

# Appendix A Farmland Consultation

---



CirclePoint<sup>SM</sup>

The *whole* view.

Integrated Environmental & Communication Solutions

December 8, 2008

To: Walter K. Cheechov, District Conservationist  
National Resources Conservation Service

Dear Mr. Cheechov,

Please find enclosed in this envelope two (2) Farmland Conversion Impact Rating (AD-1006) Forms for proposed projects within Solano County. Three (3) maps have been attached as well to help clarify the location and proposed construction of these projects. If you have any questions or comments regarding the information submitted on the forms, please feel free to contact me via phone or email.

Best Regards,

Elise Lieberman  
Environmental Assistant Planner  
CirclePoint  
[e.lieberman@circlepoint.com](mailto:e.lieberman@circlepoint.com)  
Tel 415.227.1100 x177

*As requested  
Walter Cheechov  
NRC S*

U.S. Department of Agriculture

# FARMLAND CONVERSION IMPACT RATING

|  |   |
|--|---|
| <b>PART I</b> (To be completed by Federal Agency)                | Date Of Land Evaluation Request<br>12/8/08                |
| Name Of Project<br>4-561-80, I-80 Eastland Cordelia Truck Scales | Federal Agency Involved<br>Federal Highway Administration |
| Proposed Land Use<br>Relocation<br>Transportation, Truck Scales  | County And State<br>Solano County, California             |

|   |   |
|---|---|
| <b>PART II</b> (To be completed by NRCS)  | Date Request Received By NRCS<br>12/8/08                            |
| Does the site contain prime, unique, statewide or local important farmland?<br>(If no, the FPPA does not apply -- do not complete additional parts of this form). | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |
| Acres Irrigated<br>171,000  | Average Farm Size<br>391  |
| Major Crop(s)<br>PASTURE, ORCHARD, ROW CROPS  | Farmable Land In Govt. Jurisdiction<br>Acres: 233,000 % 40          |
| Name Of Land Evaluation System Used<br>CA STORE   | Name Of Local Site Assessment System<br>NONE                        |
|   | Amount Of Farmland As Defined in FPPA<br>Acres: NOT AVAILABLE %     |
|   | Date Land Evaluation Returned By NRCS<br>1/9/09                     |

|   |                         |        |        |        |
|---|-------------------------|--------|--------|--------|
| <b>PART III</b> (To be completed by Federal Agency) | Alternative Site Rating |        |        |        |
|   | Site A                  | Site B | Site C | Site D |
| A. Total Acres To Be Converted Directly             | 42.1                    |        |        |        |
| B. Total Acres To Be Converted Indirectly           | 0                       |        |        |        |
| C. Total Acres In Site                              | 0.0 42.1                | 0.0    | 0.0    | 0.0    |

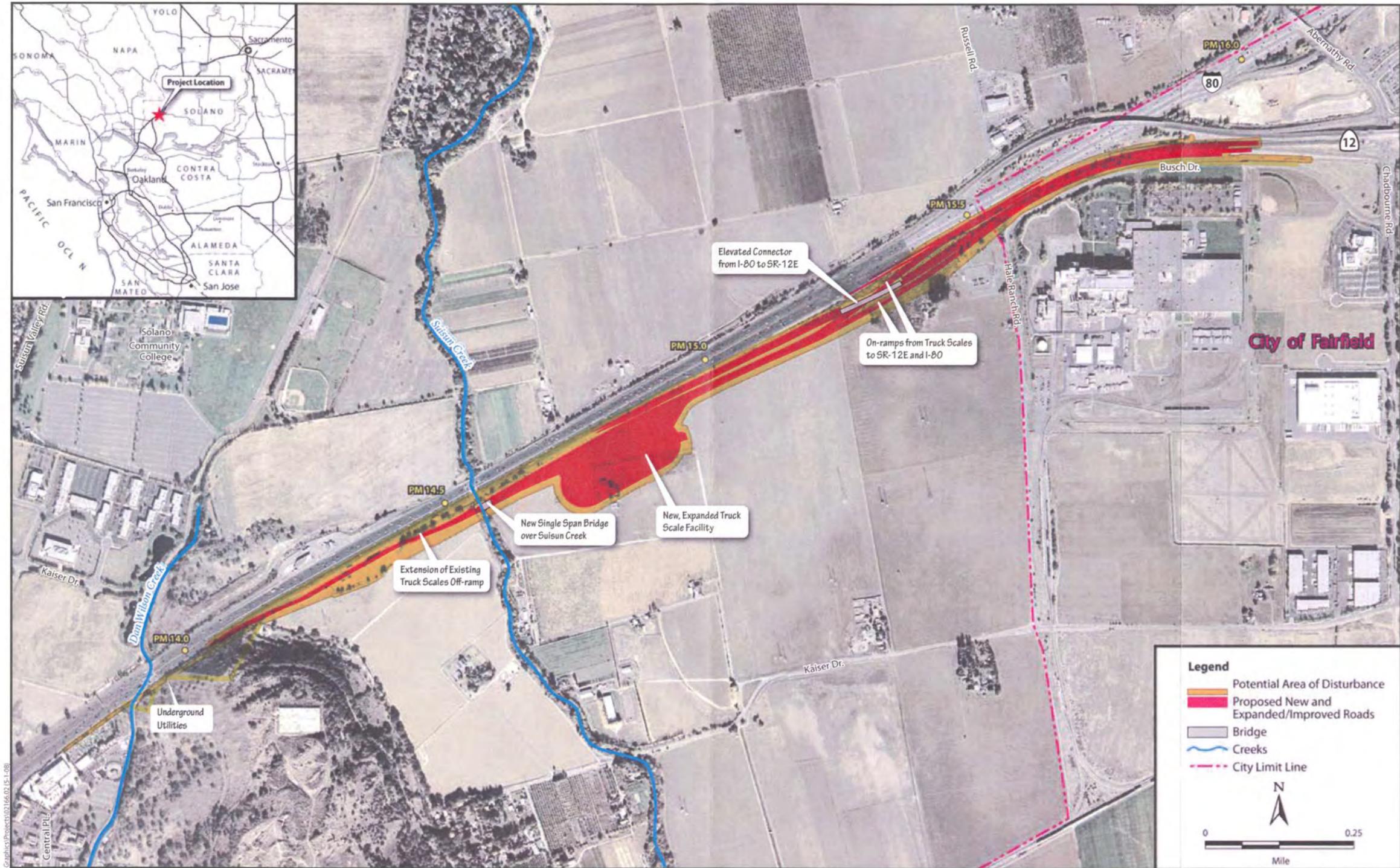
|  |         |  |  |  |
|--|---------|--|--|--|
| <b>PART IV</b> (To be completed by NRCS) Land Evaluation Information               |         |  |  |  |
| A. Total Acres Prime And Unique Farmland   | 42.1    |  |  |  |
| B. Total Acres Statewide And Local Important Farmland                              | 0       |  |  |  |
| C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted            | 0.00018 |  |  |  |
| D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value | 0       |  |  |  |

|  |   |      |   |   |   |
|--|---|------|---|---|---|
| <b>PART V</b> (To be completed by NRCS) Land Evaluation Criterion<br>Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points) | 0 | 73.3 | 0 | 0 | 0 |
|--|---|------|---|---|---|

|   |                |      |   |   |   |
|---|----------------|------|---|---|---|
| <b>PART VI</b> (To be completed by Federal Agency)                        | Maximum Points |      |   |   |   |
| Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b)) |                |      |   |   |   |
| 1. Area In Nonurban Use   | 6              |      |   |   |   |
| 2. Perimeter In Nonurban Use  | 4              |      |   |   |   |
| 3. Percent Of Site Being Farmed   | 19             |      |   |   |   |
| 4. Protection Provided By State And Local Government                      | 20             |      |   |   |   |
| 5. Distance From Urban Builtup Area                                       | N/A            |      |   |   |   |
| 6. Distance To Urban Support Services                                     | N/A            |      |   |   |   |
| 7. Size Of Present Farm Unit Compared To Average                          | 0              |      |   |   |   |
| 8. Creation Of Nonfarmable Farmland                                       | 25             |      |   |   |   |
| 9. Availability Of Farm Support Services                                  | 5              |      |   |   |   |
| 10. On-Farm Investments   | 10             |      |   |   |   |
| 11. Effects Of Conversion On Farm Support Services                        | 0              |      |   |   |   |
| 12. Compatibility With Existing Agricultural Use                          | 8              |      |   |   |   |
| <b>TOTAL SITE ASSESSMENT POINTS</b>                                       | 160            | 0 97 | 0 | 0 | 0 |

|   |     |         |   |   |   |
|---|-----|---------|---|---|---|
| <b>PART VII</b> (To be completed by Federal Agency)                   |     |         |   |   |   |
| Relative Value Of Farmland (From Part V)                              | 100 | 0 73.3  | 0 | 0 | 0 |
| Total Site Assessment (From Part VI above or a local site assessment) | 160 | 0 97    | 0 | 0 | 0 |
| <b>TOTAL POINTS (Total of above 2 lines)</b>                          | 260 | 0 170.3 | 0 | 0 | 0 |

|                       |                   |   |
|-----------------------|-------------------|---|
| Site Selected:        | Date Of Selection | Was A Local Site Assessment Used?<br>Yes <input type="checkbox"/> No <input type="checkbox"/> |
| Reason For Selection: |                   |   |



**Figure 2-2**  
**Eastbound Cordelia Truck Scales - Relocation Project Features**

Site A

# Appendix B Relocation Assistance Program Information

---

# **California Department of Transportation Relocation Assistance Program**

## **RELOCATION ASSISTANCE ADVISORY SERVICES**

The California Department of Transportation (the Department) will provide relocation advisory assistance to any person, business, farm or non-profit organization displaced as a result of the Department's acquisition of real property for public use. The Department will assist residential displacees in obtaining comparable decent, safe and sanitary replacement housing by providing current and continuing information on sales price and rental rates of available housing. Non-residential displacees will receive information on comparable properties for lease or purchase.

Residential replacement dwellings will be in equal or better neighborhoods, at prices within the financial means of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, displacees will be offered comparable replacement dwellings that are open to all persons regardless of race, color, religion, sex or national origin, and are consistent with the requirements of Title VIII of the Civil Rights Act of 1968. This assistance will also include supplying information concerning federal and state assisted housing programs, and any other known services being offered by public and private agencies in the area.

## **ADDITIONAL INFORMATION**

No relocation payment received will be considered as income for the purpose of the Internal Revenue Code of 1954 or for the purposes of determining eligibility or the extent of eligibility of any person for assistance under the Social Security Act or any other federal law (except for any federal law providing low-income housing assistance).

Persons who are eligible for relocation payments and who are legally occupying the property required for the project will not be asked to move without being given at least 90 days advance notice, in writing. Occupants of any type of dwelling eligible for relocation payments will not be required to move unless at least one comparable "decent, safe and sanitary" replacement residence, open to all persons regardless of race, color, religion, sex or national origin, is available or has been made available to them by the state.

Any person, business, farm or non-profit organization, which has been refused a relocation payment by the Department, or believes that the payments are inadequate, may appeal for a hearing before a hearing officer or the Department's Relocation Assistance Appeals Board. No legal assistance is required; however, the displacee may choose to obtain legal council at his/her expense. Information about the appeal procedure is available from the Department's Relocation Advisors.

The information above is not intended to be a complete statement of all of the Department's laws and regulations. At the time of the first written offer to purchase, owner-occupants are given a more detailed explanation of the state's relocation services. Tenant occupants of properties to be acquired are contacted immediately after the first written offer to purchase, and also given a more detailed explanation of the Department's relocation programs.

**IMPORTANT NOTICE**

To avoid loss of possible benefits, no individual, family, business, farm or non-profit organization should commit to purchase or rent a replacement property without first contacting a Department of Transportation relocation advisor at:

State of California  
Department of Transportation, District 04  
111 Grand Avenue  
Oakland, CA 94623-0660

Your Rights and Benefits as a  
Displacee Under the Uniform  
Relocation Assistance Program  
(Residential)  
2007



*Caltrans*

California Department of Transportation

## **Introduction**

In building a modern transportation system, the displacement of a small percentage of the population is often necessary. However, it is the policy of Caltrans that displaced persons shall not suffer unnecessarily as a result of programs designed to benefit the public as a whole.

Displaced individuals, families, businesses, farms, and nonprofit organizations may be eligible for relocation advisory services and payments.

This brochure provides information about available relocation services and payments. If you are required to move as the result of a Caltrans transportation project, a Relocation Agent will contact you. The Relocation Agent will be able to answer your specific questions and provide additional information.

### **Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 As Amended "The Uniform Act"**

The purpose of this Act is to provide for uniform and equitable treatment of persons displaced from their homes, businesses, or farms by federal and federally assisted programs and to establish uniform and equitable land acquisition policies for federal and federally assisted programs.

49 Code of Federal Regulations Part 24 implements the "Uniform Act" in accordance with the following relocation assistance objective:

To ensure that persons displaced as a direct result of federal or federally-assisted projects are treated fairly, consistently and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole.

*While every effort has been made to assure the accuracy of this booklet, it should be understood that it does not have the force and effect of law, rule, or regulation governing the payment of benefits. Should any difference or error occur, the law will take precedence.*

## Some Important Definitions...

Your relocation benefits can be better understood if you become familiar with the following terms:

Comparable Replacement: means a dwelling which is:

- (1) Decent, safe, and sanitary. (See definition below)
- (2) Functionally equivalent to the displaced dwelling.
- (3) Adequate in size to accommodate the family being relocated.
- (4) In an area not subject to unreasonable adverse environmental conditions.
- (5) In a location generally not less desirable than the location of your displacement dwelling with respect to public utilities and commercial and public facilities, and reasonably accessible to the place of-employment.
- (6) On land that is typical in size for residential development with typical improvements.

Decent, Safe and Sanitary (DS&S): Replacement housing must be decent, safe, and sanitary...which means it meets all of the minimum requirements established by federal regulations and conforms to applicable housing and occupancy codes. The dwelling shall:

- (1) Be structurally sound, weather tight, and in good repair.
- (2) Contain a safe electrical wiring system adequate for lighting and other devices.



- (3) Contain a heating system capable of sustaining a healthful temperature (of approximately 70 degrees) for a displaced person, except in those areas where local climatic conditions do not require such a system.
- (4) Be adequate in size with respect to the number of rooms and area of living space needed to accommodate the displaced person. The Caltrans policy is that there will be no more than 2 persons per room unless the room is of adequate size to accommodate the normal bedroom furnishings for the occupants.
- (5) Have a separate, well-lighted and ventilated bathroom that provides privacy to the user and contains a sink, bathtub or shower stall, and a toilet, all in good working order and properly connected to appropriate sources of water and to a sewage drainage system.

*Note: In the case of a housekeeping dwelling, there shall be a kitchen area that contains a fully usable sink, properly connected to potable hot and cold water and to a sewage drainage system, and adequate space and utility service connections for a stove and refrigerator.*

- (6) Contains unobstructed egress to safe, open space at ground level. If the replacement dwelling unit is on the second story or above, with access directly from or through a common corridor, the common corridor must have at least two means of egress.
- (7) *For a displaced person who is handicapped, be free of any barriers which would preclude reasonable ingress, egress, or use of the dwelling by such displaced person.*

Displaced Person or Displacee: Any person who moves from real property or moves personal property from real property as a result of the acquisition of the real property, in whole or in part, or as the result of a written notice from the agency to vacate the real property needed for a transportation project. In the case of a partial acquisition, Caltrans shall determine if a person is displaced as a direct result of the acquisition.

Residents **not lawfully present** in the United States are not eligible to receive relocation payments and assistance

Relocation benefits will vary, depending upon the type and length of occupancy. As a residential displacee, you will be classified as either a:

- An owner occupant of a residential property (includes mobile homes)
- A tenant occupant of a residential property (includes mobile homes and sleeping rooms)

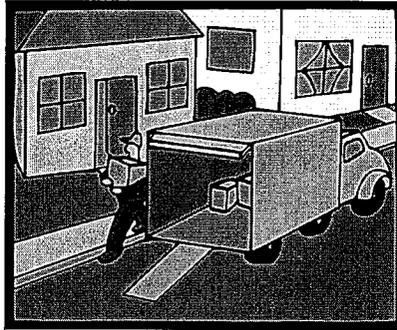
Dwelling: The place of permanent or customary and usual residence of a person, according to local custom or law, including a single family house; a single family unit in a two-family, multi-family, or multi-purpose property; a unit of a condominium or cooperative housing project; a non-housekeeping unit; a mobile home; or any other residential unit.

Owner: A person is considered to have met the requirement to own a dwelling if the person purchases or holds any of the following interests in real property:

- (1) Fee title, a life estate, a land contract, a 99-year lease, oral lease including any options for extension with at least 50 years to run from the date of acquisition; or
- (2) An interest in a cooperative housing project which includes the right to occupy a dwelling; or
- (3) A contract to purchase any interests or estates; or
- (4) Any other interests, including a partial interest, which in the judgment of the agency warrants consideration as ownership.

Tenant: A person who has the temporary use and occupancy of real property owned by another.

# Moving Expenses



If you qualify as a displaced person, you are entitled to reimbursement of your moving costs and certain related expenses incurred in moving. The methods of moving and the various types of moving cost payments are explained. Below.

Displaced individuals and families may choose to be paid on the basis of actual, reasonable moving costs and related expenses, or according to a fixed moving cost schedule. However, to ensure your eligibility and prompt payment of moving expenses, you should contact your Relocation Agent before you move.

## You Can Choose Either:

**Actual Reasonable Moving Costs** - You may be paid for your actual reasonable moving costs and related expenses when a commercial mover performs the move. Reimbursement will be limited to a move of 50 miles or less. Related expenses may include:

- Transportation
- Packing and unpacking personal property.
- Disconnecting and reconnecting household appliances.
- Temporary storage of personal property.
- Insurance while property is in storage or transit.

**OR**

**Fixed Moving Cost Schedule** - You may be paid on the basis of a fixed moving cost schedule. Under this option, you will not be eligible for reimbursement of related expenses listed above. The fixed schedule is designed to cover such expenses.

Examples (Year 2005 Rate):

4 Rooms - \$ 950

7 Rooms - \$1,550

If the furniture is moved with the mobile home, the amount of the fixed payment is based on Schedule B.

Examples (Year 200 Rate):

4 Rooms - \$1,175

7 Rooms - \$1,900

Under the Fixed Move Schedule for a furnished unit (e.g. you are a tenant of an apartment that is furnished by your landlord) is based on Schedule B.

Example (Year 2005 Rate):

1 Room - \$400

Under the Fixed Move Schedule, you will not receive any additional payments for temporary storage, lodging, transportation or utility hook-ups.

## **Replacement Housing Payments**

The type of Replacement Housing Payment (RHP) depends on whether you are an owner or a tenant, and the length of occupancy in the property being acquired.

If you are a qualified **owner occupant** of more than 180 days prior to the initiation of negotiations for the acquisition of your property, you may be entitled to a RHP that consists of:

**Price Differential, and**

**Mortgage Differential, and**

**Incidental Expenses;**

**OR**

**Rent Differential**

If you are a qualified **owner occupant** of more than 90 days but less than 180 days, OR you are a qualified **tenant occupant** of at least 90 days, you may be entitled to a RHP as follows:

**Rent Differential**

**OR**

**Downpayment Option**

Length of occupancy simply means counting the number of days that you actually occupied a dwelling before the date of initiation of negotiations by Caltrans for the purchase of the property. The term "initiation of negotiations" means the date Caltrans makes the first personal contact with the owner of real property, or his/ her representative, to give him/her a written offer for the property to be acquired.

*Note: If you have been in occupancy less than 90 days before the initiation of negotiations and the property is subsequently acquired, or if you move onto the property after the initiation of negotiations and you are still in occupancy on the date of acquisition, you may or may not be eligible for a Replacement Housing Payment. Check with your Relocation Agent before you make any decision to vacate your property.*

**For Owner Occupants of 180 Days or More**

If you qualify as a 180-day owner occupant, you may be eligible -- in addition to the fair market value of your property -- for a Replacement Housing Payment that consists of a Price Differential, Mortgage Differential and/or Incidental Expenses.

The **Price Differential** payment is the amount by which the cost of a replacement dwelling exceeds the acquisition cost of the displacement dwelling. This payment will assist you in purchasing a comparable decent, safe, and sanitary (DS&S) replacement dwelling. Caltrans will compute the maximum payment you may be eligible to receive.

In order to receive the full amount of the calculated price differential, you must spend at least the amount calculated by Caltrans on a replacement property

The **Mortgage Differential** payment will reimburse you for any increased mortgage interest costs you might incur because the interest rate on your new mortgage exceeds the interest rate on the property acquired by Caltrans. The payment computation is complex as it is based on prevailing rates, your existing loan and your new loan. Also, a part of this payment may be prorated such as reimbursement for a portion of your loan origination fees and mortgage points.

To be eligible to receive this payment, the acquired property must have been encumbered by a bona fide mortgage which was a valid lien for at least 180 days prior to the initiation of negotiations.

You may also be reimbursed for any actual and necessary **Incidental Expenses** that you incur in relation to the purchase of your replacement property. These expenses may be those costs for title search, recording fees, credit report, appraisal report, and certain other closing costs associated with the purchase of property. You will not be reimbursed for any recurring costs such as prepaid real estate taxes and property insurance.

If the total amount of your **Replacement Housing Payment** (Price Differential, Mortgage Differential and Incidental Expenses) exceeds \$22,500, the payment must be deposited directly into an escrow account or paid directly to the mortgage company.

## EXAMPLES OF PRICE DIFFERENTIAL PAYMENT COMPUTATION:

Assume that Caltrans purchases your property for \$98,000. After a thorough study of available, decent, safe and sanitary dwellings on the open market, Caltrans determines that a comparable replacement property will cost you \$100,000. If your purchase price is \$100,000, you will receive \$2,000 (see *Example A*).

If your actual purchase price is more than \$100,000, you pay the difference (see *Example B*). If your purchase price is less than \$100,000, the differential payment will be based on actual costs (see *Example C*).

