the County prior to County signing the agreement and before work commences. However, failure to do so shall not operate as a waiver of these insurance requirements.

The County reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.



*Application for the*  
Department of Water Resources  
Small Communities Flood Risk Reduction Program  
Phase 1: Feasibility Study

*On behalf of the Small Community of*

**Gerber, CA**

*A Mid & Upper Sacramento River Small Community*

MID & UPPER  
*Sacramento*  
RIVER

REGIONAL FLOOD MANAGEMENT PLAN

*NOVEMBER 2, 2016*



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# 1.0 Applicant Information

## 1.1 Agency Name, Primary Contact, Address, Phone Number, and email address.

Tehama County Public Works Department  
9380 San Benito Avenue  
Gerber, CA 96035  
(530) 385-1462  
[nbethurem@tcpw.ca.gov](mailto:nbethurem@tcpw.ca.gov)

## 1.2 Information about the authorized applicant representative.

Ryan Teubert  
Flood Control and Water Resources Manager  
(530) 385-1462  
[rteubert@tcpw.ca.gov](mailto:rteubert@tcpw.ca.gov)

## 1.3 Small community's name that is under the applicant's jurisdiction.

Gerber, California

## 1.4 Location of the proposed study area including regional flood management planning area, county, local maintaining agency and reclamation district.

Community of Gerber, Tehama County (County), Named Area 19 (NA19), Mid and Upper Sacramento River Area

## 1.5 Applicant's flood management authority.

The County of Tehama and the Tehama County Flood Control and Water Conservation District (District) have entered into a Joint Power Agreement (JPA) designating the District as the agency maintaining NA19.

## 1.6 Applicant's role in regional flood management planning:

Tehama County has been a key participant and stakeholder in the Mid & Upper Sacramento River Regional Flood Management (MUSR RFMP) and the Mid & Upper Sacramento River Regional Emergency Response planning process. In addition, Tehama County is the lead agency for the Upper Sacramento River Unified Flood Fight Command.

## 1.7 Is there a regional plan in place? Is the proposed project a priority project within the regional plan?

Yes, The MUSR RFMP was adopted in November 2014 and providing 100-Year protection for Small Communities within the region, including Gerber, has been identified as a key priority for the MUSR RFMP. The Gerber small community feasibility study is specifically listed as a priority project within the MUSR Regional Plan.



## 2.0 Funding Request

The County of Tehama is requesting the amount of \$500,000 to undertake the Gerber Flood Risk Reduction Feasibility Study.

## 3.0 Project Description

### 3.1 Community Name, Location, and Population

The town of Gerber is an unincorporated community located along the left bank of Elder Creek just upstream of its confluence with the Sacramento River. Gerber sits at an approximate elevation of 226 feet and has a population of 1,060 per 2010 Census data.

Elder Creek is an intermittent stream with flows generally occurring from November through May. From June through October Elder Creek is dry in most years. The Elder Creek watershed drains runoff from the east side of the North Coast Range and the Sacramento Valley floor into the Sacramento River east of the town of Gerber. The Project provides flood protection to the town of Gerber, major and minor roadways (State Route 99 and County Route A8), rural residents, railroads (Union Pacific Railroad), agricultural lands, and the Tehama-Colusa Canal.

The Flood Control Act of December 22, 1944, authorized the Elder Creek Channel Improvement and Levee Construction unit of work. This unit is part of the Sacramento River and Major and Minor Tributaries Project and was enacted by Congress. The USACE's October 1, 1959, "Design Memorandum No. 4, Sacramento River and Major and Minor Tributaries, California, Elder Creek General Design" (Design Memorandum) report contains the design details of the Flood Control Project (USACE 1959).

The Project's design capacity is 17,000 cubic feet per second (cfs) however an analysis of Elder Creek by DWR has determined that the existing condition capacity of the Elder Creek is only 9,000 cfs.

DWR is responsible for maintaining the channel section of Elder Creek while Tehama County Flood Control and Water Conservation District (the local maintaining agency) is responsible for the maintenance of the levees.

### 3.2 Project Area Maps

Figure 1 shows the vicinity map for the community of Gerber. Figure 2 depicts Gerber's location within DWR's Levee Flood Protection Zone (LFPZ). Figure 3 below shows an aerial overview of the State Plan of Flood Control (SPFC) facilities protecting the community of Gerber and the surrounding rural residential and agricultural lands.

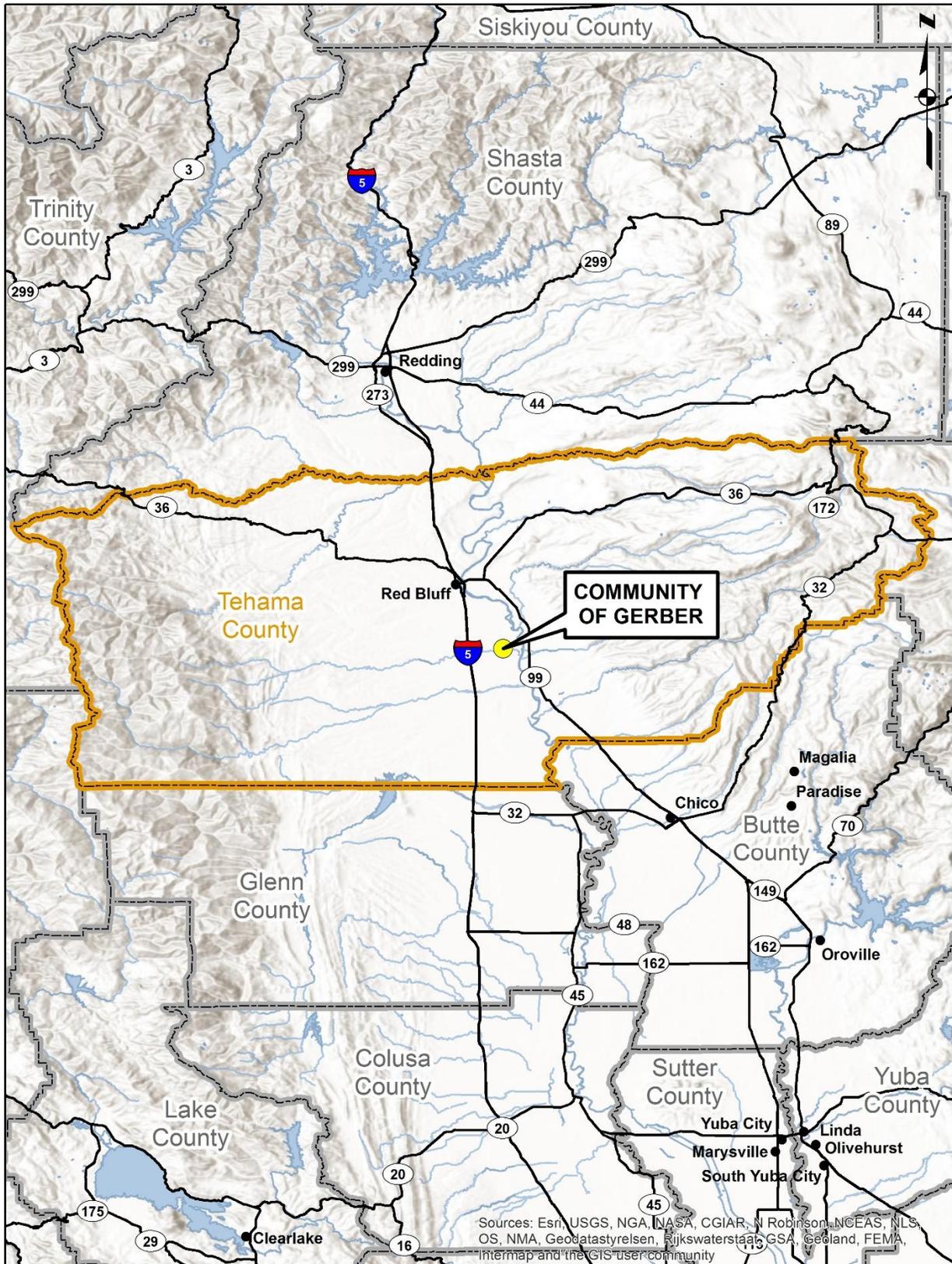


Figure 1: Vicinity Map

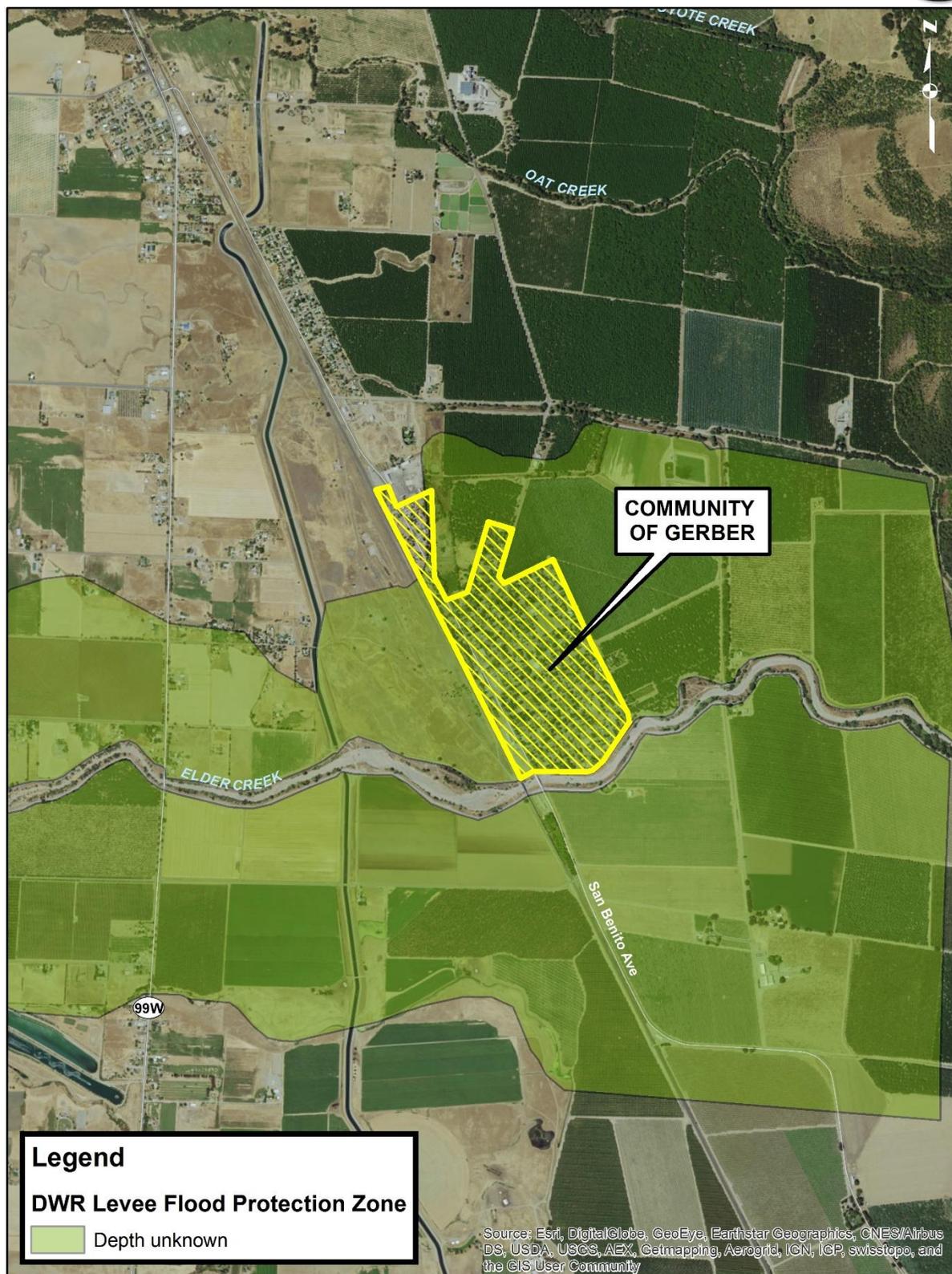


Figure 2: LFPZ Flood Depths

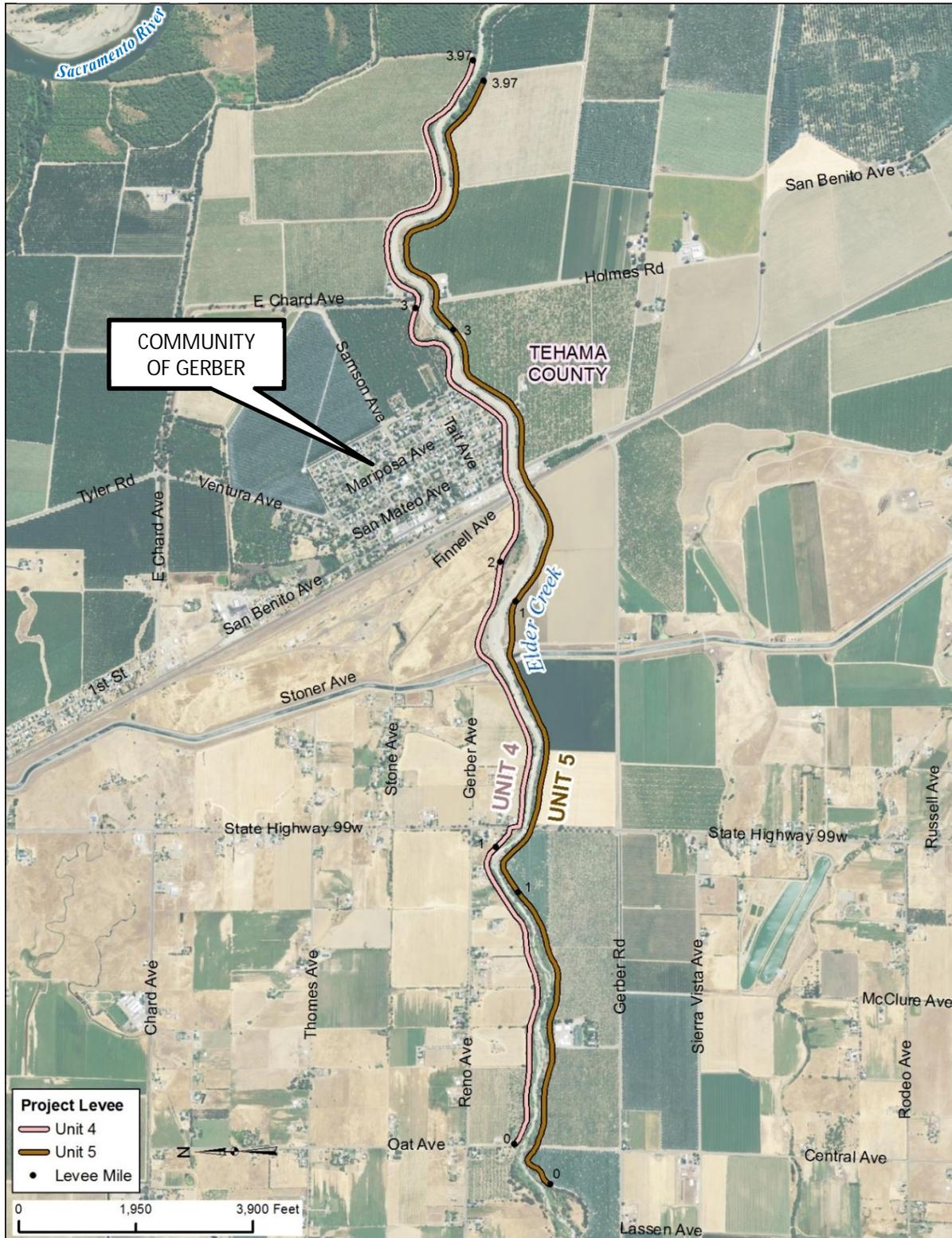


Figure 3: State Plan of Flood Control (SPFC) facilities protecting Gerber



### 3.3 Description of the Problem to be Addressed

Gerber has an existing levee along its southern boundary to protect it from flooding from Elder Creek. Gerber also has levees to the north and east to protect it from backwater flooding from the Sacramento River and downstream non-project levees. The 1957 design flow for Elder Creek is 17,000 cfs. As part of the Non-Urban Levee Evaluation (NULE) investigations, DWR analyzed the deficiencies currently associated with passing the 1957 design flow. The investigations concluded that the levees protecting Gerber contain underseepage, through-seepage, landside stability, and geometry deficiencies (see Figure 4 and Figure 5).