How much of a differential payment you receive depends on how much you actually spend on a replacement dwelling as shown in these examples:

### Caltrans' Computation

|  |                   |
|--|-------------------|
| Comparable Replacement Property and Mobile Home    | \$100,000         |
| Acquisition Price of Your Property and Mobile Home | <u>-\$ 98,000</u> |
| Maximum Price Differential                         | \$ 2,000          |

### Example A

|                                    |                   |
|------------------------------------|-------------------|
| Purchase Price of Replacement      | \$100,000         |
| Comparable Replacement Property    | \$100,000         |
| Acquisition Price of Your Property | <u>-\$ 98,000</u> |
| Maximum Price Differential         | \$ 2,000          |

### Example B

|  |                  |
|--|------------------|
| Purchase Price of Replacement Property | \$105,000        |
| Comparable Replacement Property        | \$100,000        |
| Acquisition Price of Your Property     | <u>\$ 98,000</u> |
| Maximum Price Differential             | \$ 2,000         |
| You Must Pay the Additional            | \$ 5,000         |

### Example C

|                                    |                  |
|------------------------------------|------------------|
| Comparable Replacement Property    | \$100,000        |
| Purchase Price of Replacement      | \$ 99,000        |
| Acquisition Price of Your Property | <u>\$ 98,000</u> |
| Price Differential                 | \$ 1,000         |

*In Example C you will only receive \$1,000 - not the full amount of the Caltrans "Comparable Replacement Property" because of the "Spend to Get" requirements.*

**IN ORDER FOR A "180 DAY OWNER OCCUPANT" TO RECEIVE THE FULL AMOUNT OF THEIR REPLACEMENT HOUSING PAYMENT** (*Price Differential, Mortgage Differential and Incidental Expenses*), **you must:**

A) Purchase and occupy a DS&S replacement dwelling within one year after the later of:

(1) The date you first receive a notification of an available replacement house, **OR**

(2) The date that Caltrans has paid the acquisition cost of your current dwelling (usually the closing of escrow on State's acquisition),

**AND**

B) Spend at least the amount of the Caltrans "Comparable Replacement Property" for a replacement property,

**AND**

C) File a claim for relocation payments within 18 months of the later:

(1) The date you vacate the property acquired by Caltrans, **OR**

(2) The date that Caltrans has paid the acquisition cost of your current dwelling (usually the close of escrow on State's acquisition)

**You will not be eligible to receive any relocation payments until the State has actually made the first written offer to purchase the property. Also, you will also receive at least 90 days' written notice before you must move.**

## For Owner Occupants and Tenants of 90 Days or More

If you qualify as a 90-day occupant (either as an owner or tenant), you may be eligible for a Replacement Housing Payment in the form of a Rent Differential.

The **Rent Differential** payment is designed to assist you in renting a comparable decent, safe and sanitary replacement dwelling. The payment is based on the difference between the base monthly Rent for the property acquired by Caltrans (including average monthly cost for utilities) and the lesser of:

- a) The monthly rent and estimated average monthly cost of utilities for a comparable replacement dwelling as determined by Caltrans, **OR**
- b) The monthly rent and estimated average monthly cost of utilities for the decent, safe and sanitary dwelling that you actually rent as a replacement dwelling.

Utility costs are those expenses you incur for heat, lights, water and sewer - regardless of the source (e.g. electricity, propane, and septic system). It does not include garbage, cable, telephone, or security. The utilities at your property are the average costs over the last 12 months. The utilities at the comparable replacement property are the estimated costs for the last 12 months for the type of dwelling and area used in the calculation.

This difference is multiplied by 42 months and may be paid to you in a lump sum payment or in periodic installments in accordance with policy and regulations.

In order to receive the full amount of the calculated Rent Differential, you must spend at least the amount calculated by Caltrans on a replacement property.

This payment may - with certain limitations - be converted to a **Downpayment Option** to assist you in purchasing a replacement property.

### Example of Rent Differential Payment Computation:

After a thorough study of comparable, decent, safe and sanitary dwellings that are available for rent, Caltrans determines that a comparable replacement property will rent for \$325.00 per month.

#### Caltrans Computation (rates are per month)

|  |              |
|--|--------------|
| Rental Rate for Comparable Replacement Property    | \$ 325       |
| PLUS average estimated utilities costs             | <u>+ 100</u> |
| TOTAL Cost to Rent Comparable Replacement Property | = \$ 425     |

|                                       |             |
|---------------------------------------|-------------|
| Rental Rate for Your Current Property | \$ 300      |
| PLUS average utilities costs          | <u>+ 90</u> |
| TOTAL Cost to Rent Current Property   | = \$ 390    |

|  |              |
|--|--------------|
| Comparable Replacement Property including utilities    | \$ 425       |
| Cost you pay to rent your property including utilities | <u>+ 390</u> |
| Difference   | = \$ 35      |

Multiplied by 42 months = \$1,470 Rent Differential

#### Example A:

|   |        |
|---|--------|
| Rental Rate for a Replacement Property including<br>Estimated average utilities costs | \$ 525 |
| Comparable Replacement Property including utilities                                   | \$ 425 |
| Cost you pay to rent your property including utilities                                | \$ 390 |

Since \$425 is less than \$525, the Rent Differential is based on the difference between \$390 and \$425.

Rent Differential (\$35 x 42 months = \$1,470)

*In this case you spent "at least" the amount of the Comparable Replacement Property on the replacement property and will receive the full amount.*

#### Example B:

|   |        |
|---|--------|
| Rental Rate for a Replacement Property including<br>Estimated average utilities costs | \$ 400 |
| Comparable Replacement Property including utilities                                   | \$ 425 |
| Cost you pay to rent your property including utilities                                | \$ 390 |

Since \$400 is less than \$525, the Rent Differential is based on the difference between \$400 and \$390.

Rent Differential (\$10 x 42 months = \$420)

*In this case you spent "less than" the amount of the Comparable Replacement Property on the replacement property and will not receive the full amount.*

**IN ORDER FOR A "90 DAY OWNER OCCUPANT" TO RECEIVE THE FULL AMOUNT OF THEIR REPLACEMENT HOUSING PAYMENT (Rent Differential), you must:**

A) Rent and occupy a DS&S replacement dwelling within one year after the later of:

(1) The date you first receive a notification of an available replacement house, **OR**

(2) The day you vacate the property acquired by Caltrans.

**AND**

B) Spend at least the amount of the Caltrans "Comparable Replacement Property" to rent a replacement property,

**AND**

C) File a claim for relocation payments within 18 months of the later of:

(1) The date you vacate the property acquired by Caltrans, **OR**

(2) The date that Caltrans has paid the acquisition cost of your current dwelling (usually the close of escrow on State's acquisition)

**You will not be eligible to receive any relocation payments until the State has actually made the first written offer to purchase the property. And, you will also receive at least 90 days' written notice before you must move.**

*Note1: The time periods for a 90-day owner occupant are different than a 180-day owner occupant.*

*Note 2: If the Rent Differential is converted to a Downpayment Option, there is no "spend-to-get" requirement.*

## **DOWN PAYMENT OPTION**

The Rent Differential payment may - with certain limitations - be converted to a **Down Payment Option** to assist you in purchasing a replacement property. The down payment option is a direct conversion of the Rent Differential payment.

If the Caltrans calculated Rent Differential is between \$0 and \$5,250, your down payment option will be \$5,250, which can be used towards the purchase of a replacement decent, safe and sanitary dwelling.

If the Rent Differential is over \$5,250, you may be able to convert the entire amount of the Rent Differential to a downpayment option.

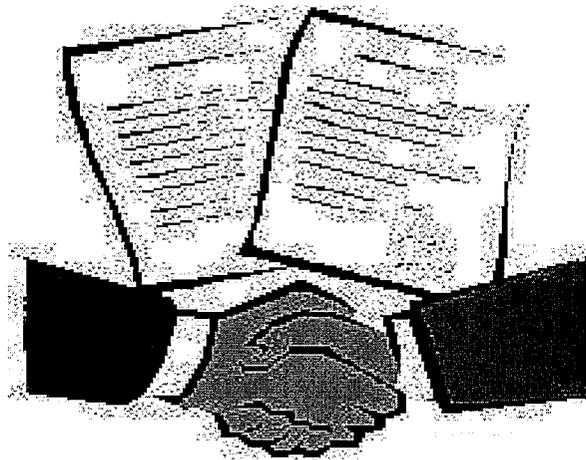
The down payment option must be used for the acquisition of the replacement dwelling, plus any eligible incidental expenses (see "180-day Owner Occupants Incidental Expenses") related to the purchase of the property. You must work closely with your Relocation Agent to ensure you can utilize the full amount of your down payment option towards the purchase.

If any portion of the Rent Differential was used prior to the decision to convert to a down payment option, those advance payments will be deducted from the entire benefit.

## **LAST RESORT HOUSING**

On most projects, an adequate supply of housing will be available for sale and for rent, and the benefits provided will be sufficient to enable you to relocate to comparable housing. However, there may be projects in certain locations where the supply of available housing is insufficient to provide the necessary housing for those persons being displaced. In such cases, Caltrans will utilize a method called Last Resort Housing. Last Resort Housing allows Caltrans to construct, rehabilitate or modify housing in order to meet the needs of the people displaced from a project. Caltrans can also pay above the statutory limits of \$5,250 and \$22,500 in order to make available housing affordable.

## Relocation Advisory Assistance



Any individual, family, business or farm displaced by Caltrans shall be offered relocation advisory assistance for the purpose of locating a replacement property. Relocation services are provided by qualified personnel employed by Caltrans. It is their goal and desire to be of service to you and assist in any way possible to help you successfully relocate.

A Relocation Agent from Caltrans will contact you personally. Relocation services and payments will be explained to you in accordance with your eligibility. During the initial interview with you, your housing needs and desires will be determined as well as your need for assistance. You cannot be required to move unless at least one comparable replacement dwelling is made available to you.

You can expect to receive the following services, advice and assistance from your Relocation Agent who will:

- Explain the relocation benefits and eligibility requirements.
- Provide the amount of the replacement housing payments in writing.
- Assure the availability of a comparable property before you move.
- Inspect possible replacement residential units for DS&S compliance.
- Provide information on counseling you can obtain to help minimize hardships in adjusting to your new location.
- Assist you in completing loan documents, rental applications or Relocation Claims Forms.

AND provide information on:

- Security deposits
- Interest rates and terms
- Typical down payments
- VA and FHA loan requirements
- Real property taxes.
- Consumer education literature on housing

If you desire, your Relocation Agent will give you current listings of other available replacement housing. Transportation will be provided to inspect available housing, especially if you are elderly or handicapped. Though you may use the services of a real estate broker, Caltrans cannot provide a referral.

Your Relocation Agent is familiar with the services provided by others in your community and will provide information on other federal, state, and local housing programs offering assistance to displaced persons. If you have special problems, your Relocation Agent will make every effort to secure the services of those agencies with trained personnel who have the expertise to help you.

If the highway project will require a considerable number of people to be relocated, Caltrans will establish a temporary Relocation Field Office on or near the project. Project relocation offices will be open during convenient hours and evening hours if necessary.

In addition to these services, Caltrans is required to coordinate its relocation activities with other agencies causing displacements to ensure that all persons displaced receive fair and consistent relocation benefits.

Remember - YOUR RELOCATION AGENT is there to offer advice and assistance. Do not hesitate to ask questions. And be sure you fully understand all of your rights and available benefits.



## YOUR RIGHTS AS A DISPLACEE

All eligible displacees have a freedom of choice in the selection of replacement housing, and Caltrans will not require any displaced person to accept a replacement dwelling provided by Caltrans. If you decide not to accept the replacement housing offered by Caltrans, you may secure a replacement dwelling of your choice, providing it meets DS&S housing standards. Caltrans will not pay more than your calculated benefits on any replacement property.

The most important thing to remember is that the replacement dwelling you select must meet the basic "decent, safe, and sanitary" standards. Do not execute a purchase agreement or a rental agreement until a representative from Caltrans has inspected and certified in writing that the dwelling you propose to occupy meets the basic standards. **DO NOT jeopardize** your right to receive a replacement housing payment by moving into a substandard dwelling.

It is important to remember that your relocation benefits will not have an adverse affect on your:

- Social Security Eligibility
- Welfare Eligibility
- Income Taxes

In addition, the Title VIII of the Civil Rights Act of 1968 and later acts and amendments make discriminatory practices in the purchase and rental of most residential units illegal if based on race, color, religion, sex, or national origin.

Whenever possible, minority persons shall be given reasonable opportunities to relocate to decent, safe, and sanitary replacement dwellings, not located in an area of minority concentration, and that is within their financial means. This policy, however, does not require Caltrans to provide a person a larger payment than is necessary to enable a person to relocate to a comparable replacement dwelling.

Caltrans' Non-Discrimination Policy ensures that all services and/or benefits will be administered to the general public without regard to race, color, national origin, or sex in compliance with Title VI of the 1964 Civil Rights Act (42 USC 2000d. et seq.).

And you always have the Right to Appeal any decision by Caltrans regarding your relocation benefits and eligibility.

Your Right of Appeal is guaranteed in the "Uniform Act" which states that any person may file an appeal with the head of the responsible agency if that person believes that the agency has failed to properly determine the person's eligibility or the amount of a payment authorized by the Act.

If you indicate your dissatisfaction, either verbally or in writing, Caltrans will assist you in filing an appeal and explain the procedures to be followed. You will be given a prompt and full opportunity to be heard. You have the right to be represented by legal counsel or other representative in connection with the appeal (but solely at your own expense).

Caltrans will consider all pertinent justifications and materials submitted by you and other available information needed to ensure a fair review. Caltrans will provide you with a written determination resulting from the appeal with an explanation of the basis for the decision. If you are still dissatisfied with the relief granted, Caltrans will advise you that you may seek judicial review.

## NOTES

# **Sus Derechos y Beneficios Como Una Persona Desplazada Bajo el Programa Uniforme De Asistencia Para Reubicación (Residencial)**

## **Introducción**

En la construcción de un sistema moderno de transportación, el desplazamiento de un pequeño porcentaje de la población es a menudo necesario. Sin embargo, la política de Caltrans es que las personas desalojadas no tengan que sufrir innecesariamente como resultado de los programas diseñados para el beneficio del público en general.

Los individuos y familias desplazadas pueden ser elegibles para recibir servicios de asesoramiento y pagos de reubicación.

Este folleto provee información acerca de los servicios y pagos de reubicación disponibles. Si usted es requerido a mudarse como resultado de un proyecto de transportación, un Agente de Reubicación se comunicará con usted. El Agente de Reubicación le contestará preguntas específicas y le proveerá información adicional.

## **Ley de Procedimiento Uniforme de Asistencia para Rubicación y Adquisición de Bienes Raíces de 1970, Enmendada “La Ley Uniforme”**

El propósito de esta Ley es proveer tratamiento igual y uniforme para las personas que son desplazadas de sus hogares, negocios, u operaciones agrícolas por programas federales o programas que son asistidos con fondos federales y para establecer uniformidad e igualdad en la política de adquisición de tierras por programas federales y programas asistidos con fondos federales.

La ley trata de asegurar que las personas desplazadas directamente como resultado de proyectos federales o proyectos asistidos con fondos federales sean tratados con igualdad, consistencia y equidad para que esas personas no sufran

daños desproporcionados como resultado de proyectos designados para el beneficio del público en general.

*Aunque se ha hecho un esfuerzo para asegurar la precisión de este folleto, debe de ser entendido que no tiene la fuerza o efectos de la ley, regla, o regulación que gobierna el pago de los beneficios. Si hay diferencias o error, la ley tomará precedencia.*

## **Algunas Definiciones Importantes...**

Sus beneficios de reubicación pueden ser entendidos mejor si usted entiende los siguientes términos:

***Vivienda de Restitución comparable:*** significa una propiedad que es:

- (1) Decente, segura y sanitaria. (Vea la definición abajo.)
- (2) Equivalente funcionalmente a la propiedad desplazada.
- (3) Adecuada en tamaño para acomodar a la familia que esta siendo reubicada.
- (4) En un área que no esté sujeta a condiciones irrazonablemente adversas.
- (5) En una localidad generalmente no menos deseable que la localidad de su propiedad desplazada con respecto a servicios públicos, y acceso razonable al lugar de empleo.
- (6) En una parcela de tamaño típico para el desarrollo de una residencia de tamaño normal.

***Decente, Segura y Sanitaria (DS&S):*** La vivienda de restitución debe de ser decente, segura y sanitaria ... que significa que llena todos los requisitos mínimos establecidos por las regulaciones federales y conforme a los códigos de ocupación de viviendas aplicables. La propiedad será:

- (1) Buena estructuralmente, cerrada a las condiciones climáticas y en buen estado de reparación.
- (2) Contiene un sistema eléctrico adecuado para iluminación y otros aparatos.
- (3) Contiene un sistema de calefacción capáz de mantener una temperatura saludable (de aproximadamente 70 grados) para la persona desplazada,

con excepción en aquellas áreas donde las condiciones climáticas no requieren dicho sistema.

- (4) Debe de ser adecuada en tamaño con respecto al número de cuartos y áreas para vivir necesarias para acomodar a las personas desplazadas. Es política de Caltrans que más de dos personas no deben de estar en un solo cuarto, a menos que el tamaño del cuarto sea suficientemente adecuado para acomodar los muebles de dormitorios necesarios de los ocupantes.
- (5) Tener un baño separado, bien iluminado y ventilado que sea privado a los usuarios y que contenga un lavamanos, una tina o regadera, y un excusado, todos en buenas condiciones y apropiadamente conectados a los sistemas de aguas negras y aguas potables.

***Nota:*** *En el caso de una propiedad residencial, debe de haber una área de cocina que contenga un lavatrastos usable, propiamente conectado a agua caliente y agua fría, y al sistema de drenaje, y con espacio adecuado para utilizar los servicios y conexiones para una estufa y un refrigerador.*

- (6) Que contenga salidas sin obstrucción y seguros espacio abierto al nivel del suelo. Si la propiedad de restitución está en el segundo piso o más arriba, que tenga acceso directamente desde o a través de un corredor, y que éste corredor común debe de tener al menos dos salidas.
- (7) Si la persona desplazada es incapacitada físicamente, debe de ser libre de cualquier barrera que le impidan la entrada o salida, o uso razonable de la propiedad por dicha persona incapacitada.

***Persona Desplazada:*** Cualquier individuo o familia que se mueva de una propiedad o mueva sus bienes personales de una propiedad como resultado de la adquisición de bienes raíces, en todo o en parte, o como resultado de una notificación escrita de una agencia pidiéndole que desocupe la propiedad que se necesita para un proyecto de transportación. En el caso de una adquisición parcial, Caltrans debe de determinar si la persona es desplazada directamente como resultado de esta adquisición.

Los residentes **que no están legalmente** en los Estados Unidos no son elegibles para recibir pagos y asistencia de reubicación.

Los beneficios de reubicación van a variar dependiendo del tipo y tiempo de ocupación. Como una persona desplazada de una unidad residencial usted puede ser clasificado como:

- Un dueño ocupante de una propiedad residencial (incluyendo casas movibles)
- Un inquilino ocupante de una propiedad residencial (incluyendo casas movibles y cuartos para dormir)

**Vivienda:** El lugar de permanencia o residencia regular y usual de una persona, de acuerdo a las costumbres locales o la ley, incluyendo una unidad familiar, una unidad familiar en un complejo doble o multi-familiar, o una propiedad de uso múltiple, una unidad de condominio o proyecto de vivienda en cooperativa, una unidad libre de mantenimiento doméstico, una casa movable, o cualquier otra unidad residencial.

**Dueño:** Una persona es considerada que llena los requisitos de dueño de una casa, si esta persona compra, tiene título o tiene algunos de los siguientes intereses en una propiedad:

- (1) Una escritura de propiedad, un interés de por vida en una propiedad, un contrato de renta por 99 años, un contrato oral de renta incluyendo una opción para extensión con al menos 50 años que queden después de la fecha de adquisición; o
- (2) El interés en un proyecto de vivienda en cooperativa que incluya el derecho de ocupar una vivienda; o
- (3) Un contrato de compra de interés, o bienes raíces.
- (4) Algún otro interés, incluyendo intereses parciales, que a juicio de la agencia garanticen los pagos como dueño.

**Inquilino:** Una persona que tiene el uso y la ocupación temporal de una propiedad de la que otro es dueño.

## Gastos de Mudanza

Si usted califica como persona desplazada, usted tiene derecho a reembolso de sus gastos de mudanza y a ciertos gastos relacionados incurridos durante el traslado. Los métodos de traslado y los distintos tipos de pagos para gastos de mudanza son explicados abajo.

Los individuos y familias desplazadas pueden escoger un pago basado en los gastos reales, razonables y los gastos relacionados, o de acuerdo a una lista de costos fijos de mudanza. Sin embargo, para asegurar su elegibilidad y el pago rápido de sus gastos de mudanza, usted debe de ponerse en contacto con su Agente de Rubicación antes de mudarse.

### Usted Puede Elegir Entre:

**Los Gastos Razonables de Mudanza** – A usted se le puede pagar por los gastos razonables de mudanza y gastos relacionados cuando una compañía comercial de mudanza hace la mudanza. Los reembolsos deberán ser limitados a una mudanza de 50 millas o menos. Los gastos relacionados pueden incluir:

- Transportación.
- Empaque y desempaque de propiedades personales.
- Desconexión y reconexión de aparatos eléctricos.
- Almacenaje temporal de propiedades personales.
- Seguros cuando la propiedad está almacenada o en tránsito.

Ó

**Lista de Costos Fijos de Mudanza** – A usted se le puede pagar basado en una lista de costos fijos de mudanza. Bajo esta opción, usted no puede ser elegible para reembolsos de gastos relacionados incluidos en la lista de arriba. Esta lista de gastos fijos está designada a cubrir todos esos gastos.

Por ejemplo (Tarifa para el año 2001)

4 Cuartos - \$ 950

7 Cuartos - \$1,550

Los costos fijos de mudanza para una unidad amueblada (ejemplo, usted es inquilino en un apartamento donde los muebles pertenecen al dueño de la vivienda) están basados en la Tabla de Honorarios B.

Ejemplos (Taza en el año 2001):

4 Cuartos - \$475

7 Cuartos - \$625

Bajo la lista de Pago Fijos de Mudanza, usted no puede recibir ningún pago adicional por almacenamiento temporario, vivienda temporaria, transportación o conexiones de servicios públicos.

## Pagos Para Vivienda de Restitución

El tipo de Pago Para Vivienda de Restitución (RHP) depende de si usted es dueño o un inquilino, y en el tiempo de ocupación que tiene de la propiedad que será adquirida.

Si usted es calificado **como dueño ocupante** de más de 180 días antes de la iniciación de negociaciones para la adquisición de su propiedad, usted puede tener derecho a recibir RHP que consiste en:

**Diferencia de Precio, y**

**Diferencia para Hipoteca, y**

**Gastos Incidentales**

**O**

**Diferencia Para Rentar**

Si usted es calificado como **dueño ocupante** de más de 90 días, pero menos de 180 días, O si usted es calificado como **inquilino ocupante** de al menos 90 días, usted puede tener derecho a recibir RHP así:

**Diferencia Para Rentar**

**U**

**Opción para Enganche**

Tiempo de ocupación simplemente significa contar el número de días que usted actualmente ocupó la vivienda antes de la fecha de iniciación de negociaciones por Caltrans para la compra de la propiedad. El término “iniciación de negociaciones” significa la fecha que Caltrans hizo el primer contacto personal con el dueño de bienes raíces, o su representante, para darle a el/ella una oferta escrita para la adquisición de la propiedad.

*Nota: Si usted ocupó una vivienda por **menos de 90 días** antes de la iniciación de negociaciones y la propiedad es posteriormente adquirida, o si usted se mudó a la propiedad después de la iniciación de negociaciones y usted todavía*

*ocupaba la propiedad a la fecha de adquisición, usted puede ser elegible para un Pago para Restitución de Vivienda, basado en una guía de elegibilidad establecida. Consulte con su Agente de Reubicación antes de que haga cualquier decisión de mudarse de su propiedad.*

## **Para Ocupantes de 180 Días o Más**

Si usted califica como dueño ocupante de 180 días, puede ser elegible – además del valor equitativo en el mercado de su propiedad – para un Pago de Restitución de Vivienda que consiste en un pago de Diferencia de Precio y/o Gastos Incidentales.

El Pago de **Diferencia de Precio** es la cantidad por la que el costo de una vivienda de restitución excede el costo de adquisición de la vivienda desplazada. Este pago le asistirá en la compra de una vivienda decente, segura, y sanitaria (DS&S). Caltrans computará el pago máximo que usted puede ser elegible para recibir. (Vea un ejemplo en la página 15.)

Para recibir la cantidad total de la diferencia de precio calculadas, usted debe de gastar al menos la cantidad calculada por Caltrans en la propiedad de restitución.

El pago de **Diferencia de Hipoteca** le será reembolsado por cualquier aumento del costo de interés en la hipoteca que usted haya incurrido porque la tasa de interés en su nueva hipoteca excede la tasa de interés de la propiedad adquirida por Caltrans. La computación del pago es complicada ya que está basada en las tasas típicas entre su préstamo anterior y su préstamo nuevo. También, una parte de los pagos pueden ser prorrateado como reembolso por una porción de los honorarios de su préstamo y los puntos (intereses) de la hipoteca.

Para ser elegible para recibir este pago, la propiedad adquirida debe de ser hipotecada con una hipoteca de buena fé, la cual fue un crédito válido de por lo menos 180 días antes de la iniciación de negociaciones.

Usted también puede ser reembolsado por cualquier **Gasto Incidental** actual y necesario que usted incurra en relación con la compra de su propiedad de restitución. Estos gastos pueden ser los costos por búsqueda de título, honorarios de copia en el Registro, reporte de crédito, reporte de evaluación, y ciertos otros gastos de cierre de escritura. Usted no puede ser reembolsado por ningún gasto frecuente como pre-pagos de impuesto de bienes raíces y seguro de propiedad.

Si la cantidad total de su **Pago de Vivienda de Restitución** (Diferencia de Precio, Diferencia Para Hipoteca y Gastos Incidentales) excede \$22,500, el pago debe de ser depositado directamente en una cuenta fiduciaria o ser pagado directamente a la compañía financiera.

**EJEMPLO DE COMO SE CALCULA LA DIFERENCIA DE PAGO:**

Suponga que Caltrans compra su propiedad por \$98,000. Después de un estudio completo de viviendas disponibles en el mercado, que sean decentes, seguras y sanitarias, Caltrans determina que la propiedad de restitución comparable en el mercado abierto le costará \$100,000. Si su precio de compra es \$100,000 usted recibirá \$2,000 (*Vea el Ejemplo A*)

Si su precio de compra es de más de \$100,000, usted paga la diferencia (*vea el Ejemplo B*). Si su precio de compra es menos de \$100,000, el pago se basará en los costos actuales (*vea el Ejemplo C*).

La cantidad que usted recibe en un pago diferencial dependerá de cuanto usted realmente gasta en una vivienda de restitución, como se muestra en estos ejemplos.

**Computación de Caltrans**

|  |                    |
|--|--------------------|
| Precio Comparable de la Propiedad de Restitución | \$100,000          |
| Precio de Adquisición de su Propiedad            | <u>– \$ 98,000</u> |
| Diferencia Máxima de Precio                      | \$ 2,000           |

**Ejemplo A**

|                                       |                    |
|---------------------------------------|--------------------|
| Precio de Compra de Restitución       | \$100,000          |
| Propiedad Comparable de Restitución   | \$100,000          |
| Precio de Adquisición de su Propiedad | <u>– \$ 98,000</u> |
| Diferencia Máxima de Precio           | \$ 2,000           |

## Ejemplo B

|  |                    |
|--|--------------------|
| Precio de Compra de Restitución            | \$105,000          |
| Propiedad Comparable de Restitución        | \$100,000          |
| Precio de Adquisición de su Propiedad      | <u>– \$ 98,000</u> |
| Diferencia Máxima de Precio                | \$ 2,000           |
| Usted Debe de Pagar el Precio Adicional de | \$ 5,000           |

## Ejemplo C

|                                       |                    |
|---------------------------------------|--------------------|
| Propiedad Comparable de Restitución   | \$100,000          |
| Precio de Compra de Restitución       | \$ 99,000          |
| Precio de Adquisición de su Propiedad | <u>– \$ 98,000</u> |
| Diferencia de Precio                  | \$ 1,000           |

*En el ejemplo C usted solo recibirá \$1,000 – no la cantidad completa de “La propiedad Comparable de Restitución” por los requisitos de “Gastar para Obtener” de Caltrans.*

**PARA QUE UN “DUENO OCUPANTE DE 180 DÍAS” RECIBA LA CANTIDAD TOTAL DE SUS BENEFICIOS DE PAGOS PARA VIVIENDA** (*Diferencia de Precio, Diferencia de Hipoteca y Gastos Incidentales*), *usted debe:*

A) Comprar y ocupar una vivienda de restitución que sea DS&S dentro de al menos un año desde la fecha más tarde de:

(1) La fecha en que recibió la primera notificación de una casa de restitución, **O**

(2) La fecha que Caltrans pagó los costos de adquisición de su vivienda actual (usualmente los gastos de cierre de escritura en la adquisición del Estado.)

**Y**

B) Haber gastado al menos la cantidad que Caltrans estableció para “La Propiedad Comparable de Restitución” para la propiedad de restitución.

**Y**

C) Reportar un reclamo para pago para reubicación dentro de los 18 meses de la fecha más tarde de:

- (1) La fecha en que se mudó de la propiedad adquirida por Caltrans, **O**
- (2) La fecha en que Caltrans le pagó los costos de adquisición de su vivienda actual (usualmente al cierre de escritura en la adquisición del Estado.)

Usted no será elegible para recibir ningún pago de reubicación hasta que el Estado haya hecho la primera oferta por escrito de la compra de la propiedad. Usted también recibirá una notificación escrita por lo menos 90 días antes de tener que mudarse.

## **Para Dueños Ocupantes e Inquilinos de 90 Días o Más**

**Si usted califica como un ocupante (ya sea como dueño o inquilino) de 90 días, usted puede ser elegible para un Pago de Vivienda de Restitución en la forma de Diferencia para Rentar.**

El pago de la **Diferencia para Rentar** es designado para asistirle en la renta de una vivienda comparable que sea decente, segura y sanitaria. El pago será basado en la diferencia entre la renta básica mensual por la propiedad adquirida por Caltrans (incluyendo el promedio del costo mensual de servicios públicos) y el menor de:

- a) La renta mensual y el promedio del costo mensual estimado de los servicios públicos para una vivienda comparable de restitución determinada por Caltrans, **O**
- b) La renta mensual y el promedio del costo mensual estimado de los servicios públicos para una vivienda decente, segura y sanitaria que usted rente como vivienda de restitución.

Gastos de servicios públicos son esos gastos que usted incurre por calefacción, luz, agua, aguas negras y basura – sin importar quien los provea (ejemplo, electricidad, gas propano, y sistema séptico.) No incluye cable de televisión, teléfono, o seguridad. Los servicios públicos en su propiedad de restitución será el estimado del promedio de costos por los 3 últimos meses para el tipo de vivienda y área usados en los cálculos.

Esta diferencia es multiplicada por 42 meses y le puede ser pagado en una sola suma o en pagos periódicos de acuerdo con la política y regulaciones. (Vea un ejemplo en la página 21.)

Para recibir la cantidad calculada total de la diferencia para rentar, usted debe gastar al menos la cantidad calculada por Caltrans en la propiedad de restitución.

Este pago puede – con ciertas limitaciones – ser convertido en una **Opción para Enganche** para asistirle en la compra de una propiedad de restitución (Vea la página 25 para una explicación completa.)

### **EJEMPLO DE LA COMPUTACIÓN DEL PAGO DE LA DIFERENCIA PARA RENTAR:**

Después de hacer un estudio completo de viviendas comparables, decentes, seguras y sanitarias que estén disponibles para rentar, Caltrans determina que una propiedad comparable de restitución podría ser rentada por \$325 al mes.

#### **Computación de Caltrans**

|   |               |
|---|---------------|
| Renta por una Propiedad Comparable de Restitución                       | \$ 325 al mes |
| MÁS: estimado de costos de servicios públicos                           | 100 al mes    |
| TOTAL Costo de renta por una Propiedad Comparable de Restitución        | \$ 425 al mes |
| Renta por su Propiedad Actual   | \$ 300 al mes |
| MÁS: costos de servicios públicos                                       | 90 al mes     |
| TOTAL Costo para pagar la renta de su propiedad actual                  | \$ 390 al mes |
| Propiedad Comparable de Restitución incluyendo servicios públicos       | \$ 425 al mes |
| Costo para pagar la renta de su propiedad incluyendo servicios públicos | 390 al mes    |
| Diferencia  | \$ 35 al mes  |

Multiplicado por 42 meses = \$1,470 Diferencia para Rentar

**Ejemplo A:**

|  |               |
|--|---------------|
| Renta para una Propiedad de Restitución, incluyendo los costos estimados de servicios públicos | \$ 525 al mes |
| Propiedad Comparable de Restitución incluyendo servicios públicos                              | \$ 425 al mes |
| Costos de pago de la renta de su propiedad incluyendo servicios públicos                       | \$ 390 al mes |

Ya que \$425 es menos que \$525, la diferencia para rentar está basada en la diferencia entre \$390 y \$425.

Diferencia para Rentar ( $\$35 \times 42 \text{ meses} = \$1,470$ )

En este caso usted gasta “al menos” la cantidad de la Propiedad de Restitución Comparable en la propiedad de restitución y así recibirá la cantidad total.

**Ejemplo B:**

|   |               |
|---|---------------|
| Renta por una Propiedad de Restitución, incluyendo los costos estimados de servicios públicos | \$ 400 al mes |
| Propiedad Comparable de Restitución incluyendo servicios públicos                             | \$ 425 al mes |
| Costos de pago de la renta de su propiedad incluyendo servicios públicos                      | \$ 390 al mes |

Ya que \$400 es menos que \$525, la diferencia para rentar está basada en la diferencia entre \$400 y \$390.

Diferencia para Rentar ( $\$10 \times 42 \text{ meses} = \$420$ )

En este caso usted va a gastar “menos que” la cantidad de Propiedad de Restitución Comparable en la restitución de la vivienda y usted no recibirá la cantidad total.

**PARA QUE UN “DUENO OCUPANTE DE 90 DÍAS” RECIBA LA CANTIDAD TOTAL DE PAGO PARA SU VIVIENDA DE RESTITUCION (Diferencia para Rentar), usted debe de:**

A) Rentar y ocupar una vivienda de restitución DS&S dentro de un año después de la última fecha de:

(1) La fecha en que usted recibió la primera notificación de una casa de restitución disponible,

(2) El día en que usted se mudó de la propiedad adquirida por Caltrans.

Y

B) Gastar al menos la cantidad de la “Propiedad Comparable de Restitución” de Caltrans para rentar una vivienda de restitución.

Y

C) Reportar un reclamo para pagos de reubicación dentro de los 18 meses de la fecha más tarde:

(1) La fecha en que usted se mudó de la propiedad adquirida por Caltrans,

(2) La fecha en que Caltrans le pagó los costos de adquisición de su propiedad actual (usualmente al cierre de escritura de la adquisición del Estado.)

Usted no será elegible para recibir ningún pago de reubicación hasta que haya hecho la primera oferta escrita para comprar la propiedad. Además, usted recibirá al menos una noticia por escrito 90 días antes de tener que mudarse.

## OPCIÓN PARA ENGANCHE

El pago de Diferencia para Rentar puede – con ciertas limitaciones – ser convertido en una **Opción para Enganche** para asistirle en la compra de una propiedad de restitución. La Opción para Enganche es una conversión directa del pago de la diferencia para rentar.

Si la diferencia para rentar es calculada entre \$0 y \$5,250, su Opción Para Enganche será de \$5,250 la cual puede ser usada para la compra de una vivienda de restitución decente, segura y sanitaria.

Si la diferencia para rentar es más de \$5,250 usted podrá convertir la cantidad completa de diferencia para rentar a una Opción Para Enganche.

La Opción Para Enganche debe de ser usada para el enganche requerido, la cual usualmente es un porcentaje del precio total de compra, más cualquier gasto incidental elegible (vea la página 14, “Gastos Incidentales para Dueños Ocupantes de 180 días”) relacionado con la compra de la propiedad. Usted debe trabajar junto con su Agente de Reubicación para asegurarse de que puede utilizar la cantidad total de su Opción Para Enganche en su compra.

Si alguna porción de la diferencia para rentar fue usada antes de su decisión de convertirla a una Opción Para Enganche, los pagos avanzados serán deducidos de los beneficios completos.

## **CASA DEL ÚLTIMO RECURSO**

En la mayoría de los proyectos de Caltrans, existe una cantidad adecuada de viviendas de venta y alquiler, y los beneficios serán suficientes para que usted pueda reubicarse a una vivienda comparable. Sin embargo, en ciertas localidades pueden haber proyectos donde el número de viviendas disponibles no son suficientes para proveer viviendas a todas las personas desplazadas. En estos casos, Caltrans utiliza un método llamado Casa del Último Recurso. La Casa del Último Recurso permite a Caltrans construir, rehabilitar, o modificar viviendas para cumplir con las necesidades de las personas desplazadas por un proyecto. Caltrans puede también pagar arriba de los límites legales de \$5,250 y \$22,500 para hacer posible viviendas con precios razonables.

### **Asistencia de Consulta Para Reubicación**

A cualquier individuo, familia, negocio u operación agrícola desplazada por Caltrans deberá ofrecérsele servicios de asistencia con el propósito de localizar una propiedad de restitución. Los servicios de reubicación son proveídos por empleados calificados de Caltrans. Es la meta de ellos y el deseo de estos empleados de servirle y asistirle de cualquier manera posible para ayudarle a reubicarse exitosamente.

Un Agente de Reubicación de Caltrans se pondrá en contacto con usted personalmente. Los servicios de reubicación y pagos se le explicarán de acuerdo con su elegibilidad. Durante la entrevista inicial, sus necesidades de vivienda y deseos se determinarán así como sus necesidades de asistencia. No se le puede pedir que se mude a menos que una vivienda comparable de restitución le sea disponible.

Usted puede esperar recibir los siguientes servicios, consejos y asistencia de su Agente de Reubicación quien le:

- Explicará los beneficios de reubicación y los requisitos de elegibilidad.
- Proveerá por escrito la cantidad de pago por su vivienda de restitución.
- Asegurará la disposición de una propiedad comparable antes de que se mude.
- Inspeccionará las posibles unidades residenciales de restitución para el cumplimiento de DS&S.

- Proveerá información y aconsejará como puede obtener ayuda para minimizar las adversidades en ajustarse a su nueva localidad.
- Ayudará en completar los documentos de préstamos, aplicaciones de rentas o las Formas de Reclamo para Reubicación.

Y proveerle información de:

- Seguro de Depósitos
- Taza de intereses y términos
- Pagos típicos de enganches
- Requisitos de préstamos de la Administración de Veteranos (VA) y la Administración de Vivienda Federal (FHA)
- Impuestos sobre bienes raíces
- Literatura de educación en viviendas para el consumidor

Si usted lo desea, el Agente de Reubicación le dará una lista actual de otras viviendas de restitución disponibles.

Se proveerá transportación para inspeccionar viviendas disponibles, especialmente si usted es mayor de edad o con impedimento físico. Aunque usted puede utilizar los servicios de un agente de bienes raíces, Caltrans no lo podrá referir.

Su Agente de Reubicación está familiarizado con los servicios proveídos por otras agencias de su comunidad y le proveerá información de otros programas de viviendas federales, estatales y locales que ofrecen programas de asistencia para personas desplazadas. Si usted tiene algún problema especial, su Agente de Reubicación hará su mejor esfuerzo para asegurarle los servicios de esas agencias con personal capacitado y con experiencia que le ayudarán.

Si el proyecto de transportación requiere un número considerable de personas que sean reubicados, Caltrans establecerá una Oficina Temporal de Reubicación en, o cerca del proyecto. Las oficinas de proyectos de reubicación deberán de abrirse durante horas convenientes y en horas tempranas de la noche, si es necesario.

Además de estos servicios, Caltrans es requerido que coordine las actividades de otras agencias que causen desplazamientos para asegurar que todas esas personas desplazadas reciban beneficios de reubicación equitativos y consistentes.

Recuerde – SU AGENTE DE REUBICACIÓN está para aconsejarle y asistirle. No vacile en hacer preguntas, y asegúrese de que entiende completamente sus derechos y beneficios de reubicación disponibles.

## SUS DERECHOS COMO UNA PERSONA DESPLAZADA

Todas las personas elegibles como personas desplazadas tienen la libertad de escoger dentro de la selección de viviendas de restitución, y Caltrans no requerirá a ninguna persona que sea desplazada que acepte una vivienda de restitución proveída por Caltrans. Si usted decide no aceptar la vivienda de restitución ofrecida por Caltrans, usted puede elegir una vivienda de restitución de su propia selección, mientras que cumple con los requisitos de DS&S. Caltrans no pagará más que los beneficios calculados por una vivienda de restitución.

Lo más importante que usted debe de recordar es que la vivienda de restitución que usted seleccione debe de llenar los requisitos básicos de “decente, segura y sanitaria”. No ejecute los documentos de compra o el contrato de renta hasta que un representante de Caltrans haya inspeccionado y certificado por escrito que la vivienda que usted se propone ocupar cumple con los requisitos básicos. **NO ARRIESGUE** su derecho de recibir los pagos de vivienda de restitución por mudarse a una vivienda que no sea “decente, segura y sanitaria.”

Es importante recordar que sus beneficios de reubicación no van a tener ningún efecto adverso en su:

- Elegibilidad para Seguro Social
- Elegibilidad para Asistencia Social
- Impuestos sobre ingresos

Además, el Título VIII de los Derechos Civiles, Ley de 1968 y luego otras leyes y enmiendas hacen discriminatoria la práctica de compra y renta de unidades de vivienda si es basada ilegalmente en la raza, color, religión, sexo u origen nacional.

Cuando sea posible, a personas de minorías se les debe de dar oportunidades razonables para reubicarse a viviendas de restitución que sean decentes, seguras y sanitarias, no localizadas en áreas de concentración de minorías, y que estén dentro de sus recursos económicos. Esta política, sin embargo, no requiere que Caltrans provea a una persona pagos más grandes de lo que sean necesarios para permitir que la persona sea reubicada a una vivienda de restitución comparable.

La política No-Discriminatoria de Caltrans asegura que todos los servicios y/o los beneficios deben de ser administrados al público en general sin importar la raza, color, origen nacional, o sexo en cumplimiento con el Título VI de la Ley de Derechos Civiles de 1964 (42 USC 2000 d. et seq.)

Usted siempre tendrá el Derecho de Apelar cualquier decisión hecha por Caltrans relacionada a los beneficios de reubicación y elegibilidad.

Su Derecho de Apelar está garantizado en la “Ley Uniforme” la cual establece que una persona puede apelar al jefe de la agencia responsable, si ella cree que la agencia ha fallado en determinar correctamente su elegibilidad, o la cifra del pago autorizado por la Ley.

Si usted indica su disatisfacción, ya sea verbalmente o por escrito, Caltrans le asistirá en hacer su demanda de apelación y le explicará el procedimiento que debe de seguir. Usted tiene derecho de ser representado por un asesor legal u otro representante en conexión con su apelación (pero solamente por su propia cuenta.)

Caltrans considerará toda justificación y materia pertinente que usted entregue u otra información disponible, necesaria para asegurar una audiencia equitativa. Caltrans le proveerá una determinación por escrito del resultado de su apelación, con una explicación sobre la base de la decisión. Si usted aún no está satisfecho con la decisión otorgada, Caltrans le aconsejará que usted puede pedir una audiencia judicial.

### **Noticiero de la Ley para Americanos con Incapacidades Físicas (ADA):**

**Para personas con incapacidades físicas, este documento es disponible en formatos alternativos. Para Información llame al número (916) 654-5413 Voz, CRS: 1-800-735-2929, o escriba a Derecho de Vía, MS 37, 1120 N Street, Sacramento, CA 95814.**

# NOTAS

## Appendix C Title VI Policy Statement

---

**DEPARTMENT OF TRANSPORTATION**

OFFICE OF THE DIRECTOR

1120 N STREET

P. O. BOX 942873

SACRAMENTO, CA 94273-0001

PHONE (916) 654-5266

FAX (916) 654-6608

TTY (916) 653-4086

*Flex your power!  
Be energy efficient!*

August 25, 2009

**TITLE VI  
POLICY STATEMENT**

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

A handwritten signature in blue ink that reads "Randell H. Iwasaki".