The recent Central Valley Hydrology Study (CVHS) hydrology determined that the 100-year flow for Elder Creek could be as high as 20,000 cfs. But DWR estimated in 2015 that the estimated capacity of the Elder was 9,000 cfs due to vegetation growth and accumulated sediment. Therefore, significant changes in channel geometry would be needed in order for Elder Creek to convey the 100-year flow with 3 feet of freeboard.

The feasibility study will also address issues related to long-term O&M costs by incorporating a structured and integrated levee vegetative management plan. The vegetative management plan could promote both erosion control and terrestrial wildlife survival during floods, and include a streamlined permitting process to facilitate vegetation maintenance on the levees.

The feasibility study will also address how to improve institutional support in several ways, including:

- Coordinating O&M protocols between the levee maintaining agencies and the State and federal regulatory agencies
- Developing a streamlined permitting process to facilitate vegetation maintenance on the levees
- Coordinating emergency preparedness and response activities between County Office of Emergency Services and maintenance agencies

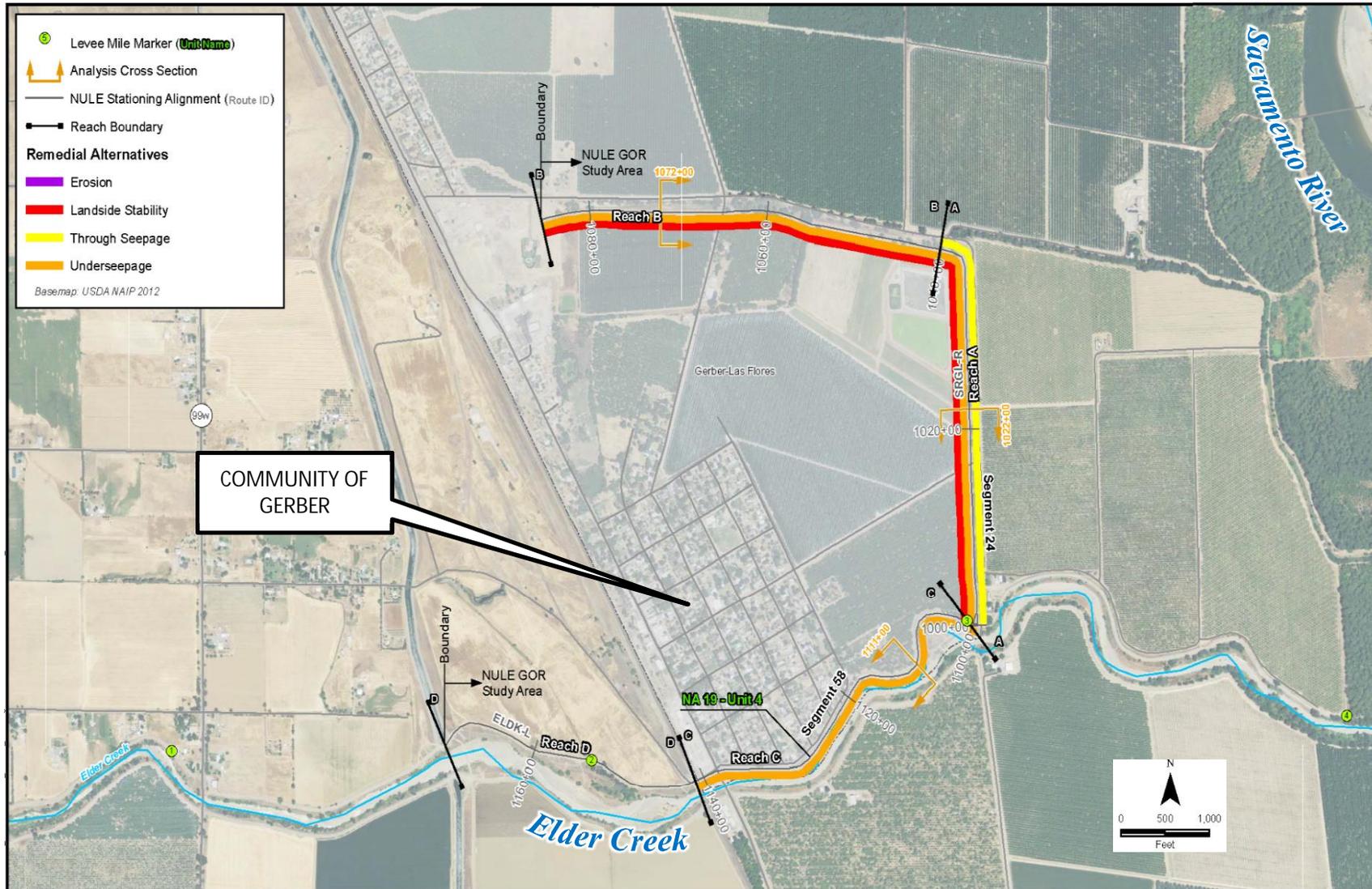


Figure 4: Gerber Levee Deficiencies

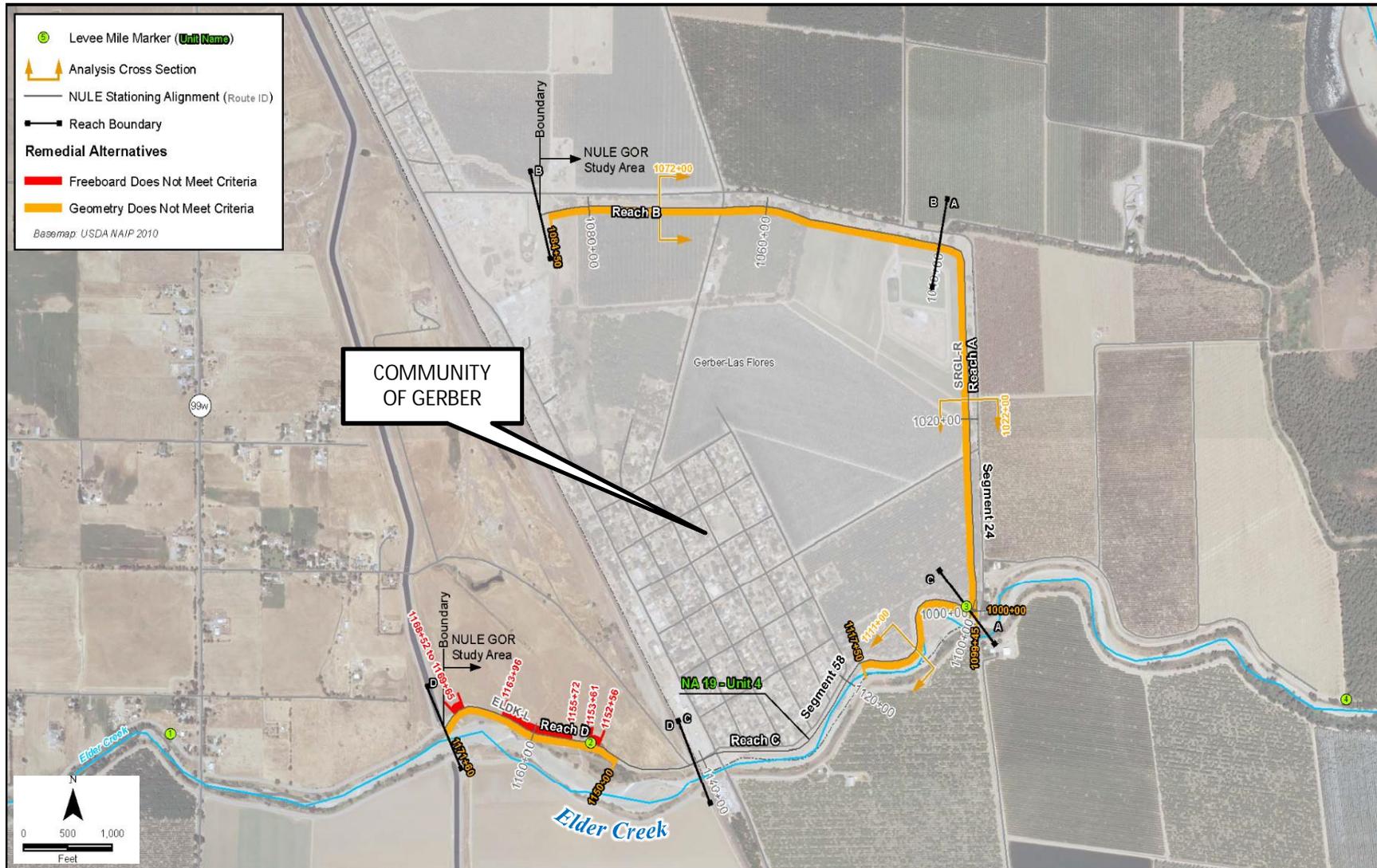


Figure 5: Gerber Freeboard and Geometry Deficiencies



### 3.4 Feasibility Study Goals and Objectives

The broad goals of the Gerber Small Community Flood Risk Reduction Feasibility Study will be to evaluate alternatives for providing Gerber with a 100-Year level of flood protection which also provide opportunities to improve aquatic and terrestrial habitat along Elder Creek, and potentially within and/or adjacent to the Sacramento River Nation Wildlife Refuge, while also being sensitive to the needs and values of the local landowners. The feasibility study will also look at opportunities to improve recreation opportunities in the portion of the Sacramento River Nation Wildlife Refuge adjacent to Gerber, which is currently only accessible by boat.

More specifically, the objectives of the Feasibility Study and Conceptual Design Project are to:

- Identify the causes of the flood threats to the town of Gerber;
- Evaluate both structural and non-structural options for increased flood protection;
- Evaluate alternatives that contribute to measurable objectives for targeted metrics under the ecological objectives and goals set forth by "Metrics for Ecosystem Process, Habitat, and Stressor Objectives" outlined in DWR's Draft Conservation Strategy;
- Assess current flood emergency response capabilities and recommend actions for improvements to flood emergency preparedness;
- Identify actions and groups of actions that may lead to reliable, sustainable and acceptable flood protection and improved ecosystem health and/or function along the project reach;
- Transfer information to landowners, stakeholders, and the public, and acquire landowner feedback;
- Develop a range of alternatives that may satisfy project goals;
- Identify preferred alternative(s);
- Evaluate funding opportunities needed to implement the preferred alternative(s); and
- Develop strategic plan for next steps and actions needed to advance the preferred alternative(s) closer to implementation.

### 3.5 Description of Opportunities and Constraints

There are significant ecological and recreational opportunities associated with this project. Please see Section 3.9 below for additional discussion. In addition, a full description of opportunities and constraints will be developed through the feasibility study effort.



### 3.6 Description of Potential Alternative Solutions

The feasibility study will evaluate a suite of alternatives including but not limited to:

- Fix-in-place existing levees;
- New setback levees;
- Ring levees;
- Wing levees; and
- Non-structural alternatives such as flood-proofing, raising existing structures, and improved emergency preparedness and response.

### 3.7 Detailed Description of the Feasibility Study Approach

The goals for the feasibility study shall be met by stepping through an iterative and interactive process to formulate a cost-efficient, multi-benefit integrated plan that meets the State's objectives. The process will follow the following structured approach that provides a rational framework for decision-making:

1. Identify Problems and Deficiencies
2. Inventory Existing Condition and Forecasting Conditions
3. Formulate Alternative Plans
4. Refine goals, objectives and constraints
5. Evaluate Alternatives
6. Public Outreach
7. Financial Feasibility Analysis
8. Tradeoff Analyses and Selection of Preferred Alternative

In 2014 DWR published the Final Draft Guidance for Development of a State-Led Feasibility Studies. This document was referenced as part of the SCFRR Program and will guide the preparation of this feasibility study. The following details a preliminary description of work we believe will be required to provide the engineering and environmental assessments necessary to conduct the Gerber Feasibility Study per the requirements of the SCFRRP. This scope described below covers the full universe of potential activities and will be refined after grant award based upon funding award, and existing available, usable data.

#### Task 1. Project Management and Grant Administration

This task includes the management activities required to ensure the Feasibility Study is completed on time, within budget, and addresses the SCFRRP requirements. This will include preparing monthly invoices and progress reports to meet all of DWR's grant requirements. The progress report will summarize budget and schedule status in measurable terms. A detailed schedule and budget will be prepared for effective project management, with a goal of completing all work on time and within budget.

Communication between the County, its consultant, and DWR will be frequent and flow freely as needed to ensure the success of the Feasibility Study.



## Task 2. Feasibility Study

The intent of this Feasibility Study will be to develop solutions to solve Gerber's flood risk problems while also providing opportunities for habitat enhancement along the Elder Creek corridor by completing the tasks outlined below.

### Subtask 2.1 - Define Goals, Objectives, and Constraints:

Project objectives set the foundation for how alternatives are formulated and which criteria are selected for evaluation. This task will involve working to develop a clear understanding of what the Feasibility Study will need to achieve. The goal setting process will also identify any constraints that the study will need to work within when formulating alternatives. These planning constraints will help guide the Feasibility Study. Examples of constraints can include current applicable laws, regulations, and policies; and physical conditions (e.g., topography, hydrology). It will be important that this study's goals and objectives align with those of other ongoing efforts such as the Upper and Mid-Sacramento River Regional Flood Management Plan, DWR's 2017 CVFPP, and the draft Conservation Strategy. Therefore, coordination with agencies leading other ongoing efforts will be necessary.

### Subtask 2.2 - Define Existing Conditions, Problems, and Opportunity Identification:

This task will consist of conducting a baseline assessment of the study area. The Feasibility Study Team will work to define the current issues along Elder Creek, as well as opportunities to be realized through solving the problems. Analysis of existing data and studies will help guide the Feasibility Study Team to determine existing conditions, which will provide a basis for comparison of future alternatives.

#### *Compile Existing Data and Review Previous Reports*

The purpose of this task is to compile all the available information from local, state and federal agencies, public records, and/or stakeholders to properly evaluate the existing and proposed hydraulics of the floodplain. The available study information will assist in review of existing flood control issues, developmental impacts, and wildlife habitat considerations.