RANDELL H. IWASAKI

Director

## Appendix D List of Technical Studies

---

## Appendix D List of Technical Studies

---

- *I-80 Eastbound Cordelia Truck Scales Relocation Project, Community Impact Assessment.* December 2008. Submitted to the California Department of Transportation, District 4. Prepared by CirclePoint.
- *Draft Traffic Operations Report, Interstate 80 Eastbound Cordelia Truck Scales Relocation Project.* October 2008. Prepared for the Solano Transportation Authority. Submitted to the California Department of Transportation, District 4. Prepared by Fehr & Peers.
- *I-80 Eastbound Cordelia Truck Scales Relocation Project, Final Visual Impact Assessment.* December 2008. Submitted to the California Department of Transportation, District 4. Prepared by CirclePoint.
- *Draft Historical Property Survey Report I-80 Eastbound Cordelia Truck Scales Relocation Project Caltrans District 4 Solano County, California.* December 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
- *Draft Historical Resources Evaluation Report I-80 Eastbound Cordelia Truck Scales Relocation Project Caltrans District 4 Solano County, California.* October 2008. Prepared for the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
- *Draft Archaeological Survey Report I-80 Eastbound Cordelia Truck Scales Relocation Project Caltrans District 4 Solano County, California.* December 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
- *Draft Extended Phase I Report I-80 Eastbound Cordelia Truck Scales Relocation Project Caltrans District 4 Solano County, California.* December 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
- *Eastbound Cordelia Truck Scales Relocation Project Location Hydraulic Study, (Draft) PA/ED Submittal.* October 2008. Submitted to California Department of Transportation. Prepared by Mark Thomas & Company, Inc., and Nolte Associates, Inc.
- *Eastbound Cordelia Truck Scales Relocation Project Storm Water Data Report, (Draft) PA/ED Submittal.* October 2008. Submitted to California Department of Transportation. Prepared by Mark Thomas & Company, Inc., and Nolte Associates, Inc.
- *Eastbound Cordelia Truck Scales Relocation Project Water Quality Report, Final PA/ED Submittal.* July 2008. Submitted to California Department of Transportation. Prepared by Mark Thomas & Company, Inc., and Nolte Associates, Inc.
- *Geologic and Seismic Section in Support of Environmental Document for eastbound I-80 Truck Scales Relocation Project, Solano County, California, 04-Sol-80 PM Var.* 2008. Submitted to California Department of Transportation. Prepared by Parikh and Associates.
- *I-80 Eastbound Cordelia Truck Scales Relocation Project Paleontological Sensitivity Analysis Solano County, California Interstate 80, between Suisun Creek and Chadbourne*

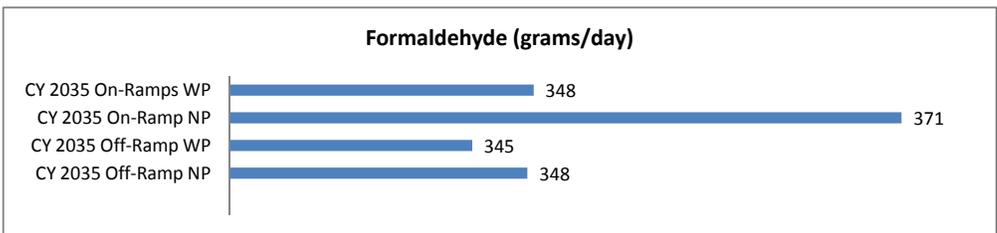
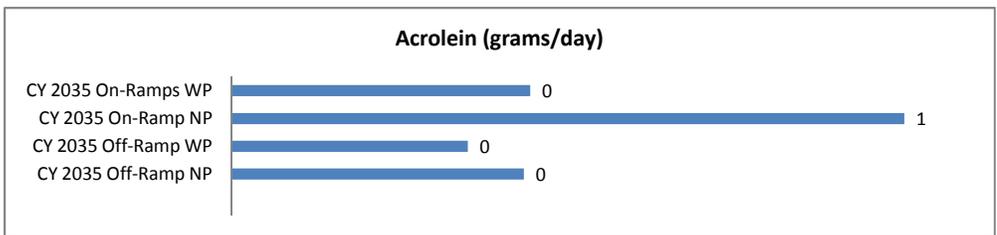
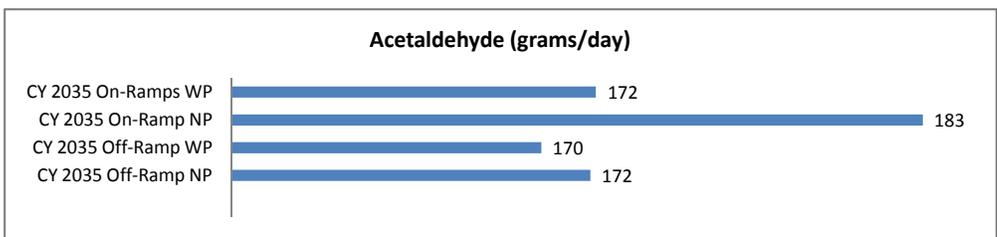
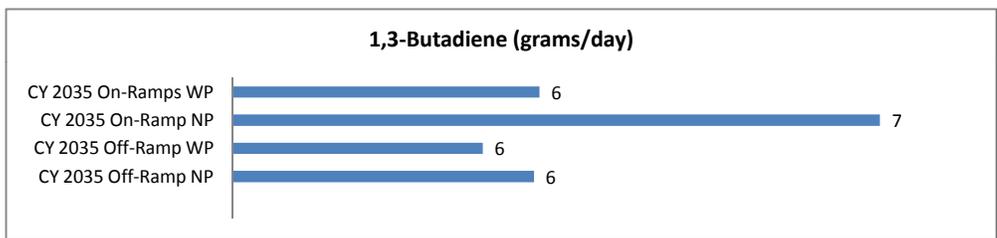
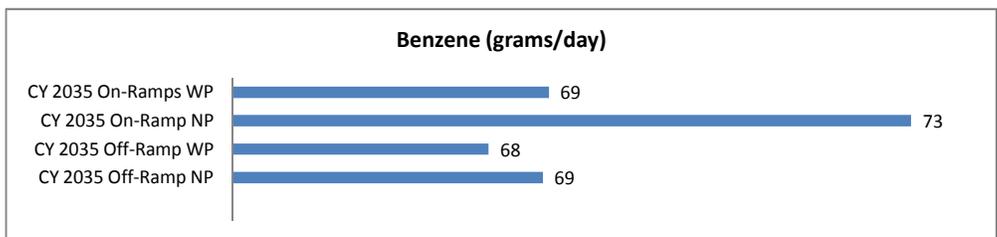
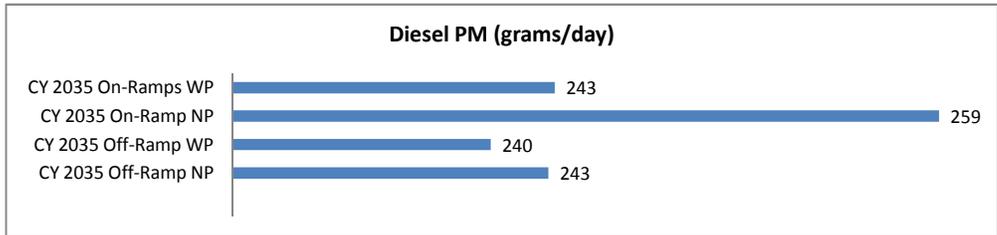
- Road on State Route 12.* August 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
- *Initial Site Assessment I-80 Eastbound Cordelia Truck Scale Relocation Project Solano County, CA.* September 2008. Prepared for Mark Thomas and Company, Walnut Creek, CA, and submitted to the California Department of Transportation. Prepared by Geocon Consultants, Inc.
  - *Draft Aerially-Deposited Lead Investigation Report, I-80 Eastbound Truck Scale Relocation Project, Fairfield, California.* September 2008. Prepared for Mark Thomas and Company, Walnut Creek, CA, and submitted to the California Department of Transportation. Prepared by Geocon Consultants, Inc.
  - *Draft Limited Site Investigation Report, I-80 Eastbound Truck Scale Relocation Project, Fairfield, California.* November 2008. Prepared for Mark Thomas and Company, Walnut Creek, CA, and the California Department of Transportation.
  - *Interstate 80 Eastbound Cordelia Truck Scales Relocation Project Air Quality Technical Report Interstate 80 and State Route 12 East in the Vicinity of Fairfield Solano County, California.* November 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
  - *Interstate 80 Eastbound Cordelia Truck Scales Relocation Project Noise Study Technical Report Interstate 80 and State Route 12 East in the Vicinity of Fairfield Solano County, California.* November 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
  - *Interstate 80 Eastbound Cordelia Truck Scales Relocation Project Energy Technical Report Interstate 80 and State Route 12 East in the Vicinity of Fairfield Solano County, California.* November 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
  - *Interstate 80 Eastbound Cordelia Truck Scales Relocation Project Natural Environment Study Interstate 80 and State Route 12 East in the Vicinity of Fairfield Solano County, California.* December 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
  - *Preliminary Delineation of Waters of the United States for the Interstate 80 Eastbound Cordelia Truck Scales Relocation Project, Solano County, California.* August 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
  - *I-80 Eastbound Cordelia Truck Scales Relocation Project Biological Assessment for California Red-Legged Frog and Valley Elderberry Longhorn Beetle Solano County, California Interstate 80, between Suisun Creek and Chadbourne Road on State Route 12.* October 2008. Submitted to the California Department of Transportation, District 04. Prepared by ICF Jones & Stokes.
  - *I-80 Eastbound Cordelia Truck Scales Relocation Project Biological Assessment/Essential Fish Habitat Assessment for Central California Coast Steelhead and Central Valley Fall/Late Fall–Run Chinook Salmon Solano County, California Interstate 80, between Suisun*

*Creek and Chadbourne Road on State Route 12. September 2008. Submitted to the California Department of Transportation, District 04.*

Appendix E Compliance with 40 CFR 1502.22  
and System-Wide Emissions  
Spreadsheet

---

| Summary of Project Level MSAT Emissions<br>(grams/day) |           |         |               |              |          |              |
|--|-----------|---------|---------------|--------------|----------|--------------|
|  | Diesel PM | Benzene | 1,3-Butadiene | Acetaldehyde | Acrolein | Formaldehyde |
| CY 2035 Off-Ramp NP                                    | 243       | 69      | 6             | 172          | 0        | 348          |
| CY 2035 Off-Ramp WP                                    | 240       | 68      | 6             | 170          | 0        | 345          |
| CY 2035 On-Ramp NP                                     | 259       | 73      | 7             | 183          | 1        | 371          |
| CY 2035 On-Ramps WP                                    | 243       | 69      | 6             | 172          | 0        | 348          |



Percent increases

| Diesel PM | Benzene | 1,3-Butad | Acetaldeh | Acrolein ( | Formalde |
|-----------|---------|-----------|-----------|------------|----------|
|-----------|---------|-----------|-----------|------------|----------|

|                     |       |       |       |       |       |       |
|---------------------|-------|-------|-------|-------|-------|-------|
| CY 2035 Off-Ramp NP |       |       |       |       |       |       |
| CY 2035 Off-Ramp WP | -1%   | -1%   | -1%   | -1%   | -1%   | -1%   |
| CY 2035 On-Ramp NP  |       |       |       |       |       |       |
| CY 2035 On-Ramps WP | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 | -0.06 |

Increases

| Diesel PM | Benzene | 1,3-Butad | Acetaldeh | Acrolein ( | Formalde |
|-----------|---------|-----------|-----------|------------|----------|
|-----------|---------|-----------|-----------|------------|----------|

|                     |     |    |   |     |   |     |
|---------------------|-----|----|---|-----|---|-----|
| CY 2035 Off-Ramp NP |     |    |   |     |   |     |
| CY 2035 Off-Ramp WP | -2  | -1 | 0 | -2  | 0 | -3  |
| CY 2035 On-Ramp NP  |     |    |   |     |   |     |
| CY 2035 On-Ramps WP | -16 | -4 | 0 | -11 | 0 | -22 |

## Appendix F CALINE Model

---

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
 JUNE 1989 VERSION  
 PAGE 1

JOB: Cordelia Truck Scales Facility CO 2015  
 RUN: Hour 1 (WORST CASE ANGLE)  
 POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S                      Z0= 100. CM                      ALT= 0. (M)  
 BRG= WORST CASE              VD= .0 CM/S  
 CLAS= 7 (G)                    VS= .0 CM/S  
 MIXH= 1000. M                AMB= 3.9 PPM  
 SIGTH= 5. DEGREES            TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

| LINK        | * LINK COORDINATES (M)             | * EF | H    | W |
|-------------|------------------------------------|------|------|---|
| DESCRIPTION | * X1 Y1 X2 Y2 * TYPE VPH (G/MI)    | (M)  | (M)  |   |
| A. Link A   | * 0 0 1300 -100 * AG 788 6.5       | 10.0 | 20.0 |   |
| B. Link B   | * 1300 -100 1800 -100 * AG 198 6.5 | 10.0 | 20.0 |   |
| C. Link C   | * 1300 -100 1800 -150 * AG 590 6.5 | 10.0 | 20.0 |   |
| D. Link D   | * 1800 -100 2100 -100 * AG 198 6.5 | 10.0 | 20.0 |   |
| E. Link E   | * 1800 -150 2100 -150 * AG 590 6.5 | 10.0 | 20.0 |   |
| F. Link F   | * 2100 -100 3800 -100 * AG 443 6.5 | 10.0 | 20.0 |   |
| G. Link G   | * 3800 -100 6000 0 * AG 788 6.5    | 10.0 | 20.0 |   |
| H. Link H   | * 2100 -150 2300 -400 * AG 147 6.5 | 10.0 | 20.0 |   |
| I. Link I   | * 2300 -400 2000 -600 * AG 147 6.5 | 10.0 | 20.0 |   |
| J. Link J   | * 2000 -600 1400 -600 * AG 147 6.5 | 10.0 | 20.0 |   |
| K. Link K   | * 1400 -600 1300 -400 * AG 7 6.5   | 10.0 | 20.0 |   |
| L. Link L   | * 1300 -400 1300 -100 * AG 7 6.5   | 10.0 | 20.0 |   |
| M. Link M   | * 1400 -600 1550 -400 * AG 140 6.5 | 10.0 | 20.0 |   |
| N. Link N   | * 1550 -400 1800 -320 * AG 140 6.5 | 10.0 | 20.0 |   |
| O. Link O   | * 1800 -320 2100 -150 * AG 140 6.5 | 10.0 | 20.0 |   |
| P. Link P   | * 2100 -150 3000 -100 * AG 590 6.5 | 10.0 | 20.0 |   |

III. RECEPTOR LOCATIONS

| RECEPTOR   | * COORDINATES (M) |
|------------|-------------------|
|            | * X Y Z           |
| 1. Recpt 1 | * 2200 -1800 1.8  |
| 2. Recpt 2 | * 2500 -1500 1.8  |
| 3. Recpt 3 | * 4300 -250 1.8   |
| 4. Recpt 4 | * 4700 -300 1.8   |
| 5. Recpt 5 | * 5300 -700 1.8   |
| 6. Recpt 6 | * 1400 150 1.8    |



CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL  
 JUNE 1989 VERSION  
 PAGE 1

JOB: Cordelia Truck Scales Facility CO 2035  
 RUN: Hour 1 (WORST CASE ANGLE)  
 POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S                      Z0= 100. CM                      ALT= 0. (M)  
 BRG= WORST CASE              VD= .0 CM/S  
 CLAS= 7 (G)                    VS= .0 CM/S  
 MIXH= 1000. M                AMB= 3.9 PPM  
 SIGTH= 5. DEGREES            TEMP= 10.0 DEGREE (C)

II. LINK VARIABLES

| LINK        | * LINK COORDINATES (M)          | * EF | H    | W    |
|-------------|---------------------------------|------|------|------|
| DESCRIPTION | * X1 Y1 X2 Y2 * TYPE VPH (G/MI) | (M)  | (M)  |      |
| A. Link A   | * 0 0 1300 -100 * AG 1104       | 1.6  | 10.0 | 20.0 |
| B. Link B   | * 1300 -100 1800 -100 * AG 276  | 2.6  | 10.0 | 20.0 |
| C. Link C   | * 1300 -100 1800 -150 * AG 828  | 2.6  | 10.0 | 20.0 |
| D. Link D   | * 1800 -100 2100 -100 * AG 276  | 2.6  | 10.0 | 20.0 |
| E. Link E   | * 1800 -150 2100 -150 * AG 828  | 2.6  | 10.0 | 20.0 |
| F. Link F   | * 2100 -100 3800 -100 * AG 621  | 2.6  | 10.0 | 20.0 |
| G. Link G   | * 3800 -100 6000 0 * AG 1104    | .9   | 10.0 | 20.0 |
| H. Link H   | * 2100 -150 2300 -400 * AG 207  | 1.2  | 10.0 | 20.0 |
| I. Link I   | * 2300 -400 2000 -600 * AG 207  | 1.2  | 10.0 | 20.0 |
| J. Link J   | * 2000 -600 1400 -600 * AG 207  | 1.2  | 10.0 | 20.0 |
| K. Link K   | * 1400 -600 1300 -400 * AG 10   | 1.2  | 10.0 | 20.0 |
| L. Link L   | * 1300 -400 1300 -100 * AG 10   | 1.2  | 10.0 | 20.0 |
| M. Link M   | * 1400 -600 1550 -400 * AG 197  | 2.6  | 10.0 | 20.0 |
| N. Link N   | * 1550 -400 1800 -320 * AG 197  | 2.6  | 10.0 | 20.0 |
| O. Link O   | * 1800 -320 2100 -150 * AG 197  | 1.2  | 10.0 | 20.0 |
| P. Link P   | * 2100 -150 3000 -100 * AG 828  | 1.2  | 10.0 | 20.0 |

III. RECEPTOR LOCATIONS

| RECEPTOR   | * COORDINATES (M) |
|------------|-------------------|
|            | * X Y Z           |
| 1. Recpt 1 | * 2200 -1800 1.8  |
| 2. Recpt 2 | * 2500 -1500 1.8  |
| 3. Recpt 3 | * 4300 -250 1.8   |
| 4. Recpt 4 | * 4700 -300 1.8   |
| 5. Recpt 5 | * 5300 -700 1.8   |
| 6. Recpt 6 | * 1400 150 1.8    |



## Appendix G CEQA Checklist

---

# Appendix G CEQA Checklist

|  | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| <b>I. AESTHETICS.</b> Would the project:   |                                |  |                                     |                                     |
| a. Have a substantial adverse effect on a scenic vista?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. Substantially degrade the existing visual character or quality of the site and its surroundings?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <b>II. AGRICULTURAL RESOURCES.</b> In determining whether impacts on agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation. Would the project: |                                |  |                                     |                                     |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?   | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/>            |
| b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>III. AIR QUALITY.</b> When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:  |                                |  |                                     |                                     |

|    |   | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|----|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| a. | Conflict with or obstruct implementation of the applicable air quality plan?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. | Violate any air quality standard or contribute substantially to an existing or projected air quality violation?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. | Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. | Expose sensitive receptors to substantial pollutant concentrations?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e. | Create objectionable odors affecting a substantial number of people?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**IV. BIOLOGICAL RESOURCES.** Would the project:

|    |   |                          |                          |                                     |                                     |
|----|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. | Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. | Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. | Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. | Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

|    |   | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|----|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| e. | Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f. | Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**V. CULTURAL RESOURCES.** Would the project:

|    |   |                          |                          |                                     |                                     |
|----|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. | Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5?    | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. | Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. | Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?              | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. | Disturb any human remains, including those interred outside of formal cemeteries?                                 | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

**VI. GEOLOGY AND SOILS.** Would the project:

|    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. | Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:  |                          |                          |                                     |                                     |
|    | 1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
|    | 2. Strong seismic groundshaking?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
|    | 3. Seismic-related ground failure, including liquefaction?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
|    | 4. Landslides?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. | Result in substantial soil erosion or the loss of topsoil?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

|  |  | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|--|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| c.   | Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?          | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d.   | Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e.   | Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>VII. HAZARDS AND HAZARDOUS MATERIALS.</b> |  |                                |  |                                     |                                     |
| Would the project:                           |  |                                |  |                                     |                                     |
| a.   | Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b.   | Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c.   | Emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d.   | Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?                   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e.   | Be located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f.   | Be located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

|    |  | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact                           |
|----|--|--------------------------------|--|------------------------------|-------------------------------------|
| g. | Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| h. | Expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

### VIII. HYDROLOGY AND WATER QUALITY.

Would the project:

|    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. | Violate any water quality standards or waste discharge requirements?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. | Substantially deplete groundwater supplies or interfere substantially with groundwater recharge, resulting in a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation onsite or offsite?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. | Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding onsite or offsite?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e. | Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f. | Otherwise substantially degrade water quality?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

|            |   | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|------------|---|--------------------------------|--|-------------------------------------|-------------------------------------|
| g.         | Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| h.         | Place within a 100-year flood hazard area structures that would impede or redirect floodflows?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| i.         | Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| j.         | Contribute to inundation by seiche, tsunami, or mudflow?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>IX.</b> | <b>LAND USE AND PLANNING.</b> Would the project:  |                                |  |                                     |                                     |
| a.         | Physically divide an established community?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b.         | Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, a general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c.         | Conflict with any applicable habitat conservation plan or natural community conservation plan?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>X.</b>  | <b>MINERAL RESOURCES.</b> Would the project:  |                                |  |                                     |                                     |
| a.         | Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b.         | Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>XI.</b> | <b>NOISE.</b> Would the project:  |                                |  |                                     |                                     |
| a.         | Expose persons to or generate noise levels in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

|    |  | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|----|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| b. | Expose persons to or generate excessive groundborne vibration or groundborne noise levels?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. | Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. | Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e. | Be located within an airport land use plan area, or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f. | Be located in the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels?  | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**XII. POPULATION AND HOUSING.** Would the project:

|    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. | Induce substantial population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. | Displace a substantial number of existing housing units, necessitating the construction of replacement housing elsewhere?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. | Displace a substantial number of people, necessitating the construction of replacement housing elsewhere?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

|  | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact |
|--|--------------------------------|--|------------------------------|-----------|
|--|--------------------------------|--|------------------------------|-----------|

**XIII. PUBLIC SERVICES.** Would the project:

- a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:

|                          |                          |                          |                                     |                                     |
|--------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| Fire protection?         | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Police protection?       | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Schools?                 | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Parks?                   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**XIV. RECREATION.** Would the project:

- a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?
- b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

|    |                          |                          |                          |                                     |
|----|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

**XV. TRANSPORTATION/TRAFFIC.** Would the project:

- a. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?
- b. Cause, either individually or cumulatively, exceedance of a level-of-service standard established by the county congestion management agency for designated roads or highways?

|    |                          |                          |                          |                                     |
|----|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

|    |  | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|----|--|--------------------------------|--|-------------------------------------|-------------------------------------|
| c. | Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. | Substantially increase hazards because of a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?      | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e. | Result in inadequate emergency access?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| f. | Result in inadequate parking capacity?   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g. | Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?                                | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**XVI. UTILITIES AND SERVICE SYSTEMS.** Would the project:

|    |   |                          |                          |                          |                                     |
|----|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a. | Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. | Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?                           | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c. | Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?                                     | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d. | Have sufficient water supplies available to serve the project from existing entitlements and resources, or would new or expanded entitlements be needed?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e. | Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f. | Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

|    |  | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact                           |
|----|--|--------------------------------|--|------------------------------|-------------------------------------|
| g. | Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE.**

|    |  |                          |                          |                                     |                                     |
|----|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a. | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. | Does the project have impacts that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. | Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

## Appendix H NOAA Concurrence Letter

---



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Southwest Region  
501 West Ocean Boulevard, Suite 4200  
Long Beach, California 90802-4213

November 12, 2008

In response refer to:  
2008/07393

James B. Richards  
Deputy Director Environmental Planning and Engineering  
Office of Natural Sciences and Permits  
California Department of Transportation  
111 Grand Avenue  
Oakland, California 94623-0660

Dear Mr. Richards:

Thank you for your October 9, 2008, letter requesting initiation of consultation with NOAA's National Marine Fisheries Service (NMFS) pursuant to section 7 of the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*), and the Essential Fish Habitat (EFH) provisions of the Magnuson Stevens Fishery Conservation and Management Act (MSFCMA). The California Department of Transportation's (Caltrans) request for informal consultation was received on October 10, 2008. Additional information was requested for the project by NMFS on October 17, 2008; that information was received from Caltrans on October 21 and November 3, 2008. This response also serves as consultation under the authority of and in accordance with the provisions of the Fish and Wildlife Coordination Act of 1934 (FWCA), as amended. These consultations pertain to Caltrans' proposed Interstate 80 (I-80) Eastbound Cordelia Truck Scales Project (EA 0A5350), located at the I-80/State Route (SR) 12 East interchange over Suisun Creek, in Cordelia, Solano County, California.

Caltrans, in conjunction with the Federal Highway Administration, and the Solano County Transportation Authority (SCTA), proposes to construct a new truck scale facility on I-80 in the eastbound direction at Cordelia, Solano County. The project includes construction of a four-lane, single-span, precast bridge over Suisun Creek. The bridge will be lowered in place onto new abutments. The abutments will be constructed above the ordinary high water mark (OHWM), and supported on 12 piles each (24 piles total). The piles will either be 14" square precast concrete piles, or 24" cast-in-drill-hole (CIDH) piles. Installation of the piles will be done with an impact hammer, and depending on the type of pile used, pile driving will require from 6 (for precast) to 24 (for CIDH) days. Caltrans and the SCTA anticipate construction to begin in June 2012.

### **Endangered Species Act**

Suisun Creek flows perpendicular to I-80. It is a tributary to Suisun Slough, and eventually drains



into the Suisun Bay. Although the creek has been highly disturbed and channelized, it does support a population of Federally-listed threatened Central California Coast (CCC) steelhead (*Oncorhynchus mykiss*), and provides a migratory corridor for the species. Suisun Creek does not contain designated critical habitat for the species. The creek also supports Central Valley fall/late fall-run Chinook salmon (*O. tshawytscha*), which is a species of concern and not Federally-listed under the ESA. However, they are managed under the MSFCMA, and will be discussed in the EFH section of this letter.

Caltrans has determined that the proposed action is not likely to adversely affect CCC steelhead or its habitat. During the installation of the bridge, disturbance of the creek bank may increase sedimentation rates and turbidity. However, due to the timing of construction (June 15<sup>th</sup> – October 15<sup>th</sup>) and location of the work area, turbidity and sedimentation will be minimal as no work will occur in flowing water and all work will be conducted from the creek bank, above the OHWM. The banks will be revegetated where necessary and stabilized prior to the rainy season.

Pile driving for the bridge abutments may result in temporary elevations of underwater sound, which may affect listed fish through exposure to high underwater sound levels. For this project, Caltrans proposes to use an impact hammer to install the piles. However, all piles will be installed along the dry creek bank, none will be driven in water. Thus, anticipated underwater sound pressure levels during pile driving by this project are not expected to rise to levels which would adversely affect anadromous salmonids.

NMFS considers the possibility of adverse effects to listed steelhead during project implementation to be insignificant because: (1) project activities will occur during low flow conditions between June 15<sup>th</sup> and October 15<sup>th</sup>; (2) no work will be conducted within the creek bed or in flowing water; (3) the installation of piles is expected to temporarily produce elevations of underwater sound levels, but not to reach levels that would cause injuries to fish; and (4) additional BMPs will be implemented to minimize disturbances and to preclude potential adverse effects to the aquatic environment and associated salmonid habitat (*e.g.*, installation of erosion control devices).

Based on the best available scientific and commercial information, NMFS concurs with Caltrans' determination that the proposed project is not likely to adversely affect CCC steelhead. This concludes ESA consultation in accordance with 50 CFR 402.13(a) for the proposed Interstate 80 (I-80) Eastbound Cordelia Truck Scales Project (EA 0A5350), located at Suisun Creek, Solano County, California. However, further consultation may be required if: (1) new information becomes available indicating that listed species or habitat may be affected by the project in a manner or to an extent not previously considered; (2) current project plans change in a manner that causes an effect to listed species or critical habitat in a manner not previously considered; or (3) a new species is listed or critical habitat designated that may be affected by the action.

### **Magnuson-Stevens Fishery Conservation and Management Act**

As discussed in the above ESA section, Suisun Creek is designated EFH for Central Valley fall/late fall-run Chinook salmon. Although no in-water construction will take place, there may be increased sedimentation and turbidity resulting from construction on the bank. In addition,

Caltrans may have to remove riparian vegetation for access to the construction area during construction. Caltrans has stated that they will implement BMPs to reduce erosion, and replant any areas where vegetation was removed with native vegetation. While these impacts are considered minor and temporary, NMFS has made the determination that the proposed action would adversely affect EFH for this species. However, the proposed action contains adequate measures to avoid, minimize, mitigate, or otherwise offset any adverse effects to EFH. Therefore, NMFS has no additional EFH Conservation Recommendations to provide.

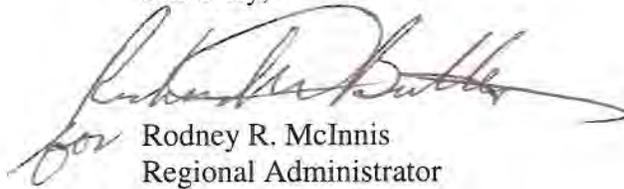
### **Fish and Wildlife Coordination Act**

The purpose of the FWCA is to ensure that wildlife conservation receives equal consideration, and is coordinated with other aspects of water resources development [16 U.S.C. 661]. The FWCA establishes a consultation requirement for Federal departments and agencies that undertake any action that proposes to modify any stream or other body of water for any purpose, including navigation and drainage [16 U.S.C 662(a)]. Consistent with this consultation requirement, NMFS provides recommendations and comments to Federal action agencies for the purpose of conserving fish and wildlife resources. The FWCA allows the opportunity to offer recommendations for the conservation of species and habitats beyond those currently managed under the ESA.

Pursuant to FWCA, NMFS has no comments to provide.

Please contact Ms. Jacqueline Meyer at (707) 575-6057, or via e-mail at [jacqueline.pearson-meyer@noaa.gov](mailto:jacqueline.pearson-meyer@noaa.gov) should you have any questions concerning this consultation.

Sincerely,



for Rodney R. McInnis  
Regional Administrator

cc: Russ Strach, NMFS, Sacramento  
Korie Schaeffer, NMFS, Santa Rosa  
Jeffrey Jensen, Caltrans District 4 Oakland  
Ahmad Hashemi, Caltrans District 4 Oakland  
Melissa Escaron, California Department of Fish and Game  
Copy to file: ARN: 151422-SWR-2008-SR00418

# Appendix I Biological Opinion

---



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office  
2800 Cottage Way, Room W-2605  
Sacramento, California 95825-1846



In Reply Refer To:  
81420-2008-F-1929-3

SEP 18 2009

Mr. James Richards  
California Department Transportation  
111 Grand Avenue  
P.O. Box 23660  
Oakland, California 94623-0660

Subject: Biological Opinion for the Proposed Interstate 80 Eastbound Cordelia Truck Scales Relocation Project, Solano County, California (Caltrans EA 0A5350) on the Threatened Valley Elderberry Longhorn Beetle and the Threatened California Red-legged Frog

Dear Mr. Richards:

This is in response to your July 30, 2008, request for formal consultation with the U.S. Fish and Wildlife Service (Service) on the proposed Interstate 80 Eastbound Cordelia Truck Scales Relocation Project in Solano County, California. Your request was received in our Sacramento field office on July 31, 2008, and included the request for formal consultation on the threatened valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*) and the threatened California red-legged frog (*Rana aurora draytonii*). A revised biological assessment for the project was received on October 27, 2008. Formal consultation on the valley elderberry longhorn beetle was removed on May 30, 2009, but reinitiated on July 15, 2009 (as detailed in the *Consultation History* section). This document represents the Service's biological opinion on the effects of the proposed action on these listed species. This document is issued under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. § 1531 *et seq.*)(Act).

This biological opinion is based on: (1) the October 2008 Biological Assessment; (2) additional project information provided by ICF Jones & Stokes on March 18, 2009; April 21, 2009, and June 1, 2009; (3) the March 30, 2009, mitigation and monitoring plan for the proposed 3.0-acre compensation site; (4) the July 15, 2009, California Department of Transportation's (Caltrans) response to the July 2, 2009, draft biological opinion and request for reinitiation of formal consultation for the valley elderberry longhorn beetle; (5) additional effects to the valley elderberry longhorn beetle provided by Caltrans on July 16, 2009; (6) miscellaneous correspondence and electronic mail concerning the proposed action between the Service and



Caltrans and their consultant between July 2008 and July 2009; and (7) other information available to the Service.

### Consultation History

- July 31, 2008      The Service received a biological assessment and a letter from Caltrans requesting formal consultation on the valley elderberry longhorn beetle and the California red-legged frog. The Caltrans letter was dated July 30, 2008.
- October 27, 2008      The Service received a revised biological assessment from Caltrans' consultant, ICF Jones & Stokes.
- December 5, 2008      The Service issued a request for additional information required for the completion of consultation (Service File #: 81420-2008-F-1929-1).
- December 12, 2008      The Service visited the proposed project site with Caltrans and ICF Jones & Stokes.
- February 9, 2009      The Service received the Draft Environmental Impact Report/Environmental Assessment for the proposed project.
- March 18, 2009      The Service received a response to the December 2008 information request from ICF Jones & Stokes via an electronic mail (email) message. The response letter was dated March 18, 2009. The letter included the acceptance of a list of additional conservation measures recommended by the Service in our December 5, 2008, request for additional information.
- April 20, 2009      The Service received a copy of the *Interstate 80 HOV Lanes/Eastbound Cordelia Truck Scales Relocation Project Mitigation and Monitoring Plan* attached to an email message from a consultant to the Solano Transportation Authority (STA). The restoration project was intended to offset the project's effects on the California red-legged frog. The plan also includes the planting of 107 elderberry shrubs (*Sambucus* species). The document was prepared by H.T. Harvey & Associates and was dated March 30, 2009.

April 21, 2009 The Service received an electronic mail message from ICF Jones & Stokes which included further clarification of the area of effects to California red-legged frog habitat as shown in the following table.

|  | Permanent<br>(acres) | To be restored<br>(acres) | Total<br>(acres) |
|--|----------------------|---------------------------|------------------|
| Riparian previously covered by Interstate 80 biological opinion. | 0.02                 | 0.11                      | <b>0.13</b>      |
| Riparian   | 0.71                 | 1.00                      | <b>1.71</b>      |
| Ruderal  | 0.31                 | 1.28                      | <b>1.59</b>      |
| <b>Total</b>   | <b>1.04</b>          | <b>2.39</b>               | <b>3.43</b>      |

May 26, 2009 The Service was informed via an email message that a jack and bore operation to install a Solano Irrigation District water pipeline under Suisun Creek was being added to the project description.

May 30, 2009 The Service received confirmation from Caltrans' consultant, ICF Jones & Stokes, that the valley elderberry longhorn beetle should be removed from the consultation because the beetles and the associated elderberry shrubs in the action area were covered under incidental take for the overlapping Interstate 80 HOV Lane Project (Service File 1-1-07-F-0146). ICF Jones & Stokes stated that they would pursue an amendment to the Interstate 580 HOV Project with Caltrans and STA. The amendment would incorporate the changes regarding the contingency plans should they be unable to transplant the five elderberry shrubs in the shared action areas.

June 1, 2009 The Service received a project description for the proposed jack and bore activity under Suisun Creek via an email from ICF Jones & Stokes. The message stated that reconnaissance surveys were performed for the additional action area. The closest elderberry shrub was approximately 70 feet away from the entry and exit work areas for the jack and bore and would be avoided by the activity. The entry and exit locations are also located within in an area actively managed for orchard and row crop agriculture and therefore activity in these locations is not likely to adversely affect the California red-legged frog.

June 4, 2009 The Service received an email from ICF Jones & Stokes stating that the entry and exit work area for the jack and bore would add 0.5 acres to the overall action area and the activity would occur between June 1 and October 1 in 2010 or 2011.

July 2, 2009 The Service issued a draft biological opinion (Service File 81420-2008-F-1929-2) for the California red-legged frog.

July 15, 2009

The Service received a letter head response from Caltrans regarding their review of the July 2, 2009, draft biological opinion. The letter included requested edits along with a request to reinitiate formal consultation for the valley elderberry longhorn beetle. The request to add the listed beetle resulted from the realization that a fifth elderberry shrub in the shared action area with the Interstate 80 HOV Lane Project had not been included in the consultation for the neighboring project (unlike the other four elderberry shrubs). This fifth shrub would be pruned or removed as a result of the actions associated with the Interstate 80 Eastbound Cordelia Truck Scales Relocation Project. If the shrub needs to be removed, it will be transplanted to the proposed 3.0-acre Suisun Creek restoration site on the Solano Community College Campus where the effects to the listed beetle have been offset by the proposed planting of 107 elderberry shrubs.

July 16, 2009

The Service received an email from Caltrans stating that they had identified three additional elderberry shrubs that may be indirectly affected by the proposed project. The three shrubs are within 17 to 34 feet of the proposed construction at the top of the bank on the east side of Suisun Creek and south of the truck scales construction area. Biologists were unable to assess the shrubs for valley elderberry beetle exit holes due to heavy poison oak (*Toxicodendron diversilobum*) growth. Caltrans identified dust accumulation, removal of associated woodland species, and root damage as potential indirect effects to the three shrubs and elderberry beetles that may be found on the shrubs. Caltrans proposed construction buffer and dust control measures to minimize the effects to the listed beetle.

## **BIOLOGICAL OPINION**

### **Description of the Proposed Action**

Caltrans proposes to relocate and reconstruct the Cordelia truck scales off of eastbound Interstate 80 in Solano County, California. The new facility would be located south of Interstate 80 between the existing truck scale facility and the Interstate 80/eastbound State Route 12 interchange. The approximately 2 mile long project includes removal of the existing truck scales along with construction of the new facility and the associated on and off ramps. The proposed project is intended to address the need for increased capacity to accommodate anticipated growth in truck traffic in the corridor by 2040, to provide traffic congestion relief along this segment of I-80, improve safety by reducing truck/auto weaving and queuing, and improve the reliability of the system to enforce truck weight and safety requirements. The project is also intended to address overall velocity, throughput, reliability, congestion, and safety in the eastbound Interstate 80 traffic corridor.

*Construction Schedule and Funding*

Construction is expected to begin May 31, 2011 and be completed by September 30, 2013.

Caltrans expects the construction to be phased generally as follows:

1. Utility relocations.
2. Construct new weigh station and inspection facility, ramp connection from existing facility to new facility (including bridge across Suisun Creek), and on ramps from the new facility to Interstate 80 and the new Interstate 80/eastbound State Route 12 connector. Any work in the Suisun Creek (vegetation cutting) would occur between June 1 and October 15 to avoid periods when Central Valley fall/late fall-run Chinook salmon (*Oncorhynchus tshawytscha*) and central California coast steelhead (*Oncorhynchus mykiss*) may be present.
3. Construct and open a new connector to eastbound State Route 12, then complete paving of a new on-ramp to eastbound Interstate 80 from the inspection facility.
4. Open new facility, using temporary off-ramp east of existing facility.
5. Complete final off-ramp configuration and remove temporary off-ramp east of existing truck scales.
6. Demolish existing facility.

*Project Components*

1. Truck Scales  
The eastbound Cordelia Truck Scales facility would be reconstructed approximately 2,500 feet east of its present location. The new facility would be a Class B (defined as an independent command facility of the California Highway Patrol located along a major highway route) Commercial Vehicle Enforcement Facility, which would have the capacity to inspect all eastbound Interstate 80 trucks passing the facility 24 hours a day, 7 days a week. The facility would contain up to four sets of scales to accommodate two lines of empty and loaded trucks. The new facility would contain four inspection bays, parking for up to 22 semi-truck trailer combinations, 49 automobile parking spaces, and a roadway along the outer edge of an oval to allow weighed trucks to be driven around into the inspection bay or to be reweighed. A single-story operations building would be constructed to facilitate the vehicle inspection and weighing process.

Construction would consist of grading to a maximum of 4 feet in depth, compacting, paving, and striping. Staging areas would be located within the acquired right-of-way and are included in the described action area.

2. Associated Ramps

Associated ramps would include an off-ramp providing access to the truck scale facility from eastbound Interstate 80 and on-ramps providing access to eastbound Interstate 80 and eastbound State Route 12.

The off-ramp to the new truck scale facility would use the existing off-ramp location and geometry, which consists of a dedicated off-ramp and a shared through-exit lane. The new off-ramp would continue as a two-lane facility through the existing truck scale site and would widen to four lanes immediately west of Suisun Creek. The new off-ramp would cross over Suisun Creek on a new bridge before entering the new truck scale facility. Truck traffic would be sorted along the approach roadway into the appropriate lane by means of weigh-in-motion scales and signal bridges.

Trucks leaving the facility would use a new two-lane eastbound roadway that splits approximately 1,300 feet east of the facility with one lane merging onto eastbound Interstate 80 and the other lane connecting to the eastbound Interstate 80-to-eastbound State Route 12 connector.

Construction would consist of grading to a maximum of 4 feet in depth, compacting, paving, and striping. Staging areas would be located within the acquired right-of-way.

3. Interstate 80/Eastbound State Route 12 Connector

The eastbound Interstate 80 connector to eastbound State Route 12 would be reconstructed as a two-lane ramp crossing over (braided with) the truck scale on-ramp to eastbound Interstate 80. The connector bridge and associated retaining wall would be constructed to an ultimate three-lane width to facilitate future planned improvements, although the exit from Interstate 80 proposed for this project would consist of a two-lane connection (one dedicated eastbound State Route 12 lane and a shared through-exit lane). The new dedicated lane on Interstate 80 would begin approximately 2,500 feet west of the exit point to the connector. The connector would cross Suisun Creek on a bridge that has been widened as part of a previous project (Interstate 80 HOV Lanes [Service File 1-1-07-F-0146]). The two-lane connector would continue east becoming eastbound State Route 12, with the truck scale on-ramp joining as an auxiliary lane that would end at the eastbound State Route 12/Chadbourne Road interchange off-ramp.

4. Bridge over Suisun Creek

A four-lane, precast, single-span bridge would be constructed to carry truck traffic on the off-ramp over Suisun Creek. The bridge would be approximately 100 feet long and 56 feet wide.

Concrete bridge abutments for the new bridge would be located above the ordinary high water mark. Excavations for the abutments would extend approximately 8 feet below the surface. The precast bridge would be positioned using a crane. No construction work would take place within the creek. Construction equipment would access the bridge site from Interstate 80 and would use the highway bridge to cross the creek.

5. Relocation of Utilities

Sewer, communication, and electrical services for the truck scales would be provided by underground utilities. The underground lines would connect to existing utilities to the west (in the vicinity of Scandia) and would follow the road shoulder, remaining entirely within the existing Caltrans right-of-way. It is expected that excavation for these utilities would be approximately 8 feet deep and would parallel existing underground utilities. The utilities would cross both Suisun and Dan Wilson Creeks attached to the Interstate 80 bridges.

Some adjustment to overhead power lines would be necessary. To facilitate the realignment of the overhead power line, it would be necessary to remove some utility poles and towers and relocate them. It is expected that five new utility poles would be located along the south and west sides of the proposed truck scales facility, and that two poles would need to be removed in that area. In the vicinity of the Interstate 80/eastbound State Route 12 interchange, one pole and two towers would be removed and relocated.

Bore-and-jack technology would be used to relocate an 18-inch diameter Solano Irrigation District (SID) pipeline beneath Suisun Creek. The bore and jack would be constructed approximately 50 feet south of the study area. The boring and receiving pits would be set in row crops approximately 30 feet east of riparian woodland on the east side of Suisun Creek and set in an orchard approximately 50 feet west of riparian woodland on the west side of the creek. Construction of the jack and bore would take approximately 4 weeks and would occur between June 1 and October 1 in 2010 or 2011. The micro-tunneling process may use a mixture of bentonite (inert clay) and petroleum as a lubricant for the drilling mechanism.

Drilling near the ground surface or close to the bed of a surface water body introduces the potential for an unplanned "frac-out," in which the pressure of the bentonite or other drilling lubricant generates a surface rupture, causing a release of bentonite to the ground surface or in Suisun Creek. Although bentonite is not toxic, it can smother habitat and increase turbidity and suspended sediments in Suisun Creek.

For bore-and-jack tunneling activities that use drilling lubricants, Caltrans or its contractor will prepare and implement a frac-out contingency plan that is intended to minimize the potential for a frac-out associated with tunneling activities; provide for the timely detection of frac-outs; and ensure an organized, timely, and "minimum-impact"

response in the event of a frac-out and release of drilling lubricant (i.e., bentonite). The contingency plan will require, at a minimum, the following measures.