Various documents, models, and data are available which provide a history and depiction of the study site that will help to better understand local flooding concerns. A summary of the known data is included below:

- Elder Creek Channel Rehabilitation Project, Initial Study/Proposed Mitigated Negative Declaration, DWR, 2015
- DWR's FloodSAFE LiDAR and terrain data
- DWR's Flood Control System Status Report
- DWR's Non-Urban Levee Evaluation Program
- FEMA Effective FIS Report and DFIRMs
- DWR Central Valley Hydrology Study
- DWR Central Valley Floodplain Evaluation and Delineation



- Mid & Upper Sacramento River Regional Flood Management Plan
- Mid & Upper Sacramento River Regional Flood Emergency Response Project

### *Field Surveys*

Feasibility Study Team to conduct a detailed field reconnaissance of the specific study area to determine:

- Locations for the necessary control network conditions along the floodplain(s);
- Types and numbers of hydraulic and/or flood-control structures; apparent maintenance or lack thereof of existing hydraulic structures;
- Locations of cross sections to be surveyed; and other parameters needed for the updated hydrologic and hydraulic analyses.

### *Hydrologic & Hydraulic Analysis*

The Feasibility Study Team will develop hydrological and hydraulic models to incorporate the latest topographic and bathymetric data from CVFED. The onsite field surveys will be used to supplement the terrain data at critical locations.

All results from hydrologic analyses will be compared including an evaluation of regional regression and historical flows to ensure quality and reasonableness.

Hydraulic analyses will be performed using DWR FloodSAFE LiDAR and terrain data to determine water surface elevations for floodplain delineation purposes.

The Feasibility Study Team will use a HEC-RAS model under steady state regime to analyze detailed riverine reaches of Elder Creek and its tributaries within the boundary. The cross-section and field data collected during the Field Survey and DWR FloodSAFE topographic data will be utilized, when appropriate to perform the hydraulic analyses. The hydraulic analyses will be used to establish flood elevations and floodplain extents for the subject flooding sources.

The Feasibility Study Team will develop a floodplain model by using HEC-RAS storage areas or a two dimensional hydraulic modeling software such as HEC-RAS 2D or TuFlo. This model will be used to develop floodplain extents and depths with newer terrain data and more detail than the floodplains currently acknowledged by FEMA.

Additionally, 100-year flow simulations will be performed for existing conditions and for all the proposed alternatives to quantify the benefits of the various alternatives. These simulations will be used to determine the flood stage water surface elevations and provide the necessary heights for flood protection. These alternatives will be used to propose the most effective project design to reduce the potential of loss of life and property.

### *Floodplain Mapping*

The Feasibility Study Team will use hydrologic and hydraulic models described above to develop a floodplain map for the study area. The Feasibility Study Team will perform a floodplain evaluation for existing conditions and alternatives to determine the potential for loss of life and property and better define the benefits of the array of alternatives.



The Feasibility Study Team will produce detailed floodplain work maps to include a delineation of the 100-year floodplain boundaries and water surface elevations. This will be done for existing conditions, as well as for each proposed project alternatives.

- DWR Central Valley Hydrology Study
- DWR Central Valley Floodplain Evaluation and Delineation
- Mid & Upper Sacramento River Regional Flood Management Plan
- Mid & Upper Sacramento River Regional Flood Emergency Response Project

### *Geotechnical Exploration*

The Feasibility Study Team will develop a feasibility-level geotechnical program that will perform a study of the regional geology and geotechnical characteristics, review potential new levee alignments and suitable tie-in locations along existing levees, and identify potential borrow sites for suitable levee materials.

The Feasibility Study Team will review readily available documents including available published geotechnical reports; DWR's NULE data, and California Geologic Survey (CGS) data bases. This information will form the geotechnical basis for selecting feasible alignments and borrow sources. Subsequently, a limited field investigation, which relies in part on the paper study discovery, will be performed along potential alignments. A field investigation will include borings and Cone Penetration Tests (CPTs) that will be used to further develop locations suitable for levee alignments and borrow areas.

In order to evaluate the feasibility of this project, preliminary analysis and design will be performed using FEMA criteria. The evaluation analysis will utilize the data collected from the desk top study and investigation to evaluate the following:

- Bearing capacities and settlements of foundation materials.
- Potential borrow area soils will be assessed for suitable levee construction materials.
- Generalizations regarding borrow soils will be developed from laboratory testing on samples collected during the investigation and analyzed for characteristics suitable for levee materials.
- Slope stability and seepage analysis of the existing levees will be analyzed at potential tie-in locations.

### Subtask 2.3 - Formulate Alternatives:

The Feasibility Study Team will develop alternatives which will consist of an array of design flood events and alignments that provide flood protection for the town of Gerber, and which provide opportunities for ecosystem enhancement along Elder Creek, and potential within and/or adjacent to the Sacramento River National Wildlife Refuge. Each alternative will consist of measures developed from the analysis performed in Subtask 2.2. Each alternative will be formulated to address the problems and objectives defined in Subtask 2.1. Example elements of each alternative may include different levee alignments, levee heights, and other flood protection and ecosystem enhancement features.



#### Subtask 2.4 - Public Outreach

Once alternatives have been developed, a stakeholder outreach effort will be undertaken to share the information with property owners and stakeholders: The goals of the outreach effort will be to:

- Positively impact flood risk awareness
- Include a broad range of stakeholder groups and interests to maximize opportunities for collaboration and achieve multi-benefit objectives
- Facilitate support for project implementation

#### *Small Group Meetings*

In an effort to pave the way for collaboration among stakeholder groups, the Feasibility Study team will schedule small group meetings to vet issues of concern within particular interest groups, and identify opportunities for agreement on multi-benefit project elements. The consultant will coordinate all meeting logistics and provide a summary of outcomes and agreements.

#### *Scoping/Community Meetings*

Scoping/community meetings will be scheduled as needed to identify problems, opportunities and potential multi-benefit alternatives for reducing flood risk. The Feasibility Study team will prepare meeting notices, coordinate all meeting logistics, assist with materials preparation and meeting notes, and facilitate as needed.

#### *Outreach Materials*

A number of tactics will be developed to connect with and engage stakeholders in feasibility study and project implementation processes. Whenever possible, the Feasibility Study team will use electronic communications, such as email and e-news, to inform stakeholders of project activities. Additionally, a web page may be developed and housed on the grant administrator's or region's RFMP website. This page will be continually updated with project news and documents and serve as the primary hub for public information. Outreach materials will include:

- Email notifications;
- Webpage;
- Meeting summaries;
- eNews;
- Fact sheets, FAQs, white papers;
- Postcard mailings; and
- Media releases and advisories.

#### Subtask 2.5 - Environmental Constraints Analysis:

Per the Small Communities Flood Risk Reduction (SCFRR) Guidelines, "Feasibility studies will include completing a California Environmental Quality Act (CEQA) environmental checklist and identifying CEQA documents anticipated for implementing the preferred alternative. The environmental constraints analysis will identify areas of potential impacts as a result of implementing the alternatives proposed in the Feasibility Study. The environmental constraints analysis will also outline the anticipated CEQA document that



will be required for implementing the preferred alternative. The environmental constraints analysis will be comprehensive in an effort to better position the project for implementation funding.

The analysis of constraints is intended to facilitate the project planning process, assist with the evaluation of various alternatives, define a recommended project, and assess potential permitting and mitigation requirements. This is accomplished by compiling available information, considering the existing resources during the project-planning phase, conducting field surveys as appropriate and providing insight into environmental issues that should be addressed during the environmental review and permitting process. A beneficial constraints analysis should accomplish the following main objectives:

- Evaluate alternatives based on the anticipated presence or absence of environmental resources
- Describe the consistency and/or compliance with existing policies
- Analyze potential environmental mitigation costs for each alternative
- These objectives should be met with a separate, detailed discussion for each applicable resource area as they apply to the specific alternatives.

### *Project Description*

A project description that describes all of the alternatives considered and evaluated in the feasibility study will be prepared to initiate the Environmental Constraints Analysis. The project description prepared for the Environmental Constraints Analysis is intended to meet the requirements of CEQA, and will provide the background for the proposed project; document and confirm the location and boundaries of the project; provide and confirm a statement of the objectives of the proposed project; and, provide a general description of the proposed project's technical, structural, environmental, and construction aspects such as staging, site access, and phasing (specifically related to the recommended alternative). The project description will include information necessary to assess the proposed project's potential impacts on the environment. The project description will include one or more figures showing the location of the proposed project and alternatives, based on existing maps.

The Feasibility Study Team will also conduct biological resources and cultural resources analyses, investigations, and surveys related to the preparation of the Environmental Constraints Analysis for the project. The Feasibility Study Team will prepare technical memoranda for biological resources and cultural resources to summarize these analyses, investigations, and surveys. These technical memoranda will be included as appendices to the Environmental Constraints Analysis. The technical memoranda will also discuss the potential construction related effects of the proposed project and alternatives on the biological and cultural resources as they relate to the local community and surrounding land uses.

### *Biological Resources Analysis*

A field and database review of special-status species in the project area and vicinity will be conducted. Team biologists will review USFWS, National Marine Fisheries Service (NMFS),



and California Department of Fish and Wildlife (CDFW) species lists along with the California Natural Diversity Database (CNDDDB) for records of special-status species in the project area and vicinity. Biologists will also perform field reconnaissance surveys to determine the potential presence of protected-species and/or habitats and waters of the US, including wetlands in the project area. Data points will be recorded with the use of a GPS unit, and a GIS habitat map will be prepared based on the results of the field survey and desktop research. Although the project may adversely affect federally listed species, this scope of work does not include protocol level surveys or preparation of a BA, because those will need to be conducted at a later time when further project design is developed. The USFWS and CDFW species lists, along with the results of the CNDDDB review, the field reconnaissance survey, and the habitat map will be incorporated into a Technical Memo. Mitigation measures will be developed and proposed, as necessary, if there are potentially significant impacts identified. The findings of the Technical Memo will be incorporated into the Environmental Constraints Analysis.

*Cultural Resources Analysis*

The Feasibility Study Team will conduct a cultural resources records search at the Northwest Information Center of the California Historical Resources Information System located at Sonoma State University. This record search will consult California’s database of previous studies and previously recorded sites within the project area and within a ½-mile radius.

Upon completion of the records search, we will conduct a desktop investigation of the project area. A draft Area of Potential Effects (APE) map for cultural resources in and surrounding the project area will be established. The APE map and a summary of the results of the records search and desktop investigation will be provided in a Technical Memo. The findings of the TM will be incorporated into the Environmental Constraints Analysis.

The following table outlines the resource areas and provides a brief explanation of what topics would be covered in the Environmental Constraints Analysis.

Resource Area	Overview of Environmental Constraints Analysis Discussion
Aesthetics	Describe the visual environment and scenic resources in the project area Identify designated scenic highways on or near the project Describe anticipated impacts of the project on the visual environment and scenic resources Identify anticipated local agency coordination
Agriculture and Forest Resources	Identify any farmlands and/or timberlands in the project area Describe anticipated impacts of the project on agricultural land or timberlands



Resource Area	Overview of Environmental Constraints Analysis Discussion
Air Quality	<p>Describe the project area (air basin, pollutants of concern, attainment status, etc.)</p> <p>Describe anticipated impacts of the project on air quality</p> <p>Identify anticipated local agency coordination</p>
Biological Resources	<p>Describe the project area habitat</p> <p>Perform biological database searches (i.e. California Natural Diversity Database, National Wetland Inventory, etc.)</p> <p>Describe potential impacts of the project on biological resources, including recommended avoidance, minimization, and mitigation measures</p> <p>Identify potential mitigation costs</p>
Cultural Resources	<p>Provide historical framework for the project area</p> <p>Perform cultural and paleontological records search</p> <p>Review existing literature, including previously prepared surveys in the project vicinity</p> <p>Initiate informal consultation with Native American contacts</p> <p>Describe potential impacts of the project on resources within or adjacent to the project area</p>
Geology/Soils	<p>Characterize the existing geologic environment (site-specific geology, soils, seismic hazards, and topography)</p> <p>Describe anticipated impacts of the project on geologic resources, as well as geologic hazards that may apply to the project area</p>
Greenhouse Gas Emissions	<p>Based on anticipated air quality impacts (project construction and operation emissions), provide an initial qualitative comparison of project versus no-project scenarios</p>
Hazards & Hazardous Materials	<p>Describe existing hazardous waste issues in the project area,</p> <p>Perform hazardous waste database search</p> <p>Describe anticipated impacts of the project in terms of new and/or existing hazards and hazardous waste issues</p>
Hydrology/Water Quality	<p>Describe the hydrological features of the project area (surface water, groundwater, floodplains, etc.), and associated water quality as applicable</p> <p>Describe anticipated impacts of the project on</p>



Resource Area	Overview of Environmental Constraints Analysis Discussion
	hydrological features and/or water quality, including minimization and avoidance of stormwater pollution impacts
Land Use/Planning	Identify the existing and planned land uses and zoning in the project area Identify anticipated local agency coordination Describe the anticipated impacts of the project on existing land use, including consistency with jurisdictional plans
Mineral Resources	Describe the existing mineral resources in the project area Describe the anticipated impacts of the project on mineral resources
Noise	Describe the project area, including sources of noise and the locations of sensitive noise receptors Identify anticipated local agency coordination Describe the anticipated impacts of the project in terms of noise generation and impacts on sensitive receptors, as well as consistency with local ordinances
Population/Housing	Describe the population and housing characteristics of the project area Describe the anticipated impacts of the project on residents, workers, housing, etc., including any potential displacements
Public Services	Describe the service area of the project, including public service providers and coverage Describe the anticipated impacts of the project on public services, such as the any impacts that may limit the providers' ability to maintain service levels
Recreation	Describe any park and/or recreational facilities within the project area Describe the anticipated impacts of the project on existing recreational resources
Transportation/Traffic	Describe the existing transportation network within the project area (roads, trails, public transit, etc.) Describe the anticipated impacts of the project on transportation routes and levels of service, including emergency access in the project area and vicinity
Utilities/Service Systems	Describe the service area of the project, including utility service providers and infrastructure locations



Resource Area	Overview of Environmental Constraints Analysis Discussion
	Describe the anticipated impacts of the project on existing utility systems, including contribution to waste streams

The Environmental Constraints Analysis will also include a discussion of the regulatory setting for each resource area. Any potential additional studies that may be required when further Project design is developed will also be outlined in the Environmental Constraints Analysis. The potential permits for the recommended alternative will also be summarized in a table in the project description.

The Environmental Constraints Analysis will include a summary of the key environmental constraints issues to be considered during the planning process. This summary will be provided in text as well as summarized in a table that ranks each alternative based on its feasibility for project implementation. The constraints analysis summary conclusion will also indicate the anticipated level of documentation that would likely be required under California Environmental Quality Act (CEQA) and/or the National Environmental Policy Act (NEPA) as a result of the potential Project impacts.

Upon receipt of funding for the Feasibility Study, the Feasibility Study Team will prepare a notice of exemption (NOE) under CEQA in compliance with the SCFRR Solicitation Package and will submit the appropriate number of copies to the Tehama County Clerk. The NOE should be filed with the Tehama County Clerk prior to the execution of the funding agreement and receipt of any grant funds. A copy of the NOE will be submitted to DWR’s SCFRR Program as well.

Subtask 2.6 -Feasibility Study Finance Plan:

This task is intended to address the financing plan requirements outlined and described within DWR’s *State-led Feasibility Study Guidelines*. The published guidance by DWR recognizes the importance of financial feasibility as part of the evaluation that is to be prepared as part of the study process. Specifically the Guidelines state, “Financing: feasibility studies must be accompanied with a reasonable and implementable financing plan.” We are proposing a phased approach to prepare the financing plan as part of the feasibility study process. A phased approach is being proposed as the level of effort and associated actions required to complete a financing plan will be customized based on the benefited community and the preferred alternative.