- a. A full-time monitor will attend all drilling to look for observable frac-out conditions or lowered pressure readings on drilling equipment.
- b. If a frac-out is identified, all work will stop, including the recycling of drilling lubricant.
- c. In the event of a frac-out into water, the pressure of water above the tunnel will keep excess mud from escaping through the fracture. The location and extent of the frac-out will be determined, and the frac-out will be monitored for 4 hours to determine whether the drilling lubricant congeals (bentonite will usually harden, effectively sealing the frac-out location).
- d. If the drilling lubricant congeals, no other actions will be taken that would potentially suspend sediments in the water column.
- e. Surface releases of bentonite will be allowed to harden and then will be removed.
- f. The contingency plan will identify additional measures to be taken to contain or remove the drilling lubricant if it does not congeal.

#### 6. Removal of Existing Truck Scales

Once construction of the new truck scale facility is complete and the new facility is operational, the existing facility would be removed. However, the pavement associated with the existing facility will remain and be retained as a contingency for several possible uses, such as Caltrans maintenance operations or additional inspection holding areas.

#### *Construction Access and Staging*

All access to the construction area in the vicinity of Suisun Creek will be from Interstate 80 and within the described action area. Staging areas will be selected prior to construction start-up, located within the identified project footprint and in areas with no sensitive biological resources.

#### *Off-Site Habitat Restoration*

Caltrans has proposed restoration of 3.0 acres of Suisun Creek riparian habitat approximately 500 feet upstream of the Interstate 80 crossing of the creek to offset the project's adverse effects on the valley elderberry longhorn beetle and California red-legged frog and to provide replacement plantings for lost riparian vegetation (H.T. Harvey & Associates 2009). The restoration site is immediately upstream of a proposed 1.0 acre restoration site for compensation associated with STA's proposed North Connector Project (Service File 81420-2009-F-0308). The restoration

would occur in a ruderal, former agricultural field immediately adjacent to the Suisun Creek riparian corridor on Solano Community College property. The proposed restoration site is within the historical flood plain of Suisun Creek and is currently fallow yet routinely disked for fire and weed control.

The proposed restoration plan is a northward expansion of the 1.0-acre restoration plan proposed by STA for their North Connector Project. Caltrans will entrust and fund STA to implement and monitor the 3.0-acre restoration plan in conjunction with and as an extension of STA's efforts on the contiguous 1.0-acre restoration site. STA's consultant, H.T. Harvey & Associates drafted the plans for both sites and is the likely contractor to oversee the restoration and monitoring.

The restoration includes planting 767 trees and shrubs, including coast live oak (*Quercus agrifolia*), valley oak (*Q. lobata*), California buckeye (*Aesculus californica*), California bay (*Umbellularia californica*), blue elderberry (*Sambucus Mexicana*), coyote bush (*Baccharis pilularis*), coffeeberry (*Rhamnus californica*), California rose (*Rosa californica*), and California blackberry (*Rubus ursinus*). The plan includes the planting of 107 elderberries, not including possible transplantation of one shrub within in the action area.

STA has already collected plant material for the 1.0 acre site for its North Connector Project and plans to begin restoration of that area between October 2009 and February 2010. Collection and propagation of plant material for the 3.0-acre site would occur in Fall 2009 and planting would begin in Fall 2010 (which is prior to the scheduled start of the truck scales construction). According to the restoration plan, long-term establishment and reproduction of the planted vegetation would be expected within 10 years of planting and mature growth would be expected after 25 years (H.T. Harvey & Associates 2009).

The following is a summary of the proposed restoration plan. To prepare the site for planting the soil will be disked and amended if needed. Native vegetation within the adjacent riparian corridor and persisting in the restoration area will be identified for avoidance. Vegetation will be planted to provide a continuous, multi-layered, native riparian woodland community that includes species found in the Suisun Creek riparian corridor. The source material for the plantings will be collected along the Suisun Creek corridor and propagated at an experienced nursery (likely Cornflower Farms in Elk Grove, California). Additional plant material will be collected from other Solano County riparian corridors if needed. Other than the container plantings, areas disturbed during restoration will be hydroseeded with a native seed mix. The plantings will be supported with an irrigation system and mulch, and protected with caging. Woody debris from the truck scales action area will be scattered throughout the restoration area. Fencing and signage will be used to identify and protect the site.

The plan includes a ten-year monitoring plan with a more intense irrigation, management, and monitoring effort for the initial three years following planting. Monitoring during the first three years will include three site visits per month during the growing season (March-October) and one visit a month from November to February. All dead plantings will be replaced during the first

two years and replacement in the third year of monitoring will be based on achieving 80% survival. The monitoring period will be extended if 80% survival is not met by the third year following the initial planting. The success of the restoration site will be reassessed in years five, seven, and ten using the criteria outlined in the March 2009 restoration plan (H.T. Harvey & Associates 2009). Additional monitoring will occur if the success criteria have not been met after the tenth year. A monitoring report will be submitted by December 31<sup>st</sup> of each monitoring year.

A conservation easement/deed restriction will be established for the restoration site. Solano Community College will hold the easement/deed restriction and continue the management of the restoration site.

#### *Proposed Avoidance and Minimization Measures*

According to the October 2008 Biological Assessment, the March 18, 2009 letter from ICF Jones & Stokes, and the Caltrans' June 16, 2009, email, Caltrans propose to avoid, minimize, and compensate for effects to listed species by implementing the following measures:

##### Valley Elderberry Longhorn Beetle

1. If feasible, Caltrans will transplant the one directly affected elderberry shrub to the proposed 3.0-acre Suisun Creek riparian corridor restoration site on Solano Community College property according to Service-approved procedures outlined in the *Valley Elderberry Longhorn Beetle Guidelines* (Service 1999) prior to the start of construction. Transplanting will be done during the dormant period for elderberry shrubs (November through the first 2 weeks of February). If Caltrans is unable to remove the shrub due to access and/or bank stability concerns the shrub will be left in place and pruned as needed prior to construction.
2. Caltrans will plant a minimum of 107 elderberry shrubs at the proposed 3.0-acre Suisun Creek restoration site on the Solano Community College Campus to offset the effects to the valley elderberry longhorn beetle due to direct effects associated with transplantation or pruning of an elderberry shrub within the action area and the indirect effects associated with the habitat fragmentation of Suisun Creek.
3. Establish a Buffer Area Around All Elderberry Shrubs. Before any ground-disturbing activity, Caltrans will ensure that a minimum 4-foot-tall temporary, plastic mesh-type construction fence (Tensor Polygrid or equivalent) will be installed 20 feet outside the driplines of elderberry shrubs where feasible. This fencing is intended to prevent encroachment by construction vehicles and personnel, and to prevent inadvertent trimming of elderberry shrubs and associated riparian vegetation. The exact location of the fencing will be determined by a Service-approved biologist, with the goal of protecting habitat for the valley elderberry longhorn beetle.

The fencing will be strung tightly on posts set at a maximum interval of 10 feet. The fencing will be installed in a way that prevents equipment from enlarging the work area beyond the delineated work area. The fencing will be checked and maintained until all construction is completed. This buffer zone will be marked by a sign stating, "This is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." No construction activity, including grading, will be allowed until this condition is satisfied. No grading, clearing, storage of equipment or machinery, or other disturbance or activity may occur until the Service-approved biologist has inspected and approved all temporary construction fencing. The fencing and a note reflecting this condition will be shown on the construction drawings.

4. Dust Control. Caltrans will ensure that dust control measures are implemented for all ground-disturbing activities in the project area. These measures may include application of water to graded and disturbed areas that are unvegetated. To avoid attracting Argentine ants (*Linepithema humile*), at no time will water be sprayed within the driplines of elderberry shrubs.

#### California Red-Legged Frog

1. Caltrans proposes to offset the loss of approximately 3.43 acres of California red-legged frog habitat with the restoration of 3.0 acres of riparian habitat along the Suisun Creek on Solano Community College property. The proposed habitat restoration site is located approximately 500 feet upstream of the westbound Interstate 80 crossing of Suisun Creek. The proposed 3.0-acre site is currently occupied by a fallow field adjacent to the narrow riparian corridor associated with Suisun Creek. The restoration will be incorporated into another proposed restoration effort of 1.0 acres of riparian habitat for the North Connector Project proposed by STA. The combined restoration will be planned and managed by STA during development of their North Connector Project. The restoration will include a 10-year monitoring plan.
2. A Service-approved biologist(s) will be designated for the activities that will affect California red-legged frog. The qualified biologist(s) will be on-site during specific construction activities that may reasonably result in the take of the California red-legged frog. The qualifications of the biologist(s) will be presented to the Service for review and written approval prior to ground-breaking at the project site. The biologist(s) will coordinate through the Resident Engineer, to stop any work that may result in take of the California red-legged frog. If work is stopped, the biologist(s) will notify the Service by telephone and electronic mail within one (1) working day. The Service contact will be Chris Nagano, Division Chief, Endangered Species Program at the Sacramento Field Office at telephone (916) 414-6600.

3. The Service-approved biologist will monitor all ground-disturbing construction activity near potential California red-legged frog habitat. After ground-disturbing activities are complete, the Service-approved biologist will train an individual to act as the on-site construction monitor. The on-site monitor will have attended the environmental awareness training. Both the Service-approved biologist and construction monitor will have the authority to stop or redirect project activities to ensure protection of resources and compliance with all environmental permits and conditions of the project with communication through the Resident Engineer. If the Service-approved biologist or construction monitor has requested that work stop because of take of any of the listed species, the Service and the California Department of Fish and Game will be notified within one working day via email or telephone. The Service-approved biologist and construction monitor will complete a daily log summarizing activities and environmental compliance.
4. The Resident Engineer will halt work and immediately contact the Service-approved project biologist(s) and the Service in the event that a California red-legged frog gains access to a construction zone. The Resident Engineer will suspend construction activities in the immediate construction zone that could reasonably result in a take of a California red-legged frog until the animal leaves the site voluntarily or is removed by the biologist(s) to a release site using Service-approved handling techniques.
5. Any person capturing or handling a California red-legged frog will be a qualified biologist approved by the Service. Candidates will have completed at least four years of university training in wildlife biology or a related science, or have demonstrated field experience in the identification and life history of the California red-legged frogs. Resumes of all biologists proposed to capture or handle California red-legged frogs will be submitted to the Service for approval no later than 30 days before the start of construction.
6. If necessary, nets or bare hands will be used to capture California red-legged frogs. The Service-approved biologist will not use soaps, oils, creams, lotions, repellents, or solvents of any sort on their hands within two hours before and during periods in which they are capturing and relocating California red-legged frogs. To avoid transferring disease or pathogens between aquatic habitats during the course of surveys or handling of California red-legged frogs, the Service-approved biologist will follow the Declining Amphibian Populations Task Force's Code of Practice. The Service-approved biologist will limit the duration of handling and captivity of California red-legged frog. While in captivity, California red-legged frogs will be kept in a cool, moist, aerated environment, such as a bucket containing a damp sponge. Containers used for holding or transporting adults of this species will not contain any standing water.

7. All construction areas will be flagged, and all activity will be confined to these areas. For seasonal avoidance of the California red-legged frog, construction will not occur in the 3.43 acres of identified habitat in the action area from November 1 through April 30 (California red-legged frog breeding season) to the extent practicable. If any work remains to be completed after November 1, exclusion fencing will be placed in those areas where construction needs to be completed. Exclusionary fencing will consist of taut silt fabric, 24 inches in height, stacked at 10-foot intervals, with the bottom buried 6 inches below grade. Exclusion fencing will be maintained so that it is intact during rain events and 24 hours after any rain event.
8. Because dusk and dawn are often the times when California red-legged frogs are most actively foraging and dispersing, all construction activities will cease 30 minutes before sunset and will not begin before 30 minutes prior to sunrise.
9. A representative will be appointed by Caltrans who will be the contact source for any employee or contractor who might inadvertently kill or injure a California red-legged frog, or who finds a dead, injured, or entrapped individual. The representative will be identified during the employee education program. The representative's name and telephone number will be provided to the Service before the initiation of ground-disturbing activities.
10. Tightly woven fiber netting or similar material will be used for erosion control or other purposes at the project site to ensure that California red-legged frogs are not trapped. This limitation will be communicated to the contractor through use of special provisions included in the bid solicitation package. Coconut coir matting will be considered an acceptable erosion control material. No plastic monofilament matting will be used for erosion control.
11. A litter control program will be instituted at the entire project site. All workers will ensure that food scraps, paper wrappers, food containers, cans, bottles, and other trash from the project area are deposited in covered or closed trash containers. The trash containers will be removed from the project area at the end of each working day.
12. After construction is complete, temporarily disturbed areas within the project area will be restored to pre-project conditions or enhanced to compensate for the removal of riparian vegetation.
13. Caltrans will include special provisions that include the avoidance and minimization efforts described for bid information when applicable.
14. Environmental Awareness Training. Caltrans will retain a Service-approved biologist to develop and conduct environmental awareness training for construction employees on the importance of on-site biological resources, including sensitive natural communities;

native trees to be retained; special-status wildlife habitats, and the valley elderberry longhorn beetle and California red-legged frog. The environmental awareness program will be provided to all construction personnel to brief them on the life history of special-status species in or adjacent to the project area, the need to avoid adverse affects to sensitive biological resources, any terms and conditions required by state and federal agencies, and the penalties for not complying with biological constraints. If new construction personnel are added to the project, the contractor's superintendent will ensure that the personnel receive the mandatory training before starting work. An environmental awareness handout will be provided to each person that describes and illustrates sensitive resources to avoid during project construction and identifies all relevant permit conditions.

15. Project employees will be provided with written guidance governing vehicle use, speed limits on unpaved roads, fire prevention, and other hazards.
16. To avoid injury or death of a California red-legged frog, no firearms will be allowed in the action area except for those carried by authorized security personnel, or local, State, or Federal law enforcement officials.
17. To prevent harassment, injury or mortality of a California red-legged frog or destruction of their refuge, project personnel will not be permitted to have dogs or cats in the action area.
18. For work that could reasonably result in a take of a California red-legged frog, a Service-approved biologist(s) will be on-site to monitor the initial ground disturbance activities. The biologist(s) will perform a clearance survey immediately prior to the initial ground disturbance. A Service-approved biologist will carefully search all obvious potential hiding spots for California red-legged frog, such as large downed woody debris, the perimeter of wetland habitats, and the Suisun Creek riparian. The biologist(s) will investigate all potential California red-legged frog cover sites. This includes thorough investigation of mammal burrows. The entrances will be collapsed following investigation. Any California red-legged frog found will be captured and held for the minimum amount of time necessary to release them in suitable habitat outside the study area. Suitable release sites will be identified by a qualified biologist approved by the Service before the start of construction activities. Safety permitting, the Service-approved biologist(s) will investigate areas of disturbed soil for signs of listed species within thirty (30) minutes following the initial disturbance of that given area.
19. When it is necessary to relocate California red-legged frog outside the action area, the listed amphibian will be moved the shortest distance possible by a Service-approved biologist within the Suisun Creek riparian corridor or to a small mammal burrow in adjacent and appropriate habitat.

20. Injured California red-legged frogs will be cared for by a licensed veterinarian or other qualified person such as the on-site biologist; dead individuals must be placed in a sealed plastic bag with the date, time, location of discovery, and the name of the person who found the animal; the carcass should be kept in a freezer; and held in a secure location. The Service and the California Department of Fish and Game will be notified within one (1) working day of the discovery of death or injury to a California red-legged frog that occurs due to project related activities or is observed at the project site. Notification will include the date, time, and location of the incident or of the finding of a dead or injured animal clearly indicated on a USGS 7.5 minute quadrangle and other maps at a finer scale, as requested by the Service, and any other pertinent information. Caltrans has identified the Service contacts as Chris Nagano, Division Chief, Endangered Species Program at the Sacramento Fish and Wildlife Office [(916) 414-6600], and Dan Crum, Resident Agent-in-Charge of the Service's Law Enforcement Division at (916) 414-6660. Caltrans has identified the California Department of Fish and Game contact as Mr. Scott Wilson at telephone (707) 944-5563. Sightings of any listed or sensitive animal species will be reported to the California Natural Diversity Database of the California Department of Fish and Game.
21. Biologists will take precautions to prevent introduction of amphibian diseases to the action area by disinfecting equipment and clothing as directed in the October 2003, California tiger salamander survey protocol titled, *Interim Guidance on Site Assessment and Field Surveys for Determining Presence or a Negative Finding of the California Tiger Salamander* and the recommended equipment decontamination procedures within the Service's *California Red-Legged Frog Survey Guidance*. Caltrans is aware that both items are available at the Service's Sacramento office website (<http://www.fws.gov/sacramento/es/protocol.htm>). Disinfecting equipment and clothing is especially important when biologists are coming to the action area to handle amphibians after working in other aquatic habitats.
22. To minimize temporary disturbances in areas of California red-legged frog habitat, project related vehicle traffic will be restricted to established roads, construction areas, and other designated areas. These areas also should be included in pre-construction surveys and, to the maximum extent practicable, should be established in locations disturbed by previous activities to prevent further adverse effects. Project related vehicles will observe a 20-mile per hour speed limit, except on County roads, and State and Federal highways. Off-road traffic outside of designated action areas for construction phases with potential California red-legged frog habitat will be prohibited.
23. Caltrans describes temporary effects as those activities that are ancillary to permanent construction features and disturb an area for a specific limited period and which can be restored to pre-disturbance-type conditions prior to the beginning of the following year's rainy season (e.g. October 15th). Areas temporarily affected by the project will typically be restored after a single construction season. Where temporary soil disturbance occurs,

Caltrans standard erosion control practices will restore cover prior to winter rains and within a single red-legged frog breeding season.

24. Dust control measures will consist of regular truck watering of constriction access areas and disturbed soil areas with the use of organic soil stabilizers to minimize airborne dust and soil particles generated from graded areas. Regular truck watering will be a requirement of the construction contract. In addition, for disturbed soil areas, an organic tackifier to control dust emissions blowing off of the right-of-way or out of the construction area during construction will be included in the contract special provisions. Watering guidelines for dewatering will be established to avoid any excessive run-off that may flow into contiguous areas. Any material stockpiles will be watered, sprayed with tackifier or covered, to minimize dust production and wind erosion.
25. Use of rodenticides and herbicides in the action area will be used in such a manner to prevent primary or secondary poisoning of a California red-legged frog and the depletion of vegetation on which they depend. All uses of such compounds will observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other appropriate State and Federal regulations, as well as additional project-related restrictions deemed necessary by the Service or the California Department of Fish and Game.
26. Dedicated fueling and refueling practices will be designated as part of the approved Stormwater Pollution Prevention Program (SWPPP). Dedicated fueling areas will be protected from storm water run-on and run-off and will be located at least 50 feet from downslope drainage facilities and water courses. Fueling will be performed on level-grade areas. On site fueling will only be used where it is impractical to send vehicles and equipment off-site for fueling. When fueling must occur on-site, the contractor will designate an area to be used subject to the approval of the Resident Engineer, representing Caltrans. Drip pans or absorbent pads will be used during on-site vehicle and equipment fueling.
27. The potential for adverse effects to water quality will be avoided by implementing temporary and permanent Best Management Practices (BMPs) outlined in section 7-7.01G of the Caltrans' Standard Specifications. Additional water quality protection measures required by other permits such as the California Department of Fish and Game's Lake and Streambed Alteration Agreement and the State Water Resources Control Board's National Pollution Discharge Elimination System Statewide Storm Water Permit will be implemented. Caltrans SWPPP and erosion control BMPs will be used to minimize any wind or water-related erosion. A SWPPP will be developed for the project, as one is required for all projects that have at least 1.0 acre of soil disturbance. The SWPPP complies with the Caltrans Storm Water Management Plan (SWMP). The SWMP includes guidance for Design staff to include provisions in construction contracts

to include measures to protect sensitive areas and to prevent and minimize stormwater and non-stormwater discharges.

The SWPPP is referenced in the Caltrans Construction Site BMPs Manual. This manual is comprehensive and includes many other protective measures and guidance to prevent and minimize pollutant discharges and can be found at the following website location:

<http://www.dot.ca.gov/hq/construc/stormwater/manuals.htm>. Protective measures will be included in the contract, including, at a minimum:

- a. No discharge of pollutants from vehicle and equipment cleaning are allowed into the storm drain or water courses.
  - b. Vehicle and equipment fueling and maintenance operations must be at least 50 feet away from water courses.
  - c. Concrete wastes are collected in washouts and water from curing operations is collected and disposed of and not allowed into water courses.
  - d. Dust control will be implemented, including use of water trucks and tackifiers to control dust in excavation and fill areas, rocking temporary access road entrances and exits, and covering temporary stockpiles when weather conditions require.
  - e. Coir rolls will be installed along or at the base of slopes during construction to capture sediment and temporary organic hydromulching will be applied to all unfinished disturbed and graded areas.
  - f. Restoration of work areas where temporary disturbance has removed the pre-existing vegetation and re-seeding with a native seed mix.
  - g. Protection of graded areas from erosion using a combination of silt fences, fiber rolls along toe of slopes or along edges of designated staging areas, and erosion-control netting (such as jute or coir) as appropriate on sloped areas.
  - h. A Revegetation Plan will be prepared for restoration of temporary work areas. Pavement and base will be removed; topography blended with the surrounding area; and topsoil will be salvaged from the new alignment area to be placed over the restored area, which will then be revegetated with native grassland species.
28. All grindings and asphaltic-concrete waste will be stored within previously disturbed areas absent of habitat and at a minimum of 150 feet from any aquatic habitat, culvert, or drainage feature.

29. Areas outside of the construction zones containing suitable habitat for the California red-legged frog will be delineated with high visibility temporary fencing at least 4 feet in height, flagging, or other barrier to prevent encroachment of construction personnel and equipment onto sensitive areas during construction activities. The fencing will be removed only when all construction equipment is removed from the site. Activities within the action area will be limited to vehicle and equipment operation on existing roads. No project activities will occur outside the delineated project construction area.
30. If requested, before, during, or upon completion of ground breaking and construction activities, Caltrans will allow access by Service personnel to the action area to inspect project effects to California red-legged frogs and their habitat.
31. To prevent inadvertent entrapment of the California red-legged frog during construction, steep-walled holes or trenches more than 2 feet deep will be covered at the close of each working day by plywood or similar materials. Alternatively, an additional 4-foot high vertical barrier, independent of exclusionary fences, may be used to further prevent the inadvertent entrapment of California red-legged frogs. If it is not feasible to cover an excavation or provide an additional 4-foot high vertical barrier, independent of exclusionary fences, one or more escape ramps constructed of earth fill or wooden planks will be installed. Before such holes or trenches are filled, they will be thoroughly inspected for trapped animals. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape, or the Service will be contacted by telephone for guidance. The Service will be notified of the incident by telephone and electronic mail within one (1) working day.
32. The following shall be implemented for staging, storage sites, vehicle parking, and access associated with the project:
  - a. Caltrans will require as part of the construction contract that all contractors comply with the Act in the performance of the work as described in the project description of this biological opinion and conducted within the action area.
  - b. If a staging, storage, access, or vehicle parking area that is in compliance with the Act is not available, the agency with jurisdiction and the contractor would be responsible for compliance with the Act.