*Support Alternative Evaluation: Identification of Funding Sources and Requirements*

The first phase includes working with the engineering and environmental teams after the alternative formulation process, to assist with alternative evaluation. Because financial feasibility is such an important factor in the alternative selection process, this effort will work to identify the following items for the array of alternatives being evaluated;

- the beneficiaries of each alternative;
- feasible local and non-local funding sources; and
- the associated near term and long term funding requirements



These key data points are expected to factor into the evaluation and selection of the preferred alternative.

#### *Financial Plan Development: Funding Strategy, Analysis and Implementation Recommendation*

Depending on the outcome of the first phase and as part of the preferred alternative selection process, the second phase will develop a full financial plan for the preferred alternative. This would include identification of the funding mechanisms proposed to implement the project, the quantification of the needed revenues, any associated financing and a strategy for the project's implementation that includes a discrete set of recommendation for the project's implementation. The recommendations would include, for example:

- State investment: a recommended strategy for pursuing grant funding including the identification or recommendation of associated programs that could be utilized, and/or any multi-benefit features that could be identified and integrated into the project that could increase state cost sharing; and
- Local funding: the identification of appropriate of local funding mechanisms such as, local assessments, special taxes, development fees etc.

In the case of a local assessment, the recommendation would include the identification and assessment of direct beneficiaries and associated assessment rates to address the requirements of Proposition 218. In the case of a development fee, the recommendation would include the identification of developable land and associated fee rates that would address the requirements of AB 1600, the Mitigation Fee Act.

#### Subtask 2.6 - Evaluate and Compare Alternatives:

Alternatives which have multiple benefits (in addition to flood risk reduction they will include such benefits as environmental enhancement, agricultural preservation, etc.) will be developed to a point where a detailed comparative evaluation can be performed. This task will consist of generating feasibility level cost estimates for all construction, real estate requirements, operations and maintenance, and environmental mitigation costs. Additionally, the benefits of each alternative will be quantified and expressed monetarily where possible. As the alternatives are developed, consideration will be given to the potential construction impacts and risks, and environmental and other permitting requirements. The alternatives will be ranked based on the comparison of the costs and benefits to each of the other alternatives and the No-Action alternative, in order for a preferred alternative to be selected.

### **Task 3. Implementation Strategy**

The Feasibility Study team will develop an implementation strategy(s) for the preferred alternative(s) identified in the Feasibility Study report.



### 3.8 Preliminary Budget with Total Study Cost, Funds Requested, and Cost Share Amount

The total study cost for the proposed project is anticipated to be \$500,000. Therefore, Tehama County is requesting funds to prepare a feasibility study in the amount of \$500,000. As costs will not exceed \$500,000 no cost sharing will be necessary.

PHASE 1 FEASIBILITY STUDY PRELIMINARY DRAFT BUDGET*	
Task Description	Estimated Cost
Task 1: Project Management and Grant Administration	
Project Management	\$ 35,000.00
Task 1 Total	\$ 35,000.00
Task 2: Feasibility Study	
Determine Goals, Objectives and Constraints	\$ 10,000.00
Define Existing Conditions	\$ 3,000.00
Compile Existing Data	\$ 6,000.00
Field Surveys	\$ 15,000.00
Hydrologic & Hydraulic Analysis	\$ 70,000.00
Floodplain Mapping	\$ 14,000.00
Geotechnical Investigation	\$ 185,000.00
Define Alternatives	\$ 15,000.00
Public Outreach	\$ 6,000.00
Scoping/Community Meetings	\$ 3,000.00
Outreach Materials	\$ 1,000.00
Environmental Constraints Analysis	\$ 10,000.00
Project Description	\$ 4,000.00
Biological Resource Analysis	\$ 5,000.00
Cultural Resource Analysis	\$ 5,000.00
Feasibility Study Finance Plan	\$ 25,000.00
Alternative Evaluation	\$ 30,000.00
Identification of Funding Sources	\$ 5,000.00
Financial Plan Development	\$ 10,000.00
Evaluate and Compare Analysis	\$ 15,000.00
Determination of Preferred Project	\$ 8,000.00
Task 2 Total	\$ 445,000.00
Task 3: Implementation Strategy	
Finalize Feasibility Study and Implementation Strategy	\$ 20,000.00
Task 3 Total	\$ 20,000.00
Total Feasibility Study Cost	\$ 500,000.00

\*Values are estimated. Upon grant award and further refinement in the development of the Scope of Work, cost allocations are subject to change.



### 3.9 Potential Project Benefits

While the primary goal for the feasibility report approach is to reduce flood risk to the community of Gerber, the proposed feasibility study presents a rare opportunity to integrated flood management with the goals of the 2016 Draft Central Valley Flood System Conservation Strategy. Given the project's location adjacent to the Sacramento River National Wildlife Refuge there is an opportunity to advance integrated flood management concepts such as setback levees that could achieve numerous ecological benefits on Elder Creek near its confluence with the Sacramento River while improving flood protection system performance. Therefore a full analysis of ecosystem processes will be incorporated into evaluation of alternatives.

Habitat quantity, quality, and diversity will be addressed in the proposed feasibility study by identifying opportunities to increase longitudinal and lateral connectivity. Stressors in Elder Creek will be assessed by this feasibility study through consideration of removal of invasive plant-dominated vegetation through an adaptive management planning process:

The feasibility report will include an evaluation of potential to increase and improve quantity, diversity, quality, and/or connectivity of riverine aquatic and floodplain habitats.

In addition, the feasibility study will look at opportunities to improve recreational opportunities within the project area. Geber is directly adjacent to the Sacramento River National Wildlife Refuge, but the Refuge in this location is only accessible by boat. The feasibility study will look at improving recreational access to the Refuge.

### 3.10 Known Studies Relevant to the Project Area

- Elder Creek Channel Rehabilitation Project, Initial Study/Proposed Mitigated Negative Declaration, DWR, 2015
- DWR's FloodSAFE LiDAR and terrain data
- DWR's Flood Control System Status Report
- DWR's Non-Urban Levee Evaluation Program
- FEMA Effective FIS Report and DFIRMs
- DWR Central Valley Hydrology Study
- DWR Central Valley Floodplain Evaluation and Delineation
- Mid & Upper Sacramento River Regional Flood Management Plan
- Mid & Upper Sacramento River Regional Flood Emergency Response Project

### 3.11 Potential Project Permitting and Environmental Constraints

Anticipated permit requirements and environmental constraints are to be determined during the feasibility study. However, a list of potential permitting and environmental compliance constraints can be considered as follows:

- California Environmental Quality Act (CEQA)



- United States Army Corps of Engineers (USACE) 404 & 409 Permit
- California State Water Resources Control Board (SWRCB) 401 Permit
- California Department of Fish and Wildlife (DFW) Streambed Alteration Agreement
- Central Valley Flood Protection Board (CVFPB) Encroachment Permit
- USFWS & NMFS concurrence

### 3.12 Levee Flood Protection Zone Status

The town of Gerber is located within the Levee Flood Protection Zone.

### 3.13 Statement of Financial Disposition

Tehama County has sufficient funds to pay its consultant team while awaiting reimbursement from DWR per the draft SCFRR funding agreement.

### 3.14 Feasibility Study Schedule

A preliminary schedule for the preparation of the feasibility schedule is shown on the following page. The key milestones are:

- February 2017 – Notification of Project Funding and Awards
- February 2017 – Finalize Project Scope, Budget, and Schedule
- March, 2017 – Funding Agreement Approval
- March 2017 – Define Goals, Objectives & Constraints
- April 2017 – Define Study Area, Problems and Existing Conditions
- September 2017 – Formulate Alternates
- November 2017 – Evaluate & Compare Alternatives
- March 2018 – Final Report

**Schedule - SCFRRP Gerber, Tehama County, CA**

ID	Task Name	Duration	2017												2018			
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
1	<b>Task 1: Project Management and Grant Administration</b>	<b>291 days</b>																
2	Award Notification	1 day																
3	Scoping and Coordination with DWR and LMA	1 mon																
4	Finalize Scope of Work	0.5 mons																
5	Project Management	13 mons																
6	Grant Administration	13 mons																
7	Stakeholder Coordination	13 mons																
8	<b>Task 2: Feasibility Study</b>	<b>260 days</b>																
9	Determine Goals, Objectives and Constraints	1 mon																
10	Define Existing Conditions	1 mon																
11	Compile Existing Data	2 mons																
12	Field Surveys	0.5 mons																
13	Hydrologic & Hydraulic Analysis	2 mons																
14	Floodplain Mapping	1 mon																
15	Geotechnical Investigation	4 mons																
16	Define Alternatives	2 mons																
17	Public Outreach	13 mons																
18	Environmental Constraints Analysis	30 days																
19	Project Description	0.5 mons																
20	Biological Resource Analysis	0.5 mons																
21	Cultural Resource Analysis	0.5 mons																
22	Final Report	80 days																
23	Alternative Evaluation	2 mons																
24	Evaluate and Compare Analysis	1 mon																
25	Determination of Preferred Project	1 mon																
26	Feasibility Study Finance Plan	40 days																
27	Financial Plan Development	1.5 mons																
28	Identification of Funding Sources	0.5 mons																
29	<b>Task 3: Implementation Strategy</b>	<b>1 day</b>																
30	Finalize Feasibility Study and Implementation Strategy	1 mon																



## 4.0 DWR Environmental Information Form

Tehama County understands and is willing to abide by the following:

Funding recipients are responsible for complying with all applicable laws and regulations for their projects, including the California Environmental Quality Act (CEQA) and, the National Environmental Protection Act (NEPA), if applicable.

Feasibility studies are statutorily exempt from the requirements of CEQA pursuant to California Code of Regulations, title 14, section 15262. That section states:

*A project involving only feasibility or planning studies for possible future actions which the agency, board, or commission has not approved, adopted, or funded does not require the preparation of an [environmental impact report] or negative declaration but does require consideration of environmental factors. This section does not apply to the adoption of a plan that will have a legally binding effect on later activities.*

As such, applicants that have been awarded funding for completion of a feasibility study will be required to file a Notice of Exemption (NOE) with the applicable County Clerk prior to the execution of the funding agreement and receipt of any grant funds. A copy of the NOE must be submitted to DWR's SCFRR Program. See the Proposal Submittal information for contact information.

If a funding recipient wants to prepare environmental documentation in support of a completed feasibility study using Proposition 1E funding, the funding recipient must contact and consult with DWR. Work that is subject to CEQA shall not proceed until and unless approved by DWR. Such approval is fully discretionary and shall constitute a condition precedent to any work for which it is required.

## 5.0 Authorizing Resolution

The attached resolution was adopted by the Tehama County Board of Supervisors at its November 1, 2016 meeting.

## 6.0 Attorney's Certification

Following is the completed attorney's certification which is required for submission of the grant application.

**RESOLUTION NO. 2016-83**

**RESOLUTION OF THE TEHAMA COUNTY BOARD OF SUPERVISORS  
AUTHORIZING AN APPLICATION FOR FUNDING FROM THE DEPARTMENT OF  
WATER RESOURCES AND DESIGNATING THE DIRECTOR OF PUBLIC WORKS  
AS THE REPRESENTATIVE TO EXECUTE THE FUTURE AGREEMENT AND ANY  
AMENDMENTS THERETO FOR THE TEHAMA COUNTY FLOOD PROTECTION  
FEASIBILITY STUDIES PROJECT FOR THE TOWN OF GERBER**

**WHEREAS**, the County of Tehama is a political subdivision of the State of California with responsibility for flood management and authority over land use in the area protected by the facilities of the State Plan of Flood Control and is willing to participate in, coordinate, and collaborate with other interested parties that are participating in the development of the County of Tehama flood management planning activities; and

**WHEREAS**, the County of Tehama is authorized to enter into an agreement with the Department of Water Resources and the State of California; and

**NOW, THEREFORE BE IT RESOLVED THAT:**

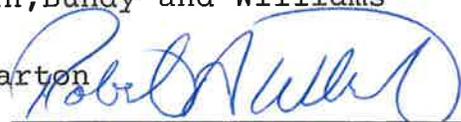
1. That pursuant and subject to all of the terms and conditions of the Disaster Preparedness and Flood Prevention Bond Act of 2006 (Pub. Resources Code § 5096.800 et seq.), the County of Tehama shall submit an application to obtain funding for the Tehama County Flood Protection Feasibility Study Project for the Town of Gerber, through the Small Communities Flood Risk Reduction Program administered by the Department of Water Resources.
2. That the Tehama County Board of Supervisors authorizes the Director of Public Works, or designee, to execute the funding agreement, with the Department of Water Resources and any amendments thereto after the agreement and any amendments are presented to and approved by Tehama County Board of Supervisors.
3. That the Director of Public Works, or designee, shall prepare the necessary data, make investigations, and take other such actions as necessary and appropriate to obtain funding for the Tehama County Flood Protection Feasibility Studies Project for the town of Gerber.

The foregoing resolution was offered on a motion by Supervisor Bundy, seconded by Supervisor Chamblin, and carried by the following vote of the Board:

AYES: Supervisors Carlson, Chamblin, Bundy and Williams

NOES:

ABSENT OR NOT VOTING: Supervisor Garton



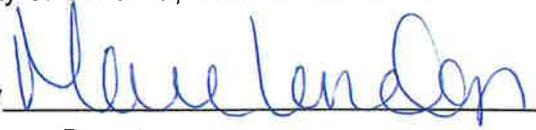
Robert A. Williams, CHAIRMAN,  
Tehama County Board of Supervisors

STATE OF CALIFORNIA    )  
  ) ss  
COUNTY OF TEHAMA    )

I, JENNIFER A. VISE, County Clerk and ex-officio Clerk of the Board of Supervisors of the County of Tehama State of California, hereby certify the above and foregoing to be a full, true and correct copy of a resolution adopted by said Board of Supervisors on the 1st day of November 2016.

DATED: This 1st day of November 2016.

JENNIFER A. VISE, County Clerk and ex-officio Clerk of the Board of Supervisors County of Tehama, State of California.

By  \_\_\_\_\_  
Deputy

## Appendix 2 – Attorney’s Certification

*(The Applicant’s attorney shall answer the following questions regarding this proposal and where indicated, shall cite statutory authority or other references.)*

- Is the Applicant a political subdivision of the State of California? (X) Yes ( ) No  
Citation: Cal. Const., Art.XI, §1; Gov. Code, § 23000
  
- Does the Applicant have legal authority to enter into The Proposed Funding Agreement with the State of California? (X) Yes ( ) No  
Citation: Gov. Code, §§ 6500, et seq; 23004; Wat. Code § 12611
  
- What steps are required by law for the Applicant to sign a Funding Agreement with the State? Approval by Tehama County Board of Supervisors.  
Citation: Gov. Code, §§ 23004; 23005
  
- What is the statutory authority under which the Applicant may obtain funds for the purpose, amount, and duration requested?  
Citation: Gov. Code, § 6500 et seq.; 23004; Wat. Code § 12611
  
- What is the statutory authority under which the Applicant was formed and is authorized to operate?  
Citation: Cal Const., Art. XI, § 1; Gov. Code, § 23000
  
- Is the Applicant required to hold an election before entering into The Proposed funding contract with the State? ( ) Yes (X) No  
Citation: Gov. Code, §§ 23004; 23005

- Will an agreement between the Applicant and the State be subject to review and approval by other governmental agencies?     Yes     No  
Citation: Gov. Code, §§ 23004; 23005

- Describe any pending litigation that impacts the financial condition of the Applicant or the operation of flood management facilities. If none is pending, so state.