### **Analytical Framework for the Jeopardy Analysis**

In accordance with policy and regulation, the jeopardy analysis in this biological opinion relies on four components: (1) the *Status of the Species*, which evaluates the species' range-wide condition, the factors responsible for that condition, and its survival and recovery needs; (2) the *Environmental Baseline*, which evaluates the condition of the species in the action area, the

factors responsible for that condition, and the relationship of the action area to the survival and recovery of the species; (3) the *Effects of the Action*, which determines the direct and indirect effects of the proposed Federal action and the effects of any interrelated or interdependent activities on the species; and (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal Activities in the action area on the species. These four components are presented separately below for the valley elderberry longhorn beetle and California red-legged frog.

In accordance with policy and regulation, the jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the species' current status, taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the species in the wild.

### **Action Area**

The action area is defined in 50 CFR § 402.02, as "all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action." For the proposed action, the action area includes all lands associated with the approximately 56.92 acre project footprint and roads (except for County roads, and State and Federal highways) and other areas accessed by project vehicles.

### **Status of the Species and Environmental Baseline**

#### Valley Elderberry Longhorn Beetle

The beetle was listed as a threatened species under the Act on August 8, 1980; critical habitat for the species was designated under the same Federal Register notice as the listing (45 FR 52803). The *Valley Elderberry Longhorn Beetle Recovery Plan* was completed on June 28, 1984 (Service 1984). Critical habitat is limited to two areas along the American River in the Sacramento metropolitan area. In addition, an area along Putah Creek, Solano County, and the area west of Nimbus Dam along the American River Parkway, Sacramento County, are considered essential habitat, according to the *Valley Elderberry Longhorn Beetle Recovery Plan* (Service 1984). These critical habitat and essential habitat areas within the American River parkway and Putah Creek support large numbers of mature elderberry shrubs with extensive evidence of use by the beetle.

The Five Year Status Review for the beetle was completed on September 2006 (Service 2006). The review stated that the number of sightings of the beetle has increased since the listing and that protection of habitat supporting the beetle has substantially reduced the primary threats to the species. On October 2, 2006, the Service announced its recommendation to remove the beetle from the endangered species list (<http://www.fws.gov/sacramento/ea/newsroom.htm>).

Valley elderberry longhorn beetle is a medium sized (0.8 inch long) beetle that is endemic to the Central Valley of California. The beetle is found only in association with its host plant, elderberry shrubs (*Sambucus* species). Adult beetles are sexually dimorphic with females having a dark metallic green to black elytra with a bright red border and males having predominantly red elytra with four dark oblong spots.

The beetle is dependent on its host plant, elderberry, which is a locally common component of the remaining riparian forests and savannah areas and, to a lesser extent, the mixed chaparral-foothill woodlands of the Central Valley.

Each stage of the beetle's life cycle requires a slightly different part of the elderberry plant to fulfill its life history needs. Adults feed on the foliage and perhaps flowers and are present from March through early June. During this period beetles mate and females lay eggs on living elderberry plants (Barr 1991). The first instar larvae bore to the center of elderberry stems where they develop for one to two years while feeding on pith. Prior to forming their pupae, the elderberry wood boring larvae chew through the bark (Halstead and Oldham 1990) and then plug the holes with wood shavings. The larvae crawl back to their pupal chamber which they pack with frass (digested remains) (Barr 1991). In the pupal chamber, the larvae metamorphose into their pupae and then into adults where upon they emerge between mid-March through June (Barr 1991).

Use of the elderberry shrubs by the beetle is rarely apparent. Frequently, the only exterior evidence of the shrub's use by the beetle is an exit hole created by the larva just prior to the pupal stage. Emergence holes are usually observed in living stems more than one inch in diameter and less than nine feet from the ground (Talley and Holyoak 2001). Observations made of elderberry shrubs along the Cosumnes River, in the Folsom Lake area, and near Blue Ravine in Folsom indicate that the beetle may be present in elderberry shrubs with no evidence of exit holes; the larvae either succumb prior to constructing an exit hole or are not far enough along in the developmental process to construct an exit hole. Larvae appear to be distributed in stems which are one inch or greater in diameter at ground level.

Population densities of the beetle are probably naturally low (Service 1984). It has been suggested, based on the spatial distribution of occupied shrubs (Barr 1991), that the beetle is a poor disperser (Collinge et al. 2001). Low density and limited dispersal capability cause the beetle to be vulnerable to the negative effects of the isolation of small subpopulations due to habitat fragmentation.

At the time of its listing in 1980, the beetle was known from less than ten locations on the American River, Putah Creek and the Merced River in the Central Valley of California (Service 1980). The beetle currently inhabits the Central Valley from southern Shasta County south to Fresno County in the San Joaquin Valley (Barr 1991). As of November 2008, there were 196 records of the beetle (largely based on exit holes) in the Central Valley (CNDDDB 2008). Although records exist for Kern County (CNDDDB 2008), no specimens or observations

of living beetles exist that support the assertion that the species is found there (Talley et al. 2006).

Since the time of listing, the number of sites from which the beetle is known has increased from less than ten to approximately 196 (CNDDDB 2008), primarily due to an increased effort to look for the beetle. It should be noted that the number of records does not indicate the number of known populations. In many cases, there are multiple records from within close proximity to one another within the same watershed or river. For example, at least 24 records are known from within two miles of the American River (CNDDDB 2008).

There is little information regarding range-wide population trends for the beetle. Collinge et al. (2001) provides the only long-term data set for the species. The Collinge team surveyed for beetles at most of the sites that had previously been surveyed by Barr (1991). Both studies observed evidence of the beetle (i.e., recent exit holes) at approximately 20 percent of the sites examined, and 25 percent of the total number of elderberry groups examined at those sites (more than one elderberry group was examined at some sites). Collinge et al. (2001) found that while the proportions of occupancy were similar, the number of sites examined containing elderberry and the density of elderberry at sites had decreased since Barr's study (1991), resulting in fewer occupied sites and groups.

### *Environmental Baseline*

The distribution and abundance of the beetle within Solano County is believed to have been drastically reduced compared to historic conditions. Most of the Fairfield area was converted to agricultural use by the early 1900's and water courses and their associated riparian corridors were extensively modified and channalized. Since the mid 1900's, the towns of Fairfield and Vacaville have experienced an increase in population that has required conversion of lands from agriculture to urban sprawl. This has increased the pressure for flood control to protect property and infrastructure. As a consequence, the riparian vegetation along many stream courses within the county has been extensively reduced or altered. Alteration and loss of riparian habitat and, consequently, elderberry shrubs is still occurring and is expected to continue in the future. For instance, Solano and Napa Counties are projected to have a 53 percent growth in households by 2030 (Caltrans 2006). Much of this growth will occur in the Cities of Vacaville, Suisun, and Fairfield. To accommodate this growth, Caltrans and STA are planning for a considerable expansion of the road infrastructure within the Suisun Marsh Watershed. Many of these proposed road projects are or will cross streams at locations where the beetle or elderberry shrubs are present.

The California Natural Diversity Data Base (CNDDDB) (CNDDDB 2008) report from the search of the surrounding U.S. Geological Survey 7.5-minute quadrangles (Cordelia, Denverton, Elmira, Fairfield North, Fairfield South, and Mt. George) contained six records (from 1991 to 2006) for sign of Valley elderberry longhorn beetle. The Service is aware of at least 12 recorded locations of the beetle within Solano County (CNDDDB 2008; Service 2005a, b). However, no systematic

distribution surveys or abundance estimates for the beetle or its host plant has been conducted. Seven of those beetle locations are within the Suisun Creek Marsh watershed and one of these is within 680 feet of the action area adjacent to the proposed Solano Community College restoration site (CNDDDB 2008; Service 2005a and b; Arnold 2005). The CNDDDB (2008) also includes two additional beetle records within the Suisun Marsh Watershed but outside of the Solano County border. Six of the nine records within the Suisun Marsh watershed are located along Suisun Creek.

The Service is aware of nine locations along water courses within the Suisun Marsh Watershed, including the one location approximately 689 feet upstream of the action area, where the remaining riparian vegetation includes elderberry shrubs (exit holes have been found but presence of the beetle not necessarily confirmed) (Bronny 2006). The presence of elderberry within remaining riparian vegetation suggests that elderberry shrubs historically existed along streams where riparian vegetation now has been removed. Thus, even though the historic distribution of elderberry shrub is not known, it is reasonable to assume that it was common along streams within the Suisun Marsh Watershed. Since elderberry is the only host plant used by the listed beetle, it is further reasonable to assume that the beetle's distribution has been reduced concurrently with the reduction in riparian vegetation.

Suisun Creek and its tributaries are the only drainage within the Suisun Marsh Watershed with an extensive riparian corridor that supports elderberry plants. Sign of the beetle have been found in at least six locations along the creek (CNDDDB 2008; Service 2005 a and b; Caltrans 2006). The creek's continuous riparian vegetation and multiple elderberry locations have been and continue to be important for the conservation of the beetle in west Solano County and the Suisun Marsh Watershed. However, infrastructure and urbanization resulting in a demand for channel modifications and vegetation removal for flood-control and other projects have also affected the beetle's distribution along Suisun Creek.

Formal consultation and issuance of incidental take for the valley elderberry longhorn beetle for this project is consistent with the Service's biological opinions issued for other recently proposed projects occurring along Suisun Creek including:

1. The 1998 biological opinion for a Morrison Lane bridge replacement on Suisun Creek (Service File 1-1-97-F-0127);
2. The 2005 biological opinions on the replacement of the Cordelia Road Suisun Creek Bridge downstream of the action area (Service File 1-1-05-F-0027) and the Suisun Valley Road Bridge Replacement Project upstream of the action area (Service File 1-1-96-F-0156);
3. The Dan Wilson Creek Bridge and Fairfield Corporate Commons Projects located along the eastern bank of Suisun Creek and just north of Interstate 80 in 2006 (Service File 1-1-06-F-0284); and

4. The Interstate 80 High Occupancy Vehicle Lane Project (Service File 1-1-07-F-0146 and 81420-2009-F-0240-R001-2) in 2007 which overlaps the action area for the Interstate 80 Eastbound Cordelia Truck Scales Relocation Project.

To summarize, the Service believes that the beetle has experienced a long-term decline due to widespread alteration and fragmentation of its riparian habitat, and to a lesser extent, its upland habitat, by human activities. However, new observations show that the beetle has a wider distribution than what was known during the time of the listing. Further, creation and protection of conservation areas since the listing has provided long-term protection of the beetle and reduced the rate of habitat loss. However, within western Solano County, the beetle has not benefited from protection of conservation areas and the beetle continues to be threatened by a high rate of development that has resulted in alteration and fragmentation of riparian habitat. Known locations of the beetle within the Suisun Marsh Watershed is approximately 40 miles southwest from critical habitat and populations along the American River in Sacramento County and about nine miles south of known populations in Dry Creek on the Solano County border with Yolo County. Though the CNDDDB does not provide information of absence of listed species, the lack of known connective populations between the Suisun Marsh Watershed observations and other records of this species together with this species limited dispersal ability suggests that the Suisun Marsh Watershed population is isolated from other populations. The likelihood of natural colonization of Suisun Creek if the population was lost would therefore be low.

Because of the presence of host plants along Suisun Creek within the action area, the observations of exit holes in elderberries throughout the riparian corridor immediately north of the action area, and the known distribution, biology, and behavior of the beetle; the Service has determined that the valley elderberry longhorn beetle is reasonably certain to occur within the action area.

#### California Red-Legged Frog

The California red-legged frog was listed as a threatened species on May 23, 1996 (Service 1996). A recovery plan was published for the California red-legged frog on September 12, 2002 (Service 2002). Critical Habitat was designated for this species on April 13, 2006 (Service 2006) and a proposed revision was published on September 16, 2008 (Service 2008).

The California red-legged frog is the largest native frog in the western United States (Wright and Wright 1949), ranging from 1.5 to 5.1 inches in length (Stebbins 2003). The abdomen and hind legs of adults are largely red, while the back is characterized by small black flecks and larger irregular dark blotches with indistinct outlines on a brown, gray, olive, or reddish background color. Dorsal spots usually have light centers (Stebbins 2003), and dorsolateral folds are prominent on the back. Larvae (tadpoles) range from 0.6 to 3.1 inches in length, and the background color of the body is dark brown and yellow with darker spots (Storer 1925).

The historic range of the red-legged frog extended coastally from the vicinity of Elk Creek in Mendocino County, California, and inland from the vicinity of Redding, Shasta County, California, southward to northwestern Baja California, Mexico (Fellers 2005; Jennings and Hayes 1985; Hayes and Krempels 1986). The red-legged frog was historically documented in 46 counties but the taxa now remains in 238 streams or drainages within 23 counties, representing a loss of 70 percent of its former range (Service 2002). Red-legged frogs are still locally abundant within portions of the San Francisco Bay area and the central coast. Within the remaining distribution of the species, only isolated populations have been documented in the Sierra Nevada, northern Coast, and northern Transverse Ranges. The species is believed to be extirpated from the southern Transverse and Peninsular ranges, but is still present in Baja California, Mexico (CDFG 2009).

Because their habitats have been fragmented, many endangered and threatened species, such as the California red-legged frog, exist as metapopulations (Verboom and Apeldom 1990; Verboom et al. 1991). A metapopulation is a collection of spatially discrete subpopulations that are connected by the dispersal movements of the individuals (Levins 1970; Hanski 1991). For metapopulations of listed species, a prerequisite to recovery is determining if unoccupied habitat patches are vacant due to the attributes of the habitat patch (food, cover, and patch area) or due to patch context (distance of the patch to other patches and distance of the patch to other features). Subpopulations on patches with higher quality food and cover are more likely to persist because they can support more individuals. Large populations have less of a chance of extinction due to stochastic events (Gilpin and Soule 1986). Similarly, small patches will support fewer individuals, increasing the rate of extinction. Patches that are near occupied patches are more likely to be recolonized when local extinction occurs and may benefit from emigration of individuals via the "rescue" effect (Hanski 1982; Gotelli 1991; Holt 1993; Fahrig and Merriam 1985). For the metapopulation to persist, the rate of patches being colonized must exceed the rate of patches going extinct (Levins 1970). If some subpopulations go extinct regardless of patch context, recovery actions should be placed on patch attributes. Patches could be managed to increase the availability of food and/or cover. Movements and dispersal corridors likely are critical to California red-legged frog population dynamics, particularly because the animals likely currently persist as metapopulations with disjunct population centers. Movement and dispersal corridors are important for alleviating over-crowding and intraspecific competition, and also they are important for facilitating the recolonization of areas where the animal has been extirpated. Movement between population centers maintains gene flow and reduced genetic isolation.

California red-legged frogs predominately inhabit permanent water sources such as streams, lakes, marshes, natural and manmade ponds, and ephemeral drainages in valley bottoms and foothills up to 4,921 feet in elevation (Jennings and Hayes 1994; Bulger et al. 2003; Stebbins 2003). However, red-legged frogs also have been found in ephemeral creeks and drainages and in ponds that may or may not have riparian vegetation. California red-legged frogs also can be found in disturbed areas such as channelized creeks and drainage ditches in urban and agricultural areas. An adult California red-legged frog recently was observed in a shallow isolated pool on North Slough Creek in the American Canyon area of Napa County (Christine

Gaber/PG&E personal communication with Chris Nagano/Service on October 22, 2008). This frog location was surrounded by vineyard development. Another adult California red-legged frog was observed under debris in an unpaved parking lot in a heavily industrial area of Burlingame (Patrick Kobernus communication with Michelle Havens on October 16, 2008). This Burlingame frog was likely utilizing a nearby drainage ditch. Caltrans also has discovered California red-legged frog adults, tadpoles, and egg masses within a storm drainage system within a major cloverleaf intersection of Millbrae Avenue and State Route 101 in a heavily developed area of San Mateo County (Caltrans 2007). California red-legged frog has the potential to persist in disturbed areas as long as they provide at least one or more of their life history requirements.

California red-legged frogs typically breed between November and April with earlier breeding records occurring in southern localities (Hayes and Jennings 1988, Storer 1925). Breeding often occurs in still or slow-moving water at least 2.5 feet in depth with emergent vegetation, such as cattails (*Typha* spp.), tules (*Scirpus* spp.) or overhanging willows (*Salix* spp.) (Hayes and Jennings 1988). Red-legged frogs have paired vocal sacs and vocalize in air (Hayes and Krempels 1986). Female frogs deposit egg masses on emergent vegetation so that the egg mass floats on or near the surface of the water (Hayes and Miyamoto 1984). Individuals occurring in coastal drainages are active year-round (Jennings et al. 1992), whereas those found in interior sites are normally less active during the cold season.

During other parts of the year, habitat includes nearly any area within 1 to 2 miles of a breeding site that stays moist and cool through the summer (Fellers 2005). According to Fellers (2005), this can include vegetated areas with coyote brush, California blackberry thickets, and root masses associated with willow (*Salix* species) and California bay trees. Sometimes the non-breeding habitat used by red-legged frogs is extremely limited in size. For example, non-breeding red-legged frogs have been found in a 6-foot wide coyote brush thicket growing along a tiny intermittent creek surrounded by heavily grazed grassland (Fellers 2005). Sheltering habitat for red-legged frogs is potentially all aquatic, riparian, and upland areas within the range of the species and includes any landscape features that provide cover, such as existing animal burrows, boulders or rocks, organic debris such as downed trees or logs, and industrial debris. Agricultural features such as drains, watering troughs, spring boxes, abandoned sheds, or hay stacks may also be used. Incised stream channels with portions narrower and depths greater than 18 inches also may provide important summer sheltering habitat. Accessibility to sheltering habitat is essential for the survival of red-legged frogs within a watershed, and can be a factor limiting frog population numbers and survival.

California red-legged frogs do not have a distinct breeding migration (Fellers 2005). Adult frogs are often associated with permanent bodies of water. Some frogs remain at breeding sites all year while others disperse. Dispersal distances are typically less than 0.5 mile, with a few individuals moving up to 1 to 2 miles (Fellers 2005). Movements are typically along riparian corridors, but some individuals, especially on rainy nights, move directly from one site to another through

normally inhospitable habitats, such as heavily grazed pastures or oak-grassland savannas (Fellers 2005).

In a study of California red-legged frog terrestrial activity in a mesic area of the Santa Cruz Mountains, Bulger et al. (2003) categorized terrestrial use as migratory and non-migratory. The latter occurred from one to several days and was associated with precipitation events. Migratory movements were characterized as the movement between aquatic sites and were most often associated with breeding activities. Bulger reported that non-migrating frogs typically stayed within 200 feet of aquatic habitat 90% of the time and were most often associated with dense vegetative cover, i.e. California blackberry, poison oak and coyote brush. Dispersing frogs in northern Santa Cruz County traveled distances from 0.25 miles to more than 2 miles without apparent regard to topography, vegetation type, or riparian corridors (Bulger et al. 2003).

In a study of California red-legged frog terrestrial activity in a xeric environment, Tatarian (2008) noted that a 57% majority of frogs fitted with radio transmitters in the Round Valley study area in eastern Contra Costa County stayed at their breeding pools, whereas 43% moved into adjacent upland habitat or to other aquatic sites. This study reported a peak of seasonal terrestrial movement occurring in the fall months, with movement commencing with the first 0.2 inches of precipitation. Movements away from the source pools tapered off into spring. Upland movement activities ranged from 3 to 233 feet, averaging 80 feet, and were associated with a variety of refugia including grass thatch, crevices, cow hoof prints, ground squirrel burrows at the bases of trees or rocks, logs, and a downed barn door; others were associated with upland sites lacking refugia (Tatarian 2008). The majority of terrestrial movements lasted from 1 to 4 days; however, one adult female was reported to remain in upland habitat for 50 days (Tatarian 2008). Uplands closer to aquatic sites were used more often and frog refugia were more commonly associated with areas exhibiting higher object cover, e.g. woody debris, rocks, and vegetative cover. Subterranean cover was not significantly different between occupied upland habitat and non-occupied upland habitat.

California red-legged frogs are often prolific breeders, laying their eggs during or shortly after large rainfall events in late winter and early spring (Hayes and Miyamoto 1984). Egg masses containing 2,000 to 5,000 eggs are attached to vegetation below the surface and hatch after 6 to 14 days (Storer 1925, Jennings and Hayes 1994). In coastal lagoons, the most significant mortality factor in the pre-hatching stage is water salinity (Jennings et al. 1992). Eggs exposed to salinity levels greater than 4.5 parts per thousand results in 100 percent mortality (Jennings and Hayes 1990). Increased siltation during the breeding season can cause asphyxiation of eggs and small larvae. Larvae undergo metamorphosis 3.5 to 7 months following hatching and reach sexual maturity 2 to 3 years of age (Storer 1925; Wright and Wright 1949; Jennings and Hayes 1985, 1990, 1994). Of the various life stages, larvae probably experience the highest mortality rates, with less than one percent of eggs laid reaching metamorphosis (Jennings et al. 1992). Sexual maturity normally is reached at three to four years of age (Storer 1925; Jennings and Hayes 1985). Red-legged frogs may live eight to 10 years (Jennings et al. 1992). Populations of red-legged frogs fluctuate from year to year. When conditions are favorable red-legged frogs can

experience extremely high rates of reproduction and thus produce large numbers of dispersing young and a concomitant increase in the number of occupied sites. In contrast, red-legged frogs may temporarily disappear from an area when conditions are stressful (e.g., drought).

The diet of red-legged frogs is highly variable. Hayes and Tennant (1985) found invertebrates to be the most common food items. According to their data, vertebrates, such as Pacific tree frogs (*Pseudacris regilla*) and California mice (*Peromyscus californicus*); represent over half the prey mass eaten by larger frogs (Hayes and Tennant 1985). Hayes and Tennant (1985) found juvenile frogs to be active diurnally and nocturnally, whereas adult frogs were largely nocturnal. Feeding activity probably occurs along the shoreline and on the surface of the water (Hayes and Tennant 1985). The diet of red-legged frog tadpoles is not well studied, but their diet probably is similar to other ranid frog tadpoles that feed on algae, diatoms, and detritus by grazing on the surface of rocks and vegetation (Fellers 2005; Kupferberg 1996a, 1996b).