None

- Does the Applicant have legal authority and jurisdiction to implement a flood control program and the authority to make land use decisions at the Project site and in the protected area?  
 Yes     No  
Citation: Cal. Const., Art. XI, § 7; Gov. Code, §§ 25680, et. seq; 65100 et seq.

I certify that I am a duly qualified and licensed attorney in California representing the Applicant Agency and that I have answered the questions on this page and the preceding page to the best of my knowledge.

By   
(Signature of Applicant Agency's Attorney)

Date 11/1/16

Arthur J. Wylene  
(Printed Name of Applicant Agency's Attorney)

County Counsel SBN: 222792  
(Title) (Bar No.)

County of Tehama  
(Name of Applicant Agency)



*Application for the*  
Department of Water Resources  
Small Communities Flood Risk Reduction Program  
Phase 1: Feasibility Study

*On behalf of the Small Community of*

**Vina, CA**

*A Mid & Upper Sacramento River Small Community*

MID & UPPER  
*Sacramento*  
RIVER

REGIONAL FLOOD MANAGEMENT PLAN

*NOVEMBER 2, 2016*



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# 1.0 Applicant Information

## 1.1 Agency Name, Primary Contact, Address, Phone Number, and email address.

Tehama County Public Works Department  
9380 San Benito Avenue  
Vina, CA 96035  
(530) 385-1462  
[nbethurem@tcpw.ca.gov](mailto:nbethurem@tcpw.ca.gov)

## 1.2 Information about the authorized applicant representative.

Ryan Teubert  
Flood Control and Water Resources Manager  
(530) 385-1462  
[rteubert@tcpw.ca.gov](mailto:rteubert@tcpw.ca.gov)

## 1.3 Small community's name that is under the applicant's jurisdiction.

Vina, California

## 1.4 Location of the proposed study area including regional flood management planning area, county, local maintaining agency and reclamation district.

Community of Vina, Tehama County (County), Named Area 19 (NA19), Mid and Upper Sacramento River Area

## 1.5 Applicant's flood management authority.

The County of Tehama and the Tehama County Flood Control and Water Conservation District (District) have entered into a Joint Power Agreement (JPA) designating the District as the agency maintaining NA19.

## 1.6 Applicant's role in regional flood management planning:

Tehama County has been a key participant and stakeholder in the Mid & Upper Sacramento River Regional Flood Management (MUSR RFMP) and the Mid & Upper Sacramento River Regional Emergency Response planning process. In addition, Tehama County is the lead agency for the Upper Sacramento River Unified Flood Fight Command.

## 1.7 Is there a regional plan in place? Is the proposed project a priority project within the regional plan?

Yes, The MUSR RFMP was adopted in November 2014 and providing 100-year protection for Small Communities within the region was a priority of the RFMP. Deer Creek levee improvement ecosystem improvements were also identified as a priority of the RFMP.



## 2.0 Funding Request

The County of Tehama is requesting the amount of \$500,000 to undertake the Vina Flood Risk Reduction Feasibility Study.

## 3.0 Project Description

### 3.1 Community Name, Location, and Population

The community of Vina is located on the south bank of Deer Creek, west of Highway 99 in Tehama County. Deer Creek drains the west slope of the southern Cascades, flowing south and west through bedrock canyons, across a broad alluvial fan, and eventually into the Sacramento River near Vina. According to the 2010 Census, Vina's population is approximately 237. Critical public facilities located in Vina are the Vina Elementary School and the New Clairvaux Vineyard (approximately 17.6 acres).

DWR is responsible for maintaining the channel section of Deer Creek while Tehama County Flood Control and Water Conservation District (the local maintaining agency) is responsible for the maintenance of the levees.

### 3.2 Project Area Maps

Figure 1 is a vicinity map of the community of Vina. Figure 2 is an aerial overview of the community of Vina showing the Levee Flood Protection Zone. Figure 3 the State Plan of Flood Control (SPFC) facilities along Deer Creek which protect the community of Vina and the surrounding rural residential land and agricultural lands.

### 3.3 Description of the Problem to be Addressed

The U.S. Army Corps of Engineers (USACE) completed a flood-control project on the lower 6 miles of Deer Creek in 1949 with an intended design capacity 21,000 cfs plus 3 feet of freeboard (vertical distance from water surface to levee crown). The project was intended to provide flood protection to the community of Vina and the surrounding agricultural lands. However, since completion of the original project periodic flooding has continued to occur as a result of levee failures and levee overtopping. The Department of Water Resources' (DWR) 2011 Flood Control System Status Report (FCSSR) indicates that in some sections of Deer Creek actual flow carrying capacity is as low as 7,000 cfs, just 33% of the intended design capacity. Table 1 below provides a summary of major flood events which have occurred on Deer Creek.



Table 1. Summary of major flood damage that has occurred along Deer Creek.

Date	Flood Flow (cfs)	Comments
Dec-64	18,800	South bank, 1,000 feet downstream of Highway 99: 400 feet of project levee destroyed. South bank, downstream of Union Pacific Railroad: 300 feet of non-project levee damage. Damage east of Leininger Road at two locations and at Monastery of New Clairvaux. Called the "worst flood disaster in Tehama County History." <sup>[1]</sup>
Feb-69	15,000	Erosion along north bank, west of Leininger Road.
Jan-70	20,100	Stanford-Vina Ranch Irrigation Company Diversion Dam, Cone-Kimball Dam damaged by floodwaters.
Sep-71	N/A	Damage to Soske Ranch groin in Deer Creek.
Jan-74	11,900	Damaged riprap on south bank, downstream from the Union Pacific Railroad. A 100-foot section of levee erosion and riprap lost 0.25 mile south of Red Bridge on south bank.
Mar-83	12,200	Damage to private levees/streambank at Monastery of New Clairvaux, Rumiano, Ramsey, and Soske properties. South bank, west of Leininger Road: 700-foot breach (levee was set back 80 feet from the original alignment, per USACE.) South bank, east of Highway 99: 100-foot erosion. South bank, west of Highway 99: 350-foot breach. North bank, west of Red Bridge: 300-foot erosion.
Feb-86	16,100	Extensive damage between Leininger Road and Highway 99. South bank, 1,500 feet downstream from Leininger Road: 800-foot project levee breach. South bank, east of Highway 99 Bridge: 100-foot project levee washout. South bank, 300 feet west of Highway 99: 200-foot project levee washout. North bank, 1,800 feet west of Leininger Road: 300 feet of bank protection lost.
Jan-97	24,000	Extensive damage between Leininger Road and Union Pacific Railroad. Bank protection damaged upstream of Leininger Road, 1,500-foot breach in south project levee downstream of Leininger Road; 200-foot breach in north bank opposite. 300-foot bank protection damage along north bank, immediately downstream from primary breach. Additional breaches immediately upstream and downstream of Highway 99. 800 feet of the non-project levee overtopped west of Highway 99.

[1] "Statement to California Water Commission by TCFCWCD", February 10, 1965.

The USACE built facilities, which are a part of the State Plan of Flood Control (SPFC), rely on confining flood flows between levees set close to the channel margin. Trying to maintain the design capacity of the channel relies upon regular sediment removal and vegetation clearing which is becoming more difficult and costly to undertake due to increasing regulatory restrictions. Tehama County Flood Control and Water Conservation District (Tehama County) maintains the levees while DWR is responsible for maintaining channel capacity.



DWR has had to carry out various operation and maintenance activities over the years in an attempt to maintain the flood flow capacity of the system. One of the more significant was a sand and gravel removal project conducted by DWR between 1984 and 1987. Approximately 60,000 cubic yards of bed material (mostly gravel) were removed in 1984 from the reach between Highway 99 and the Sacramento River. Approximately 45,000 cubic yards of bed material were removed upstream of Highway 99 in the summer of 1986. In addition, approximately 40,000 cubic yards of channel bed material near Leininger Road Bridge (locally known as the 'Red Bridge') were removed in 1986.

In addition to operation and maintenance issues, the Deer Creek system has experienced significant habitat degradation since the original project was constructed. The historic Deer Creek floodplain no longer regularly conveys flood flows, and the disturbance of riparian vegetation and alteration of the channel has degraded habitat diversity and complexity in the Deer Creek corridor, including habitat for spring-run Chinook salmon.

As Deer Creek is one of only three streams in the Central Valley that still supports a viable, wild population of the federally threatened spring-run Chinook salmon (Campbell and Moyle, 1991; National Marine Fisheries Service, 2000), improving habitat along the corridor is critical to the long term survival of the species. In 2011 the Deer Creek Watershed Conservancy completed the *Lower Deer Creek Restoration and Flood Management Feasibility Study and Conceptual Design Phase 1 Report (Lower Deer Creek 2011 Report)*, which looked at alternatives to restore flood protection while reducing overall channel degradation, and restoring the channel floodplain connectivity essential to the long-term sustainability of a viable ecological system. The Vina Small Community Flood Risk Reduction Feasibility Study (Feasibility Study) intends to build upon the Lower Deer Creek 2011 Report to develop alternatives which can provide a 100-year level of flood protection for the community of Vina while also incorporating multi-benefit opportunities for improving habitat values along Deer Creek.

The feasibility study will also address issues related to long-term O&M costs by incorporating a structured and integrated levee vegetative management plan. The vegetative management plan could promote both erosion control and terrestrial wildlife survival during floods, and include a streamlined permitting process to facilitate vegetation maintenance on the levees.

The feasibility study will also address how to improve institutional support in several ways, including:

- Coordinating O&M protocols between the levee maintaining agencies and the State and federal regulatory agencies;
- Developing a streamlined permitting process to facilitate vegetation maintenance on the levees; and
- Coordinating emergency preparedness and response activities between County Office of Emergency Services and maintenance agencies.

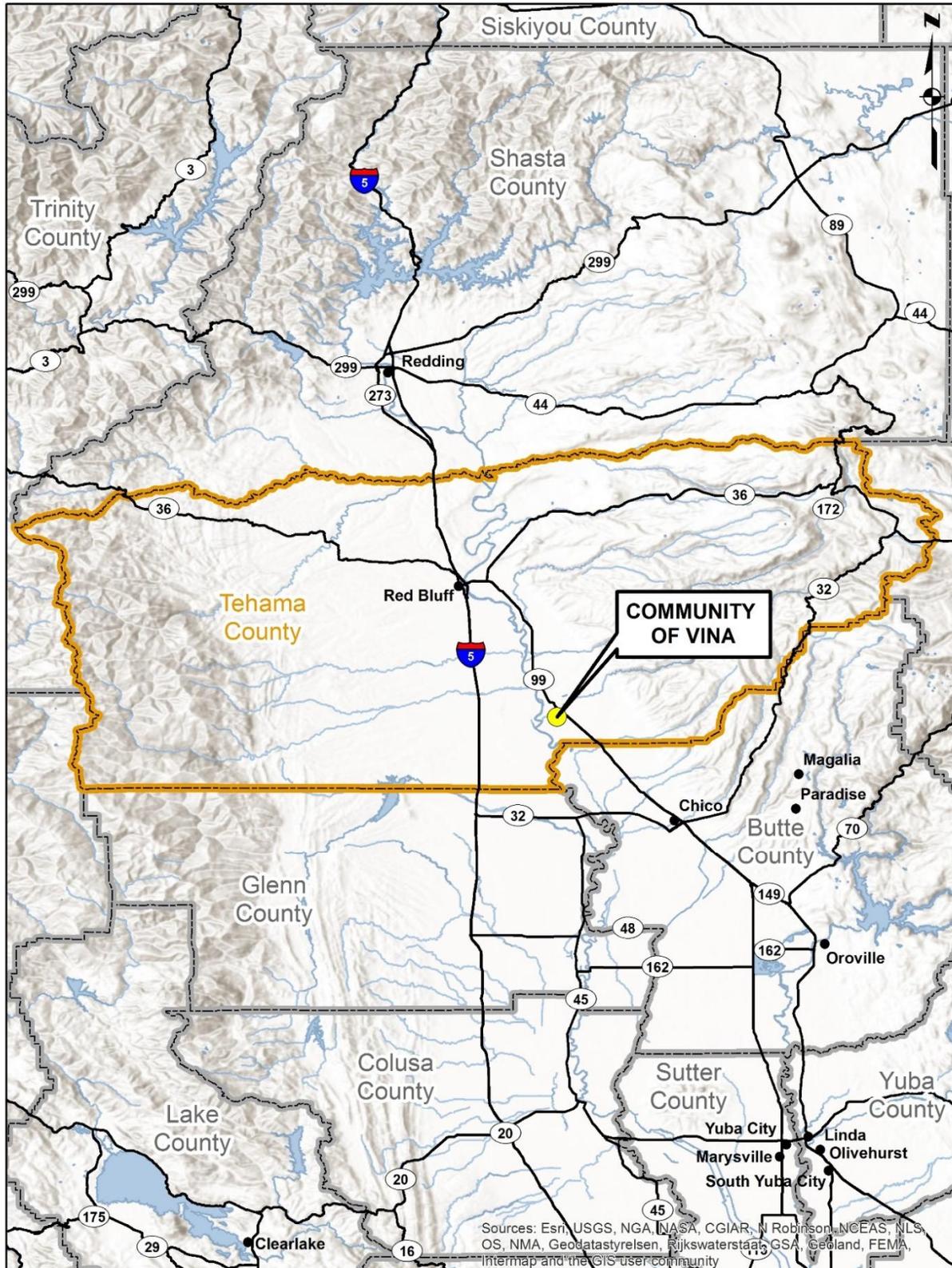


Figure 1: Vicinity Map

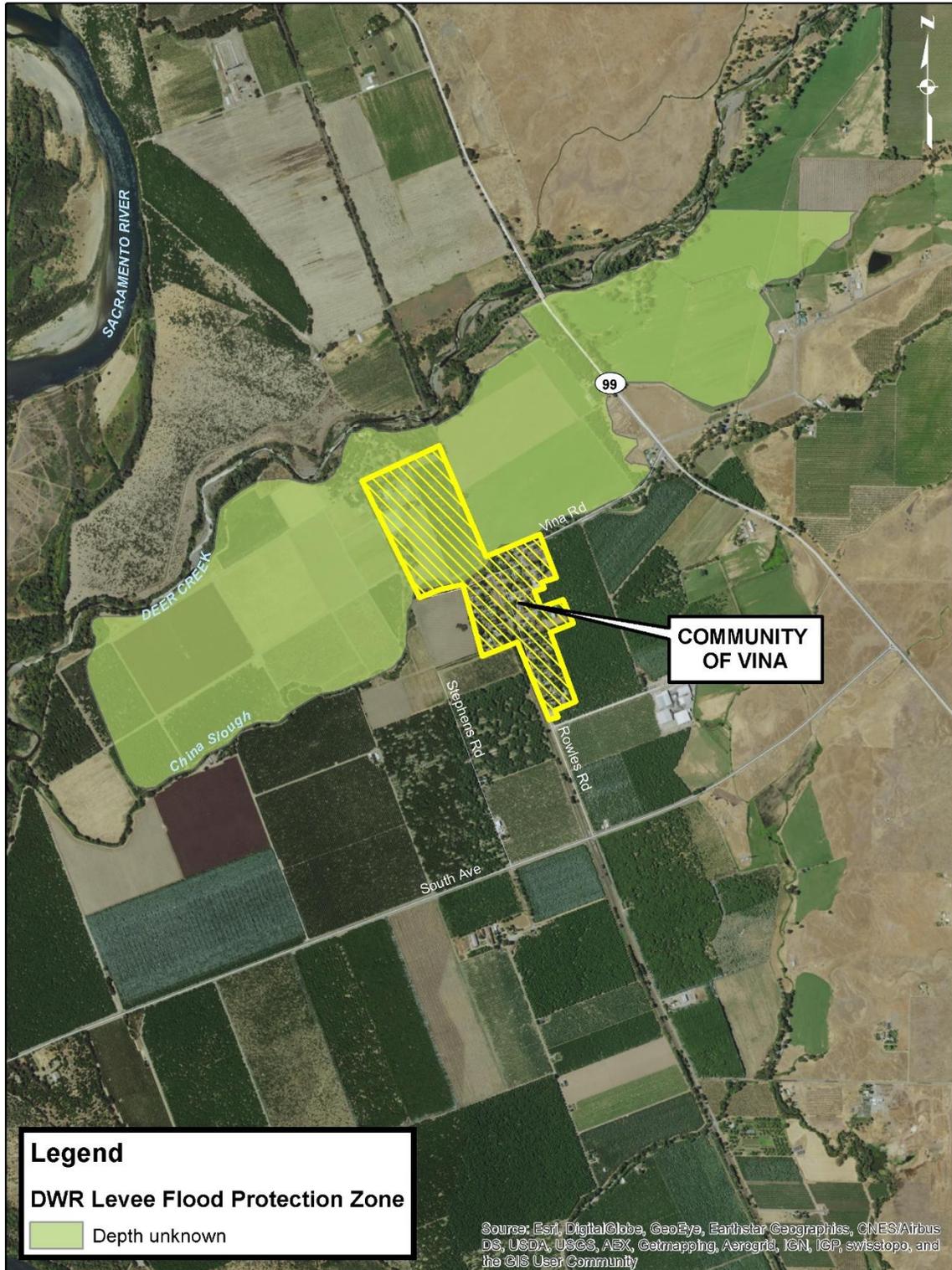


Figure 2: LFPZ Flood Depths for Vina

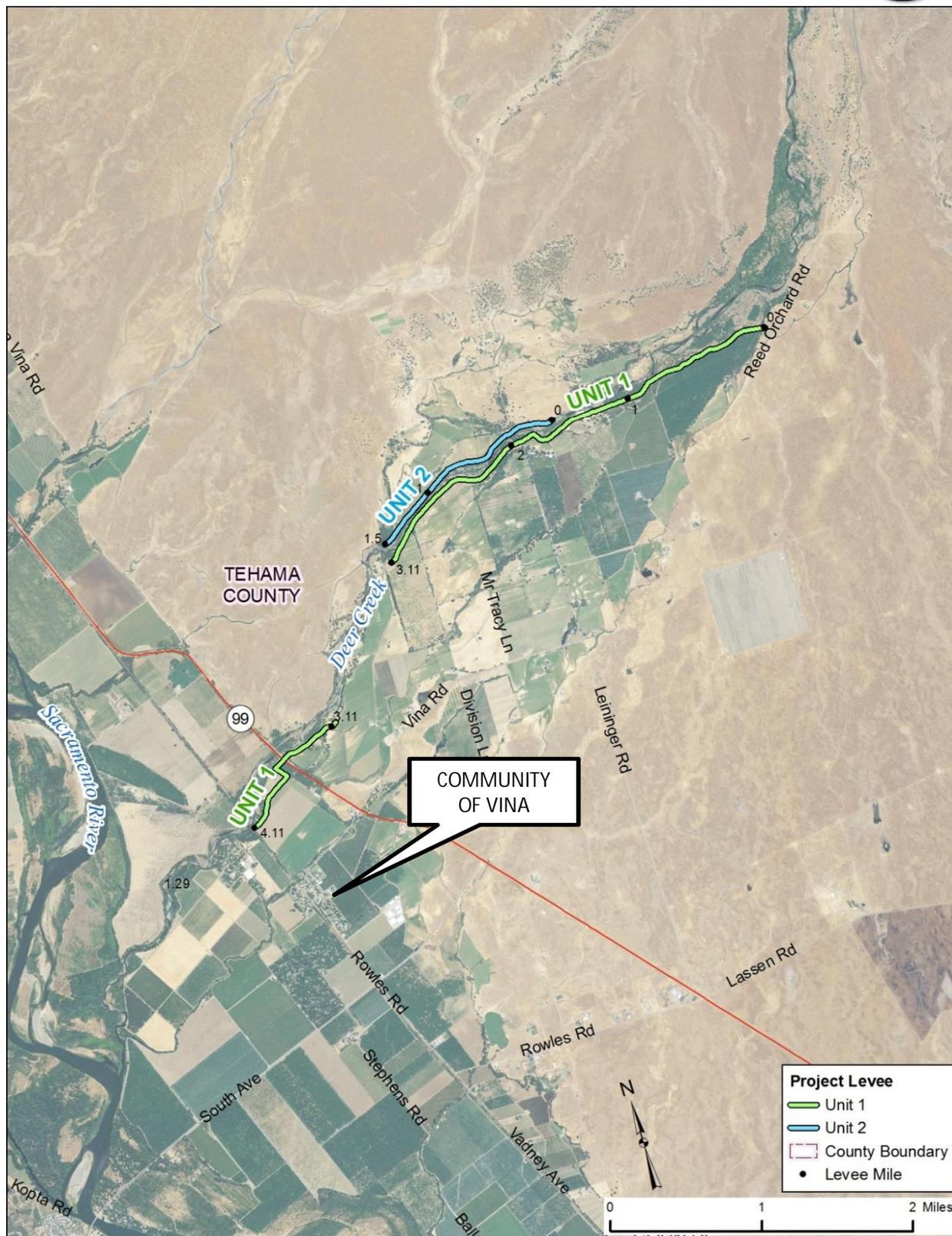


Figure 3: State Plan of Flood Control (SPFC) facilities protecting Vina



### 3.4 Feasibility Study Goals and Objectives

The broad goals of the Vina Small Community Flood Risk Reduction Feasibility Study will be to evaluate alternatives for providing Vina with a 100-year level of flood protection which also provide opportunities to improve aquatic and terrestrial habitat along Lower Deer Creek, while also being sensitive to the needs and values of the local landowners. More specifically, the objectives of the Feasibility Study and Conceptual Design Project are to:

- Update the Lower Deer Creek 2011 Report's assessment of current channel conditions and capacity;
- Identify the causes of the flood threats to the community of Vina;
- Update the Lower Deer Creek 2011 Report's assessment ecosystem degradation and health;
- Evaluate both structural and non-structural options for increased flood protection;
- Assess the potential for "hands off" flood protection alternatives which do not require channel bed maintenance (e.g., gravel removal) or vegetation clearing from the floodplain to maintain flood conveyance;
- Evaluate alternatives that contribute to measureable objectives for targeted metrics under the ecological objectives and goals set forth by "Metrics for Ecosystem Process, Habitat, and Stressor Objectives" outlined in DWR's Draft Conservation Strategy;
- Assess current flood emergency response capabilities and recommend actions for improvements to flood emergency preparedness;
- Identify actions and groups of actions that may lead to reliable, sustainable and acceptable flood protection and improved ecosystem health and/or function along the project reach;
- Transfer information to landowners, stakeholders, and the public, and acquire landowner feedback;
- Develop a range of alternatives that may satisfy project goals;
- Identify preferred alternative(s);
- Evaluate funding opportunities needed to implement the preferred alternative(s); and
- Develop strategic plan for next steps and actions needed to advance the preferred alternative(s) closer to implementation.

### 3.5 Description of Opportunities and Constraints:

There are significant ecological and recreational opportunities associated with this project. Please see Section 3.9 below for additional discussion. In addition, a full description of opportunities and constraints will be developed through the feasibility study effort.

### 3.6 Description of Potential Alternative Solutions

The feasibility study will evaluate a suite of alternatives including but not limited to:

- Fix-in-place existing levees;
- New setback levees;



- Ring levees;
- Wing levees; and
- Non-structural alternatives such as flood-proofing, raising existing structures, and improved emergency preparedness and response.

### 3.7 Detailed Description of the Feasibility Study Approach

The goals for the feasibility study shall be met by stepping through an iterative and interactive process to formulate a cost-efficient, multi-benefit integrated plan that meets the State's objectives. The process will follow the following structured approach that provides a rational framework for decision-making:

1. Identify Problems and Deficiencies
2. Inventory Existing Condition and Forecasting Conditions
3. Formulate Alternative Plans
4. Refine goals, objectives and constraints
5. Evaluate Alternatives
6. Public Outreach
7. Financial Feasibility Analysis
8. Tradeoff Analyses and Selection of Preferred Alternative

In 2014 DWR published the Final Draft Guidance for Development of a State-Led Feasibility Studies. This document was referenced as part of the SCFRR Program and will guide the preparation of this feasibility study. The following details a preliminary description of work we believe will be required to provide the engineering and environmental assessments necessary to conduct the Vina Feasibility Study per the requirements of the SCFRRP. This scope described below covers the full universe of potential activities and will be refined after grant award based upon funding award, and existing available, usable data.

#### Task 1. Project Management and Grant Administration

This task includes the management activities required to ensure the Feasibility Study is completed on time, within budget, and addresses the SCFRRP requirements. This will include preparing monthly invoices and progress reports to meet all of DWR's grant requirements. The progress report will summarize budget and schedule status in measurable terms. A detailed schedule and budget will be prepared for effective project management, with a goal of completing all work on time and within budget. Communication between the County, its consultant, and DWR will be frequent and flow freely as needed to ensure the success of the Feasibility Study.

#### Task 2. Feasibility Study

The intent of this Feasibility Study will be to develop solutions to solve Vina's flood risk problems while also providing opportunities for habitat enhancement along the Deer Creek corridor by completing the tasks outlined below.



### Subtask 2.1 - Define Goals, Objectives, and Constraints:

Project objectives set the foundation for how alternatives are formulated and which criteria are selected for evaluation. This task will involve working to develop a clear understanding of what the Feasibility Study will need to achieve. The goal setting process will also identify any constraints that the study will need to work within when formulating alternatives. These planning constraints will help guide the Feasibility Study. Examples of constraints can include current applicable laws, regulations, and policies; and physical conditions (e.g., topography, hydrology). It will be important that this study's goals and objectives align with those of other ongoing efforts such as the Upper and Mid-Sacramento River Regional Flood Management Plan, DWR's 2017 CVFPP, and the draft Conservation Strategy. Therefore, coordination with agencies leading other ongoing efforts will be necessary.

Subtask 2.2 - Define Existing Conditions, Problems, and Opportunity Identification: This task will consist of conducting a baseline assessment of the study area. The Feasibility Study Team will work to define the current issues along Deer Creek, as well as opportunities to be realized through solving the problems. Analysis of existing data and studies, particularly the *Lower Deer Creek Restoration and Flood Management Feasibility Study and Conceptual Design Phase 1 Report*, will help guide the Feasibility Study Team to determine existing conditions, which will provide a basis for comparison of future alternatives.

### *Compile Existing Data and Review Previous Reports*

The purpose of this task is to compile all the available information from local, state and federal agencies, public records, and/or stakeholders to properly evaluate the existing and proposed hydraulics of the floodplain. The available study information will assist in review of existing flood control issues, developmental impacts, and wildlife habitat considerations.

Various documents, models, and data are available which provide a history and depiction of the study site that will help to better understand local flooding concerns. A summary of the known data is listed in Section 3.10 below.

### *Field Surveys*

Feasibility Study Team to conduct a detailed field reconnaissance of the specific study area to determine:

- Locations for the necessary control network conditions along the floodplain(s);
- Types and numbers of hydraulic and/or flood-control structures; apparent maintenance or lack thereof of existing hydraulic structures; and
- Locations of cross sections to be surveyed; and other parameters needed for the updated hydrologic and hydraulic analyses.

### *Hydrologic & Hydraulic Analysis*

The Feasibility Study Team will update the hydrological and hydraulic analysis of the study area included in the *Lower Deer Creek Restoration and Flood Management Feasibility Study and Conceptual Design Phase 1 Report* to incorporate the latest topographic and



bathymetric data from CVFED. The onsite field surveys will be used to supplement the terrain data at critical locations.

All results from hydrologic analyses will be compared including an evaluation of regional regression and historical flows to ensure quality and reasonableness.

Hydraulic analyses will be performed using DWR FloodSAFE LiDAR and terrain data to determine water surface elevations for floodplain delineation purposes.

The Feasibility Study Team will use a HEC-RAS model under steady state regime to analyze detailed riverine reaches of Deer Creek and its tributaries within the boundary. The cross-section and field data collected during the Field Survey and DWR FloodSAFE topographic data will be utilized, when appropriate to perform the hydraulic analyses. The hydraulic analyses will be used to establish flood elevations and floodplain extents for the subject flooding sources.

The Feasibility Study Team will develop a floodplain model by using HEC-RAS storage areas or a two dimensional hydraulic modeling software such as HEC-RAS 2D or TuFlo. This model will be used to develop floodplain extents and depths with newer terrain data and more detail than the floodplains currently acknowledged by FEMA.

Additionally, 100-year flow simulations will be performed for existing conditions and for all the proposed alternatives to quantify the benefits of the various alternatives. These simulations will be used to determine the flood stage water surface elevations and provide the necessary heights for flood protection. These alternatives will be used to propose the most effective project design to reduce the potential of loss of life and property.

#### *Floodplain Mapping*

The Feasibility Study Team will use hydrologic and hydraulic models described above to develop a floodplain map for the study area. The Feasibility Study Team will perform a floodplain evaluation for existing conditions and alternatives to determine the potential for loss of life and property and better define the benefits of the array of alternatives.

- DWR Central Valley Hydrology Study;
- DWR Central Valley Floodplain Evaluation and Delineation;
- Mid & Upper Sacramento River Regional Flood Management Plan; and
- Mid & Upper Sacramento River Regional Flood Emergency Response Project.

#### *Geotechnical Exploration*

The Feasibility Study Team will develop a feasibility-level geotechnical program that will perform a study of the regional geology and geotechnical characteristics, review potential new levee alignments and suitable tie-in locations along existing levees, and identify potential borrow sites for suitable levee materials.

The Feasibility Study Team will review readily available documents including available published geotechnical reports; DWR's NULE data, and California Geologic Survey (CGS) data bases. This information will form the geotechnical basis for selecting feasible alignments and borrow sources. Subsequently, a limited field investigation, which relies in part on the paper study discovery, will be performed along potential alignments. A field



investigation will include borings and Cone Penetration Tests (CPTs) that will be used to further develop locations suitable for levee alignments and borrow areas.

In order to evaluate the feasibility of this project, preliminary analysis and design will be performed using FEMA criteria. The evaluation analysis will utilize the data collected from the desk top study and investigation to evaluate the following:

- Bearing capacities and settlements of foundation materials.
- Potential borrow area soils will be assessed for suitable levee construction materials.
- Generalizations regarding borrow soils will be developed from laboratory testing on samples collected during the investigation and analyzed for characteristics suitable for levee materials.
- Slope stability and seepage analysis of the existing levees will be analyzed at potential tie-in locations.

Subtask 2.3 - Formulate Alternatives: The Feasibility Study Team will develop alternatives which will consist of an array of design flood events and alignments that provide flood protection for the community of Vina, and which provide opportunities for ecosystem enhancement along Deer Creek, and potential within and/or adjacent to the Sacramento River National Wildlife Refuge. Each alternative will consist of measures developed from the analysis performed in Subtask 2.2 by incorporating concepts proposed in the Lower Deer Creek Restoration and Flood Management Feasibility study and Conceptual Design-Phase I. Each alternative will be formulated to address the problems and objectives defined in Subtask 2.1. Example elements of each alternative may include different levee alignments, levee heights, and other flood protection and ecosystem enhancement features.

Subtask 2.4 - Public Outreach: Once alternatives have been developed, a stakeholder outreach effort will be undertaken to share the information with property owners and stakeholders: The goals of the outreach effort will be to:

- Positively impact flood risk awareness
- Include a broad range of stakeholder groups and interests to maximize opportunities for collaboration and achieve multi-benefit objectives
- Facilitate support for project implementation

#### *Small Group Meetings*

In an effort to pave the way for collaboration among stakeholder groups, the Feasibility Study team will schedule small group meetings to vet issues of concern within particular interest groups, and identify opportunities for agreement on multi-benefit project elements. The consultant will coordinate all meeting logistics and provide a summary of outcomes and agreements.

#### *Scoping/Community Meetings*

Scoping/community meetings will be scheduled as needed to identify problems, opportunities and potential multi-benefit alternatives for reducing flood risk. The



Feasibility Study team will prepare meeting notices, coordinate all meeting logistics, assist with materials preparation and meeting notes, and facilitate as needed.

### *Outreach Materials*

A number of tactics will be developed to connect with and engage stakeholders in feasibility study and project implementation processes. Whenever possible, the Feasibility Study team will use electronic communications, such as email and e-news, to inform stakeholders of project activities. Additionally, a web page may be developed and housed on the grant administrator's or region's RFMP website. This page will be continually updated with project news and documents and serve as the primary hub for public information. Outreach materials will include:

- Email notifications;
- Webpage;
- Meeting summaries;
- eNews;
- Fact sheets, FAQs, white papers;
- Postcard mailings; and
- Media releases and advisories.

Subtask 2.5 - Environmental Constraints Analysis: Per the Small Communities Flood Risk Reduction (SCFRR) Guidelines, "Feasibility studies will include completing a California Environmental Quality Act (CEQA) environmental checklist and identifying CEQA documents anticipated for implementing the preferred alternative. The environmental constraints analysis will identify areas of potential impacts as a result of implementing the alternatives proposed in the Feasibility Study. The environmental constraints analysis will also outline the anticipated CEQA document that will be required for implementing the preferred alternative. The environmental constraints analysis will be comprehensive in an effort to better position the project for implementation funding.

The analysis of constraints is intended to facilitate the project planning process, assist with the evaluation of various alternatives, define a recommended project, and assess potential permitting and mitigation requirements. This is accomplished by compiling available information, considering the existing resources during the project-planning phase, conducting field surveys as appropriate and providing insight into environmental issues that should be addressed during the environmental review and permitting process. A beneficial constraints analysis should accomplish the following main objectives:

- Evaluate alternatives based on the anticipated presence or absence of environmental resources;
- Describe the consistency and/or compliance with existing policies;
- Analyze potential environmental mitigation costs for each alternative; and
- These objectives should be met with a separate, detailed discussion for each applicable resource area as they apply to the specific alternatives.



### *Project Description*

A project description that describes all of the alternatives considered and evaluated in the feasibility study will be prepared to initiate the Environmental Constraints Analysis. The project description prepared for the Environmental Constraints Analysis is intended to meet the requirements of CEQA, and will provide the background for the proposed project; document and confirm the location and boundaries of the project; provide and confirm a statement of the objectives of the proposed project; and, provide a general description of the proposed project's technical, structural, environmental, and construction aspects such as staging, site access, and phasing (specifically related to the recommended alternative). The project description will include information necessary to assess the proposed project's potential impacts on the environment. The project description will include one or more figures showing the location of the proposed project and alternatives, based on existing maps.

The Feasibility Study Team will also conduct biological resources and cultural resources analyses, investigations, and surveys related to the preparation of the Environmental Constraints Analysis for the project. The Feasibility Study Team will prepare technical memoranda for biological resources and cultural resources to summarize these analyses, investigations, and surveys. These technical memoranda will be included as appendices to the Environmental Constraints Analysis. The technical memoranda will also discuss the potential construction related effects of the proposed project and alternatives on the biological and cultural resources as they relate to the local community and surrounding land uses.

### *Biological Resources Analysis*

A field and database review of special-status species in the project area and vicinity will be conducted. Team biologists will review USFWS, National Marine Fisheries Service (NMFS), and California Department of Fish and Wildlife (CDFW) species lists along with the California Natural Diversity Database (CNDDDB) for records of special-status species in the project area and vicinity. Two biologists will also perform a 1-day field reconnaissance survey to determine the potential presence of protected-species and/or habitats and waters of the US, including wetlands in the project area. Data points will be recorded with the use of a GPS unit, and a GIS habitat map will be prepared based on the results of the field survey and desktop research. Although the project may adversely affect federally listed species, this scope of work does not include protocol level surveys or preparation of a BA, because those will need to be conducted at a later time when further project design is developed. The USFWS and CDFW species lists, along with the results of the CNDDDB review, the field reconnaissance survey, and the habitat map will be incorporated into a Technical Memo. Mitigation measures will be developed and proposed, as necessary, if there are potentially significant impacts identified. The findings of the Technical Memo will be incorporated into the Environmental Constraints Analysis.

### *Cultural Resources Analysis*

The Feasibility Study Team will conduct a cultural resources records search at the Northwest Information Center of the California Historical Resources Information System



located at Sonoma State University. This record search will consult California’s database of previous studies and previously recorded sites within the project area and within a ½-mile radius.

Upon completion of the records search, we will conduct a desktop investigation of the project area. A draft Area of Potential Effects (APE) map for cultural resources in and surrounding the project area will be established. The APE map and a summary of the results of the records search and desktop investigation will be provided in a Technical Memo. The findings of the TM will be incorporated into the Environmental Constraints Analysis.

The following table outlines the resource areas and provides a brief explanation of what topics would be covered in the Environmental Constraints Analysis.

Resource Area	Overview of Environmental Constraints Analysis Discussion
Aesthetics	Describe the visual environment and scenic resources in the project area Identify designated scenic highways on or near the project Describe anticipated impacts of the project on the visual environment and scenic resources Identify anticipated local agency coordination
Agriculture and Forest Resources	Identify any farmlands and/or timberlands in the project area Describe anticipated impacts of the project on agricultural land or timberlands
Air Quality	Describe the project area (air basin, pollutants of concern, attainment status, etc.) Describe anticipated impacts of the project on air quality Identify anticipated local agency coordination
Biological Resources	Describe the project area habitat Perform biological database searches (i.e. California Natural Diversity Database, National Wetland Inventory, etc.) Describe potential impacts of the project on biological resources, including recommended avoidance, minimization, and mitigation measures Identify potential mitigation costs
Cultural Resources	Provide historical framework for the project area Perform cultural and paleontological records search Review existing literature, including previously prepared surveys in the project vicinity



Resource Area	Overview of Environmental Constraints Analysis Discussion
	Initiate informal consultation with Native American contacts Describe potential impacts of the project on resources within or adjacent to the project area
Geology/Soils	Characterize the existing geologic environment (site-specific geology, soils, seismic hazards, and topography) Describe anticipated impacts of the project on geologic resources, as well as geologic hazards that may apply to the project area
Greenhouse Gas Emissions	Based on anticipated air quality impacts (project construction and operation emissions), provide an initial qualitative comparison of project versus no-project scenarios
Hazards & Hazardous Materials	Describe existing hazardous waste issues in the project area, Perform hazardous waste database search Describe anticipated impacts of the project in terms of new and/or existing hazards and hazardous waste issues
Hydrology/Water Quality	Describe the hydrological features of the project area (surface water, groundwater, floodplains, etc.), and associated water quality as applicable Describe anticipated impacts of the project on hydrological features and/or water quality, including minimization and avoidance of stormwater pollution impacts
Land Use/Planning	Identify the existing and planned land uses and zoning in the project area Identify anticipated local agency coordination Describe the anticipated impacts of the project on existing land use, including consistency with jurisdictional plans
Mineral Resources	Describe the existing mineral resources in the project area Describe the anticipated impacts of the project on mineral resources



Resource Area	Overview of Environmental Constraints Analysis Discussion
Noise	<p>Describe the project area, including sources of noise and the locations of sensitive noise receptors</p> <p>Identify anticipated local agency coordination</p> <p>Describe the anticipated impacts of the project in terms of noise generation and impacts on sensitive receptors, as well as consistency with local ordinances</p>
Population/Housing	<p>Describe the population and housing characteristics of the project area</p> <p>Describe the anticipated impacts of the project on residents, workers, housing, etc., including any potential displacements</p>
Public Services	<p>Describe the service area of the project, including public service providers and coverage</p> <p>Describe the anticipated impacts of the project on public services, such as the any impacts that may limit the providers' ability to maintain service levels</p>
Recreation	<p>Describe any park and/or recreational facilities within the project area</p> <p>Describe the anticipated impacts of the project on existing recreational resources</p>
Transportation/Traffic	<p>Describe the existing transportation network within the project area (roads, trails, public transit, etc.)</p> <p>Describe the anticipated impacts of the project on transportation routes and levels of service, including emergency access in the project area and vicinity</p>
Utilities/Service Systems	<p>Describe the service area of the project, including utility service providers and infrastructure locations</p> <p>Describe the anticipated impacts of the project on existing utility systems, including contribution to waste streams</p>

The Environmental Constraints Analysis will also include a discussion of the regulatory setting for each resource area. Any potential additional studies that may be required when further Project design is developed will also be outlined in the Environmental Constraints Analysis. The potential permits for the recommended alternative will also be summarized in a table in the project description.



The Environmental Constraints Analysis will include a summary of the key environmental constraints issues to be considered during the planning process. This summary will be provided in text as well as summarized in a table that ranks each alternative based on its feasibility for project implementation. The constraints analysis summary conclusion will also indicate the anticipated level of documentation that would likely be required under the California Environmental Quality Act (CEQA) and/or National Environmental Policy Act (NEPA) as a result of the potential Project impacts.

Upon receipt of funding for the Feasibility Study, the Feasibility Study Team will prepare a notice of exemption (NOE) under CEQA in compliance with the SCFRR Solicitation Package and will submit the appropriate number of copies to the Tehama County Clerk. The NOE should be filed with the Tehama County Clerk prior to the execution of the funding agreement and receipt of any grant funds. A copy of the NOE will be submitted to DWR's SCFRR Program as well.

#### Subtask 2.6 -Feasibility Study Finance Plan:

This task is intended to address the financing plan requirements outlined and described within DWR's *State-led Feasibility Study Guidelines*. The published guidance by DWR recognizes the importance of financial feasibility as part of the evaluation that is to be prepared as part of the study process. Specifically the Guidelines state, "Financing: feasibility studies must be accompanied with a reasonable and implementable financing plan." We are proposing a phased approach to prepare the financing plan as part of the feasibility study process. A phased approach is being proposed as the level of effort and associated actions required to complete a financing plan will be customized based on the benefited community and the preferred alternative.

#### *Support Alternative Evaluation: Identification of Funding Sources and Requirements*

The first phase includes working with the engineering and environmental teams after the alternative formulation process, to assist with alternative evaluation. Because financial feasibility is such an important factor in the alternative selection process, this effort will work to identify the following items for the array of alternatives being evaluated;

- the beneficiaries of each alternative;
- feasible local and non-local funding sources; and
- the associated near term and long term funding requirements

These key data points are expected to factor into the evaluation and selection of the preferred alternative.

#### *Financial Plan Development: Funding Strategy, Analysis and Implementation Recommendation*

Depending on the outcome of the first phase and as part of the preferred alternative selection process, the second phase of will develop a full financial plan for the preferred alternative. This would include identification of the funding mechanisms proposed to implement the project, the quantification of the needed revenues, any associated financing and a strategy for the project's implementation that includes a discrete set of recommendation for the project's implementation. The recommendations would include, for example:



- State investment: a recommended strategy for pursuing grant funding including the identification or recommendation of associated programs that could be utilized, and/or any multi-benefit features that could be identified and integrated into the project that could increase state cost sharing; and
- Local funding: the identification of appropriate of local funding mechanisms such as, local assessments, special taxes, development fees etc.

In the case of a local assessment, the recommendation would include the identification and assessment of direct beneficiaries and associated assessment rates to address the requirements of Proposition 218. In the case of a development fee, the recommendation would include the identification of developable land and associated fee rates that would address the requirements of AB 1600, the Mitigation Fee Act.

#### Subtask 2.6 - Evaluate and Compare Alternatives:

Alternatives which have multiple benefits (in addition to flood risk reduction they will include such benefits as environmental enhancement, agricultural preservation, etc.) will be developed to a point where a detailed comparative evaluation can be performed. This task will consist of generating feasibility level cost estimates for all construction, real estate requirements, operations and maintenance, and environmental mitigation costs. Additionally, the benefits of each alternative will be quantified and expressed monetarily where possible. As the alternatives are developed, consideration will be given to the potential construction impacts and risks, and environmental and other permitting requirements. The alternatives will be ranked based on the comparison of the costs and benefits to each of the other alternatives and the No-Action alternative, in order for a preferred alternative to be selected.

#### **Task 3. Implementation Strategy**

The Feasibility Study team will develop an implementation strategy(s) for the preferred alternative(s) identified in the Feasibility Study report.



### 3.8 Preliminary Budget with Total Study Cost, Funds Requested, and Cost Share Amount

The total study cost for the proposed project is anticipated to be \$500,000. Therefore, Tehama County is requesting funds to prepare a feasibility study in the amount of \$500,000. As costs will not exceed \$500,000 no cost sharing will be necessary.

PHASE 1 FEASIBILITY STUDY PRELIMINARY DRAFT BUDGET*	
Task Description	Estimated Cost
Task 1: Project Management and Grant Administration	
Project Management	\$ 35,000.00
Task 1 Total	\$ 35,000.00
Task 2: Feasibility Study	
Determine Goals, Objectives and Constraints	\$ 10,000.00
Define Existing Conditions	\$ 3,000.00
Compile Existing Data	\$ 6,000.00
Field Surveys	\$ 15,000.00
Hydrologic & Hydraulic Analysis	\$ 70,000.00
Floodplain Mapping	\$ 14,000.00
Geotechnical Investigation	\$ 185,000.00
Define Alternatives	\$ 15,000.00
Public Outreach	\$ 6,000.00
Scoping/Community Meetings	\$ 3,000.00
Outreach Materials	\$ 1,000.00
Environmental Constraints Analysis	\$ 10,000.00
Project Description	\$ 4,000.00
Biological Resource Analysis	\$ 5,000.00
Cultural Resource Analysis	\$ 5,000.00
Feasibility Study Finance Plan	\$ 25,000.00
Alternative Evaluation	\$ 30,000.00
Identification of Funding Sources	\$ 5,000.00
Financial Plan Development	\$ 10,000.00
Evaluate and Compare Analysis	\$ 15,000.00
Determination of Preferred Project	\$ 8,000.00
Task 2 Total	\$ 445,000.00
Task 3: Implementation Strategy	
Finalize Feasibility Study and Implementation Strategy	\$ 20,000.00
Task 3 Total	\$ 20,000.00
Total Feasibility Study Cost	\$ 500,000.00

\*Values are estimated. Upon grant award and further refinement in the development of the Scope of Work, cost allocations are subject to change.



### 3.9 Potential Project Benefits

The proposed feasibility study presents a rare opportunity to further integrate flood management and contribute directly to the goals of the 2016 Draft Central Valley Flood System Conservation Strategy. Given the rural nature of the project area and the project team's relationship with watershed stakeholders through previous efforts, there is an opportunity to advance integrated flood management concepts such as setback levees that would achieve numerous ecological benefits on lower Deer Creek while improving flood protection system performance. In addition, the proposed feasibility study would coordinate with irrigation dam operators to maintain water supply reliability with improved fish passage that is more sustainable over the long term due to integrated flood management approaches. Finally, the proposed feasibility study would lean heavily on integrated approaches that reserve room in the flood corridor for natural channel migration to restore floodplain connectivity, enhance geomorphic processes, and improve fish passage and rearing habitat for threatened Spring-run salmon and steelhead.

Conservation Strategy Ecosystem Processes Goals: Ecosystem processes will be incorporated into the alternatives evaluation through careful consideration of:

- Floodplain inundation satisfying duration and frequency criteria relevant to important species such as Spring Run Chinook salmon.
- Creation of natural streambanks with shaded riverine cover made possible by setting back levees to allow more natural channel forming processes and opening up the existing channel constrictions at the Leininger Road Bridge and Stanford Vina Ranch Irrigation Company diversion dam.
- Enhancement of river meander potential through setback levees and easements for floodway and channel migration and riparian habitat development.

Conservation Strategy Habitat Goals: Habitat quantity, quality, and diversity will be addressed in the alternatives formulation and evaluation by identifying opportunities to increase longitudinal and lateral connectivity through careful consideration of:

- Facilitation of natural banks using setback levees and removal of high flow constrictions.
- Encouragement of riparian-lined banks to create active channel and floodplain habitat that is particularly beneficial to juvenile rearing threatened salmon and steelhead in lower Deer Creek, which is subject to intense temperatures.
- Expansion of channel complexity to drive more hyporheic exchange capable of cooling temperature in lower Deer Creek.
- Directly increasing riparian habitat quantity by setting back the existing levees.
- Supporting wildlife-friendly floodplain agriculture in setback levee reaches that aren't reserved for flood protection or ecological restoration.

Conservation Strategy Stressors Goals: Alleviating stressors in Lower Deer Creek will be analyzed in this feasibility study through careful consideration of:



- Improved fish passage at the Stanford Vina Irrigation Company Diversion Dam that is more sustainable with respect to geomorphic conditions in lower Deer Creek.
- Removal and replacement of invasive plant-dominated vegetation through an adaptive management planning process. Due to the reduced capacity of the current flood protection system, periodic channel maintenance is required to limit flood risks. This includes large scale sediment and vegetation removal operations within the active channel of Deer Creek. The proposed feasibility will evaluate alternatives that allow room for more natural sediment transport and native vegetation establishment to occur without the need for maintenance destructive to channel habitat.

Conservation Strategy Species Support Goals: Given that Deer Creek supports one of the few remaining wild, independent populations of Spring-run Salmon in the Central Valley, this proposed feasibility study presents a rare integrated flood management opportunity to advance a high-impact project which could: improve flood protection; improve fish passage; enhance floodplain connectivity; and increase allowance for natural geomorphic processes and riparian habitat establishment. The presence of Central Valley Steelhead furthers the species support goals of the Conservation Strategy.

### 3.10 Known Studies Relevant to the Project Area.

- Lower Deer Creek Restoration and Flood Management Feasibility Study and Conceptual Design Phase 1 Report
- DWR's FloodSAFE LiDAR and terrain data
- DWR's Flood Control System Status Report
- DWR's Non-Urban Levee Evaluation Program
- FEMA Effective FIS Report and DFIRMs
- DWR Central Valley Hydrology Study
- DWR Central Valley Floodplain Evaluation and Delineation
- Mid & Upper Sacramento River Regional Flood Management Plan
- Mid & Upper Sacramento River Regional Flood Emergency Response Project

### 3.11 Potential Project Permitting and Environmental Constraints.

Anticipated permit requirements and environmental constraints are to be determined during the feasibility study. However, a list of potential permitting and environmental compliance constraints can be considered as follows:

- California Environmental Quality Act (CEQA)
- United States Army Corps of Engineers (USACE) 404 & 408 Permits
- Central Valley Flood Protection Board approval



- California State Water Resources Control Board (SWRCB) 401 Permit
- California Department of Fish and Wildlife (DFW) Streambed Alteration Agreement
- Central Valley Flood Protection Board (CVFPB) Encroachment Permit
- USFWS & NMFS concurrence

### 3.12 Levee Flood Protection Zone Status

The community of Vina is located within the Levee Flood Protection Zone.

### 3.13 Statement of Financial Disposition

Tehama County has sufficient funds to pay its consultant team while awaiting reimbursement from DWR per the draft SCFRR funding agreement.

### 3.14 Feasibility Study Schedule.

A preliminary schedule for the preparation of the feasibility schedule is show on the following page. The key milestones are:

- February 2017 – Notification of Project Funding and Awards
- February 2017 – Finalize Project Scope, Budget, and Schedule
- March 2017 – Funding Agreement Approval
- March 2017 – Define Goals, Objectives & Constraints
- April 2017 – Define Study Area, Problems and Existing Conditions
- September 2017 – Formulate Alternates
- November 2017 – Evaluate & Compare Alternatives
- March 2018 – Final Report

### Schedule - SCFRRP Feasibility Study, Vina, Tehama County, CA

ID	Task Name	Duration	Precedence	Start	2017												2018			
					Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
1	<b>Task 1: Project Management and Grant Administration</b>	<b>291 days</b>		<b>Wed 2/1/17</b>	[Task 1 Summary Bar]															
2	Award Notification	1 day		Wed 2/1/17	[Task 2 Summary Bar]															
3	Scoping and Coordination with DWR and LMA	1 mon	2	Thu 2/2/17	[Task 3 Summary Bar]															
4	Finalize Scope of Work	0.5 mons	3	Thu 3/2/17	[Task 4 Summary Bar]															
5	Project Management	13 mons	4	Thu 3/16/17	[Task 5 Summary Bar]															
6	Grant Administration	13 mons	4	Thu 3/16/17	[Task 6 Summary Bar]															
7	Stakeholder Coordination	13 mons	4	Thu 3/16/17	[Task 7 Summary Bar]															
8	<b>Task 2: Feasibility Study</b>	<b>260 days</b>		<b>Thu 3/16/17</b>	[Task 8 Summary Bar]															
9	Determine Goals, Objectives and Constraints	1 mon	4	Thu 3/16/17	[Task 9 Summary Bar]															
10	Define Existing Conditions	1 mon	9	Thu 4/13/17	[Task 10 Summary Bar]															
11	Compile Existing Data	2 mons	9	Thu 4/13/17	[Task 11 Summary Bar]															
12	Field Surveys	0.5 mons	11	Thu 6/8/17	[Task 12 Summary Bar]															
13	Hydrologic & Hydraulic Analysis	2 mons	12	Thu 6/22/17	[Task 13 Summary Bar]															
14	Floodplain Mapping	1 mon	13	Thu 8/17/17	[Task 14 Summary Bar]															
15	Geotechnical Investigation	4 mons	11	Thu 6/8/17	[Task 15 Summary Bar]															
16	Define Alternatives	2 mons	15	Thu 9/28/17	[Task 16 Summary Bar]															
17	Public Outreach	13 mons	4	Thu 3/16/17	[Task 17 Summary Bar]															
18	Environmental Constraints Analysis	30 days		Thu 11/23/17	[Task 18 Summary Bar]															
19	Project Description	0.5 mons	16	Thu 11/23/17	[Task 19 Summary Bar]															
20	Biological Resource Analysis	0.5 mons	19	Thu 12/7/17	[Task 20 Summary Bar]															
21	Cultural Resource Analysis	0.5 mons	20	Thu 12/21/17	[Task 21 Summary Bar]															
22	Final Report	80 days		Thu 11/23/17	[Task 22 Summary Bar]															
23	Alternative Evaluation	2 mons	16	Thu 11/23/17	[Task 23 Summary Bar]															
24	Evaluate and Compare Analysis	1 mon	23	Thu 1/18/18	[Task 24 Summary Bar]															
25	Determination of Preferred Project	1 mon	24	Thu 2/15/18	[Task 25 Summary Bar]															
26	Feasibility Study Finance Plan	40 days		Thu 11/23/17	[Task 26 Summary Bar]															
27	Financial Plan Development	1.5 mons	16	Thu 11/23/17	[Task 27 Summary Bar]															
28	Identification of Funding Sources	0.5 mons	27	Thu 1/4/18	[Task 28 Summary Bar]															
29	<b>Task 3: Implementation Strategy</b>	<b>1 day</b>		<b>Wed 2/1/17</b>	[Task 29 Summary Bar]															
30	Finalize Feasibility Study and Implementation Strategy	1 mon	24	Thu 2/15/18	[Task 30 Summary Bar]															



## 4.0 DWR Environmental Information Form

Tehama County understands and is willing to abide by the following:

Funding recipients are responsible for complying with all applicable laws and regulations for their projects, including the California Environmental Quality Act (CEQA) and, the National Environmental Protection Act (NEPA), if applicable.

Feasibility studies are statutorily exempt from the requirements of CEQA pursuant to California Code of Regulations, title 14, section 15262. That section states:

*A project involving only feasibility or planning studies for possible future actions which the agency, board, or commission has not approved, adopted, or funded does not require the preparation of an [environmental impact report] or negative declaration but does require consideration of environmental factors. This section does not apply to the adoption of a plan that will have a legally binding effect on later activities.*

As such, applicants that have been awarded funding for completion of a feasibility study will be required to file a Notice of Exemption (NOE) with the applicable County Clerk prior to the execution of the funding agreement and receipt of any grant funds. A copy of the NOE must be submitted to DWR's SCFRR Program. See the Proposal Submittal information for contact information.

If a funding recipient wants to prepare environmental documentation in support of a completed feasibility study using Proposition 1E funding, the funding recipient must contact and consult with DWR. Work that is subject to CEQA shall not proceed until and unless approved by DWR. Such approval is fully discretionary and shall constitute a condition precedent to any work for which it is required.

## 5.0 Authorizing Resolution

The attached resolution was adopted by the Tehama County Board of Supervisors at its November 1, 2016 meeting.

## 6.0 Attorney's Certification

Following is the completed attorney's certification which is required for submission of the grant application.

**RESOLUTION NO. 2016-84****RESOLUTION OF THE TEHAMA COUNTY BOARD OF SUPERVISORS  
AUTHORIZING AN APPLICATION FOR FUNDING FROM THE DEPARTMENT OF  
WATER RESOURCES AND DESIGNATING THE DIRECTOR OF PUBLIC WORKS  
AS THE REPRESENTATIVE TO EXECUTE THE FUTURE AGREEMENT AND ANY  
AMENDMENTS THERETO FOR THE TEHAMA COUNTY FLOOD PROTECTION  
FEASIBILITY STUDIES PROJECT FOR THE TOWN OF VINA**

**WHEREAS**, the County of Tehama is a political subdivision of the State of California with responsibility for flood management and authority over land use in the area protected by the facilities of the State Plan of Flood Control and is willing to participate in, coordinate, and collaborate with other interested parties that are participating in the development of the County of Tehama flood management planning activities; and

**WHEREAS**, the County of Tehama is authorized to enter into an agreement with the Department of Water Resources and the State of California; and

**NOW, THEREFORE BE IT RESOLVED THAT:**

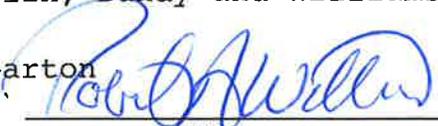
1. That pursuant and subject to all of the terms and conditions of the Disaster Preparedness and Flood Prevention Bond Act of 2006 (Pub. Resources Code § 5096.800 et seq.), the County of Tehama shall submit an application to obtain funding for the Tehama County Flood Protection Feasibility Study Project for the Town of Gerber, through the Small Communities Flood Risk Reduction Program administered by the Department of Water Resources.
2. That the Tehama County Board of Supervisors authorizes the Director of Public Works, or designee, to execute the funding agreement, with the Department of Water Resources and any amendments thereto after the agreement and any amendments are presented to and approved by Tehama County Board of Supervisors.
3. That the Director of Public Works, or designee, shall prepare the necessary data, make investigations, and take other such actions as necessary and appropriate to obtain funding for the Tehama County Flood Protection Feasibility Studies Project for the town of Gerber.

The foregoing resolution was offered on a motion by Supervisor Bundy, seconded by Supervisor Carlson, and carried by the following vote of the Board:

AYES: Supervisors Carlson, Chamblin, Bundy and Williams

NOES:

ABSENT OR NOT VOTING: Supervisor Garton

  
\_\_\_\_\_  
Robert A. Williams, CHAIRMAN,  
Tehama County Board of Supervisors



## Appendix 2 – Attorney’s Certification

*(The Applicant’s attorney shall answer the following questions regarding this proposal and where indicated, shall cite statutory authority or other references.)*

- Is the Applicant a political subdivision of the State of California? (X) Yes ( ) No  
Citation: Cal. Const., Art.XI, §1; Gov. Code, § 23000
  
- Does the Applicant have legal authority to enter into The Proposed Funding Agreement with the State of California? (X) Yes ( ) No  
Citation: Gov. Code, §§ 6500, et seq; 23004; Wat. Code § 12611
  
- What steps are required by law for the Applicant to sign a Funding Agreement with the State? Approval by Tehama County Board of Supervisors.  
Citation: Gov. Code, §§ 23004; 23005
  
- What is the statutory authority under which the Applicant may obtain funds for the purpose, amount, and duration requested?  
Citation: Gov. Code, § 6500 et seq.; 23004; Wat. Code § 12611
  
- What is the statutory authority under which the Applicant was formed and is authorized to operate?  
Citation: Cal Const., Art. XI, § 1; Gov. Code, § 23000
  
- Is the Applicant required to hold an election before entering into The Proposed funding contract with the State? ( ) Yes (X) No  
Citation: Gov. Code, §§ 23004; 23005

- Will an agreement between the Applicant and the State be subject to review and approval by other governmental agencies?     Yes     No  
 Citation: Gov. Code, §§ 23004; 23005

- Describe any pending litigation that impacts the financial condition of the Applicant of the operation of flood management facilities. If none is pending, so state.

None

- Does the Applicant have legal authority and jurisdiction to implement a flood control program and the authority to make land use decisions at the Project site and in the protected area?

Yes     No

Citation: Cal. Const., Art. XI, § 7; Gov. Code, §§ 25680, et. seq; 65100 et seq.

I certify that I am a duly qualified and licensed attorney in California representing the Applicant Agency and that I have answered the questions on this page and the preceding page to the best of my knowledge.

By   
*(Signature of Applicant Agency's Attorney)*

Date 11/1/16

Arthur J. Wylene  
*(Printed Name of Applicant Agency's Attorney)*

County Counsel SBN: 222792  
*(Title) (Bar No.)*

County of Tehama  
*(Name of Applicant Agency)*