Habitat loss, non-native species introduction, and urban encroachment are the primary factors that have adversely affected the red-legged frog throughout its range. Several researchers in central California have noted the decline and eventual local disappearance of California and northern red-legged frogs in systems supporting bullfrogs (Jennings and Hayes 1990; Twedt 1993), red swamp crayfish (*Procambarus clarkii*), signal crayfish (*Pacifastacus leniusculus*), and several species of warm water fish including sunfish (*Lepomis* spp.), goldfish (*Carassius auratus*), common carp (*Cyprinus carpio*), and mosquitofish (*Gambusia affinis*) (Moyle 1976; S. Barry 1992; L. Hunt 1993; Fisher and Schaffer 1996). This has been attributed to predation, competition, and reproduction interference. Twedt (1993) documented bullfrog predation of juvenile northern red-legged frogs (*Rana aurora aurora*), and suggested that bullfrogs could prey on subadult northern red-legged frogs as well. Bullfrogs may also have a competitive advantage over red-legged frogs. For instance, bullfrogs are larger and possess more generalized food habits (Bury and Whelan 1984). In addition, bullfrogs have an extended breeding season (Storer 1933) during which an individual female can produce as many as 20,000 eggs (Emlen 1977). Further more, bullfrog larvae are unpalatable to predatory fish (Kruse and Francis 1977). Bullfrogs also interfere with red-legged frog reproduction. Both California and northern red-legged frogs have been observed in amplexus (mounted on) with both male and female bullfrogs (Jennings and Hayes 1990; Twedt 1993; M. Jennings 1993). Thus bullfrogs are able to prey upon and out-compete red-legged frogs, especially in sub-optimal habitat.

The urbanization of land within and adjacent to red-legged frog habitat has also adversely affected red-legged frogs. These declines are attributed to channelization of riparian areas, enclosure of the channels by urban development that blocks red-legged frog dispersal, and the introduction of predatory fishes and bullfrogs. This report further identifies the conversion and isolation of perennial pool habitats resulting from urbanization as an ongoing impact to red-legged frogs. Mao et al. (1999 cited in Fellers 2005) reported northern red-legged frogs infected with an iridovirus, which was also presented in sympatric threespine sticklebacks (*Gasterosteus aculeatus*) in northwestern California. Ingles (1932a, 1932b, and 1933 cited in Fellers 2005)

reported four species of trematodes from red-legged frogs, but he later synonymized two of them (found them to be the same as the other two).

### *Environmental Baseline*

The recovery plan for red-legged frogs identifies eight Recovery Units (Service 2002). The establishment of these Recovery Units is based on the Recovery Team's determination that various regional areas of the species' range are essential to its survival and recovery. The status of the red-legged frog will be considered within the smaller scale of Recovery Units as opposed to the overall range. These Recovery Units are delineated by major watershed boundaries as defined by U.S. Geological Survey hydrologic units and the limits of the range of the California red-legged frog. The goal of the draft recovery plan is to protect the long-term viability of all extant populations within each Recovery Unit. Within each Recovery Unit, core areas have been delineated and represent contiguous areas of moderate to high red-legged frog densities that are relatively free of exotic species such as bullfrogs. The goal of designating core areas is to protect metapopulations that, combined with suitable dispersal habitat, will allow for the long term viability within existing populations. This management strategy will allow for the recolonization of habitat within and adjacent to core areas that are naturally subjected to periodic localized extinctions, thus assuring the long-term survival and recovery of red-legged frogs.

The proposed Interstate 80 Eastbound Cordelia Truck Scales Relocation Project is within Recovery Unit 3 (North Coast and North San Francisco Bay) and is approximately 2.0 miles east of the Jameson Canyon-Lower Napa River Core Recovery Area (Service 2002). Most remaining known occurrences in southern Solano County are threatened by proposed developments and the habitat along Suisun Creek has been constricted by adjacent cultivated agriculture to a narrow riparian corridor. The strategy for recovery for the California red-legged frog includes promoting and protecting populations that are geographically distributed and connected in a manner that allows for the continued existence of viable metapopulations. Protection of habitat and especially watershed integrity is an integral component to achieve this. Land protection can be achieved through the purchase of land or conservation easements. The action area is also located approximately 1.9 to 2.8 miles east of the three proposed critical habitat units in Solano County (Service 2008).

A systematic, long-term study of red-legged frog distribution and abundance within the action area has not been conducted. Earlier developments within and upstream of the action area likely have had significant adverse effects on the red-legged frog and its habitat within the Suisun Creek riparian corridor. The high peak flows, channel down cutting which has resulted in concentrated winter flows, and the stream's loss of connection with floodplains have reduced the hydrological diversity in the stream to create available red-legged frog breeding habitat. This is because high water flows during winter through late spring likely wash eggs or larvae in less protected areas downstream. Construction of bridges over the stream together with associated concrete lining of stream banks and channels also adversely affected the habitat for the listed frog in Suisun Creek. Because the creek within the construction area is a channelized with steep

incised banks, there are no side channels or pools that would be protected from high flows and would provide ideal breeding conditions for the red-legged frog. Channalization and clearing of riparian vegetation along Suisun Creek have removed natural geomorphic processes and therefore limited the creation of plunge pools, backwater, and side channels that provide habitat for the red-legged frog. As a result, potential breeding habitat within Suisun Creek is limited to smaller isolated locations within the stream whose potential may be dependent on variable yearly rainfall and hydrological conditions.

Formal consultation and issuance of incidental take for the California red-legged frog for this project is consistent with the Service's biological opinions issued for other recently proposed projects occurring along Suisun Creek including:

1. The Dan Wilson Creek Bridge and Fairfield Corporate Commons Projects located along the eastern bank of Suisun Creek and just north of Interstate 80 in 2006 (Service File 1-1-06-F-0284); and
2. The Interstate 80 HOV Lane Project (Service File 1-1-07-F-0146 and 81420-2009-F-0240-R001-2) in 2007 which overlaps the action area for the Interstate 80 Eastbound Cordelia Truck Scales Relocation Project.

The CNDDDB (2008) report from the search of the surrounding U.S. Geological Survey 7.5-minute quadrangles (Cordelia, Denverton, Elmira, Fairfield North, Fairfield South, and Mt. George) contained 15 records (from 1993 to 2007) for sightings of California red-legged frogs. The closest record is approximately 2.3 miles southwest of the action area (Monk 2005). No CNDDDB (2008) records are known from the action area; however, the CNDDDB is limited to occurrence data from areas that have been previously surveyed and does not represent all occupied habitat. The comprehensive value of the CNDDDB is also limited by the degree to which people are willing to report data.

Potential aquatic and upland riparian habitat for the California red-legged frog was identified within the Suisun Creek portion of the action area. Aerial photography and the results of Caltrans' habitat assessment (Caltrans 2008) suggest that potential red-legged frog habitat is found throughout much of the length Suisun Creek, including potential breeding habitat. The riparian corridor for Suisun Creek is constricted by intense agricultural cultivation throughout its length therefore placing high value on what habitat remains. Caltrans identified at least 28 non-native plants species in the action area but reported that their intrusion into the Suisun Creek riparian habitat portion of the action area is limited (Caltrans 2008). Red-legged frogs likely use the project area for forage, refugia, and dispersal. Due of the presence of habitat within the action area, connectivity with a long corridor of habitat, observations of the species in the general area, observations of the species in similar habitat conditions throughout its range, and knowledge of the biology and behavior of the red-legged frog, the Service has determined that it is reasonable to conclude that the red-legged frog could occur within Suisun Creek and riparian habitat in the action area.

## **Effects of the Proposed Action**

### Valley Elderberry Longhorn Beetle

Four elderberry shrubs have been identified in the action area. The construction of the Cordelia Truck Scales bridge across Suisun Creek will result in direct effects to one of the shrubs. Caltrans plans to transplant this shrub and avoid the other three; however transplantation may not be an option due to access and bank stability. If so, Caltrans may need to cut the shrub back to accommodate the footprint of the proposed overhead bridge.

Construction of the bridge will permanently remove approximately 56 linear feet of vegetated riparian corridor from opposing stream banks. This will add to the existing loss and fragmentation of the Suisun Creek riparian corridor created by the approximately 236 foot-wide existing Interstate 80 Bridge immediately north of the action area. The new bridge structure will further widen the gap between the existing riparian vegetation and elderberry shrubs up and downstream of the bridges. Fragmentation and isolation of elderberry shrubs could eventually result in local extirpations.

The planting of 107 elderberry shrubs within a 3.0-acre restoration site less than 800 feet upstream of the action area has the potential to enhance the local valley elderberry longhorn beetle habitat and compensate for project's effects to the beetle. This restoration of riparian habitat that had been removed for agriculture may partially offset the local effects of fragmentation by increasing the size of the available habitat and the number of host plants. Exit holes have been observed in the elderberry shrubs in the adjacent existing riparian habitat (CNDDDB 2008). If occupied by the valley elderberry longhorn beetle, these existing plants could be a source of recruitment for the Solano Community College restoration area.

Although the conservation measures involve creation or restoration of habitat, it generally takes five or more years for elderberry plants to become large enough to support beetles, and it may take 25 years or longer for riparian habitats to reach their full value. Temporal disturbance of habitat will temporarily reduce the amount of habitat available to beetles and may cause fragmentation of habitat and isolation of subpopulations.

Unsuccessful transplantation could result in the death or stunting of the plant's growth affecting the viability of the shrubs to continue to host or become occupied by the listed beetle. The success criteria and long term monitoring and active management included in the restoration plan are intended to minimize plant loss. The conservation easement/deed restriction placed on the restoration area will also preserve the habitat for the beetle in perpetuity. Establishment of the restoration area is likely to provide a model and an opportunity to continue habitat improvements along Suisun Creek by way of compensation for other projects or conservation-based grants. David Redfield, the Dean of Math and Science at Solano Community College informed the Service that the College has continued interest in restoring additional riparian habitat on Suisun

and Dan Wilson Creek within the campus property (personal communication with D. Redfield on December 17, 2008).

The proposed conservation measures are likely to avoid and minimize the take of valley elderberry longhorn beetles that could result from the potential adverse effects described above. The majority of the proposed action area will be located within open and disked agricultural land which reduces the loss of elderberry and riparian habitat that could have been locally removed. Successful implementation of the proposed dust control and installation of construction buffers will likely avoid direct and indirect adverse effects to the other three elderberry plants in the action area as well as neighboring vegetation thereby safeguarding the integrity and function of the local riparian system for the listed beetle. Post-construction restoration of temporary work areas will likely limit fragmentation of the riparian corridor. Possible transplantation of one elderberry shrub to and the proposed planting of 107 elderberry shrubs within the approximately 3.0-acre riparian restoration site on the Solano Community College property have the potential to enhance the riparian habitat for the listed beetle on Suisun Creek. There is potential for future occupation of the restoration site from a nearby source where valley elderberry longhorn beetle sign has been observed.

#### California Red-Legged Frog

The proposed project could have adverse effects on the threatened California red-legged frog through mortality, injury, harassment, and harm of individual juveniles and adults. Due to existing development, the effects to California red-legged frog habitat will likely be limited to the activities associated with the construction of the new bridge across Suisun Creek or any utility relocations under Suisun Creek. The new bridge will be a clear span structure that will avoid the need for construction or structures within Suisun Creek. The proposed jack and bore method of installing a water pipeline under Suisun Creek is intended to avoid effects to the creek and riparian corridor but has the potential to affect frogs if drilling muds are inadvertently discharged within frog habitat.

According to an April 21, 2009, email message, the proposed project will adversely affect approximately 3.43 acres of California red-legged frog riparian and upland habitat. This includes 0.13 acres of riparian woodland that was previously accounted for in the Interstate 80 HOV Lanes (Service File 1-1-07-F-0146), 1.71 acres of riparian woodland not previously accounted for, and 1.59 acres of ruderal upland habitat. Given the intensity of the surrounding agricultural and transportation-related development, the localized California red-legged frog habitat for breeding, foraging, dispersal, and refuge is likely limited to Suisun Creek and its constrained riparian corridor. Approximately 2.39 acres of the affected habitat will be subject to restoration within the action area following construction. This includes 0.11 acres of habitat covered under the mentioned Interstate 80 consultation, 1.0 acres of the riparian habitat specific to the truck scales project, and 1.28 acres of the ruderal habitat. Replacement of mature riparian vegetation is likely to take several years but this area has the potential to provide foraging, dispersal, and refuge habitat for the California red-legged frog given successful restoration. Restoration of the

ruderal vegetation area is expected to result in baseline function within one year following construction. The proposed compensation through the restoration of 3.0 acres of riparian habitat approximately 736 feet upstream may offset the effects of new bridge construction by increasing the net California red-legged frog habitat in the general vicinity.

The proposed project likely will result in adverse effects to the feeding, resting, aestivation, movement, and other essential behaviors of the California red-legged frog. It will result in the loss and degradation of habitat. The clear span bridge structure will create shading and interrupt the vegetated riparian corridor but is unlikely to present any significant barriers to movement.

Construction activities associated with the proposed project would remove vegetation and other materials necessary for cover and aestivation, fill or crush burrows or crevices, and potentially reduce the prey base for the California red-legged frog. Because this listed amphibian uses small mammal burrows and soil crevices for shelter, individuals may be crushed, buried, or otherwise injured during construction activities. California red-legged frogs also may be run over by construction equipment or other vehicles accessing the construction areas. Siltation, fill, or spill of petroleum products or other chemicals could cause loss of prey items in or adjacent to the project area. Discharge of drilling muds and the associated cleanup could cause death or injury to individual frogs at the or downstream of the point of discharge. A "frac-out" could also result in the fill or removal of upland refugia. Construction activities are likely to result in the direct disturbance, displacement, injury, and/or mortality of California red-legged frogs. Individuals likely are to be killed or injured by construction equipment or other vehicles accessing the construction site. There is a likelihood of direct injury or mortality to the animal from injury or death due to pet cats or dogs owned by construction related personnel, poisoning by pesticides, injury or death due to predators attracted to food or trash at the site, and harassment from night-lighting, noise, and vibration. Implementation of certain types of erosion control materials, such as plastic netting, could result in the entanglement and death of California red-legged frogs within these materials due to exposure or predators (Bartin and Kinkead 2005, Stuart et al. 2001). Disturbance from construction activities may also cause individuals to move into or across areas of unsuitable habitat where they may be prone to higher rates of mortality from vehicles and predation.

Range-wide habitat loss, fragmentation, and degradation from multiple factors are the primary threats to the California red-legged frog (Service 1996, 2004). Loss of natural lands continues to further reduce the habitat available for this listed animal. However, the amount of historical and current habitat loss directly attributable to road loss has not been calculated, but the effect of habitat fragmentation on the California red-legged frog is significant. Fragmentation can reduce access to habitat as well as habitat suitability, increase mortality of animals that are moving between habitat patches due to increased risk of predation, and disrupt movements, dispersal, and gene flow. As barriers to movement for the California red-legged frog, roads, paved areas, and other habitat loss create smaller patches of habitat and increase patch isolation. Smaller populations of animals are at greater risk of extinction by chance from demographic, genetic, and environmental stochastic events (Wilcox and Murphy 1985, Schoener and Spiller 1992). Isolated

populations also have a higher chance of extinction without the demographic and genetic input of immigrants and a lower chance of colonization after extinction (Lande 1988, Sjogren-Gulve 1994).

A short term temporal effect will occur when suitable habitat is lost when riparian and other vegetation is removed for construction of the bridge, and also due to the improved ability of predators to hunt the listed amphibian. Hilty and Merender (2004) found that, in contrast to native species, non-native mammalian predators were more active in narrow and denuded riparian corridors and in large expanses of agricultural land (vineyards) far from core habitat.

The necessity of moving between multiple habitats and breeding ponds means that many amphibian species, such as the California red-legged frog are especially vulnerable to roads and well-used large paved areas in the landscape. Van Gelder (1973) and Cooke (1995) have examined the effect of roads on amphibians and found that because of their activity patterns, population structure, and preferred habitats, aquatic breeding amphibians are more vulnerable to traffic mortality than some other species.

Although traffic will not be at highway speeds, the proposed truck scales will include a large paved area subject to a great deal of large vehicle traffic. According to Caltrans, the existing truck scales had an average daily volume of 11,800 trucks a day (Caltrans 2008). Caltrans expects that volume to increase 70 % by 2025 and 115% by 2040. The new facility is designed to receive up to 1,000 trucks an hour. All of this traffic will be directed to the truck scales via the new bridge over Suisun Creek. The effects associated with the truck scale construction and long-term operations are likely to be similar to those resulting from highway projects. Fahrig et al. (1995) found that high traffic two-lane paved roads had a much larger effect on frog abundance than low traffic two-lane roads. Mortality rates for anurans on high traffic roads are higher than on low traffic roads (Hels and Buchwald 2001). Vos and Chardon (1998) found a significant negative effect of road density on the occupation probability of ponds by the moor frog (*Rana arvalis*) in the Netherlands. In addition, incidences of very large numbers of road-killed frogs are well documented (e.g., Asley and Robinson 1996), and studies have shown strong population level effects of traffic density (Carr and Fahrig 2001) and high traffic roads on these amphibians (Van Gelder 1973; Vos and Chardon 1998). Most studies regularly count road kills from slow moving vehicles (Hansen 1982; Rosen and Lowe 1994; Drews 1995; Mallick et al. 1998) or by foot (Munguira and Thomas 1992). These studies assume that every victim is observed, which may be true for large conspicuous mammals, but is certainly not true for small animals, such as the California red-legged frog. Amphibians appear especially vulnerable to traffic mortality because they readily attempt to cross roads, are slow-moving and small, and thus can not easily be avoided by drivers (Carr and Fahrig 2001).

The direction and type of habitat used by dispersing animals is especially important in fragmented environments (Forys and Humphrey 1996). Models of habitat patch geometry predict that individual animals will exit patches at more "permeable" areas (Buechner 1987; Stamps et al. 1987). A landscape corridor may increase the patch-edge permeability by

extending patch habitat (La Polla and Barrett 1993), and allow individuals to move from one patch to another. The geometric and habitat features that constitute a “corridor” must be determined from the perspective of the animal (Forys and Humphrey 1996). Given the various modifications to Suisun Creek and the associated riparian vegetation from past and proposed projects, including the proposed truck scales project, the local red-legged frog habitat is more confined and “patchy”. This limits the dispersal opportunities in the action area as frogs that disperse in directions other than up or down the riparian corridor will be subject to an increased potential for harm as they encounter additional hardscape, human activity, and barriers to movement. A portion of the adjacent habitat once lost to agricultural development likely poses greater risk now that it has been replaced by more urban development.

Additional fragmentation of the Suisun Creek riparian corridor and the surrounding upland habitat could further genetically isolate metapopulations that are at greater risk of deleterious genetic effects such as inbreeding, genetic drift, and founder effects. The survival of wildlife species in fragmented habitats may ultimately depend on their ability to move among patches to access necessary resources, retain genetic diversity, and maintain reproductive capacity within populations (Hilty and Merenlender 2004; Petit et al. 1995; Buza et al. 2000).

Most metapopulation or meta-population-like models of patchy populations do not directly include the effects of dispersal mortality on population dynamics (Hanski 1994; With and Crist 1995; Lindenmayer and Possingham 1996). Based on these models, it has become a widely held notion that more vagile species have a higher tolerance to habitat loss and fragmentation than less vagile species. But models that include dispersal mortality predict exactly the opposite: more vagile species should be more vulnerable to habitat loss and fragmentation because they are more susceptible to dispersal mortality (Fahrig 1998; Casagrandi and Gatto 1999). This prediction is supported by Gibbs (1998), who examined the presence-absence of five amphibian species across a gradient of habitat loss. He found that species with low dispersal rates are better able than more vagile species to persist in landscapes with low habitat cover. Gibbs (1998) postulated that the land between habitats serves as a demographic “drain” for many amphibians. Furthermore, Bonnet et al. (1999) found that snake species that use frequent long-distance movements have higher mortality rates than do sedentary species.

The proposed construction activities could result in the introduction of chemical contaminants to the site. Substances used in road building materials could leach out or wash out of the soil into adjacent habitat. Vehicles may leak hazardous substances such as motor oil and antifreeze. A variety of substances could be introduced during accidental spills of materials. Such spills can result from leaks in vehicles, small containers falling off vehicles, or from accidents resulting in whole loads being spilled. Large spills may be partially or completely remediated by clean-up efforts, depending on the substance. California red-legged frogs using these areas could be exposed to any contaminants that are present at the site. The commercial vehicles visiting the truck scales during operation are more likely to be carrying a large quantity of potential contaminants than the average personal vehicle traveling on Interstate 80. Even small

contaminate spills and leaks from individual vehicles could be cumulatively significant given that the facility is designed to receive as many as 1000 trucks an hour.

Exposure pathways could include inhalation, dermal contact, direct ingestion, or ingestion of contaminated soil or plants. Exposure to contaminants could cause short- or long-term morbidity, possibly resulting in reduced productivity or mortality. Carcinogenic substances could cause genetic damage resulting in sterility, reduced productivity, or reduced fitness among progeny. Little information is available on the effects of contaminants on the California red-legged frog. The effects may be difficult to detect. Morbidity or mortality likely would occur after the animals had left the contaminated site, and more subtle effects such as genetic damage could only be detected through intensive study and monitoring.

Preconstruction surveys and the relocation of individual red-legged frogs may reduce injury or mortality. However, the capturing and handling of red-legged frogs to remove them from a work area may result in the harassment, mortality or injury of individuals. Stress, injury, and mortality may occur as a result of improper handling, containment, and transport of individuals. Death and injury of individual red-legged frogs could occur at the time of relocation or later in time subsequent to their release. Although survivorship for translocated red-legged frogs has not been estimated, survivorship of translocated wildlife, in general, is lower because of intraspecific competition, lack of familiarity with the location of potential breeding, feeding, and sheltering habitats, risk of contracting disease in foreign environment, and increased risk of predation. Improper handling, containment, or transport of individuals would be reduced or prevented by use of a Service-approved biologist, by limiting the duration of handling, limiting the distance of translocation a short distance down Suisun Creek to clear them from the action area, and requiring the proper transport.

Biologists, construction workers, and construction equipment working in different areas and with different species may transmit diseases by introducing contaminated equipment. The chance of a disease being introduced into a new area is greater today than in the past due to the increasing occurrences of disease throughout amphibian populations in California and the United States. It is possible that chytrid fungus may exacerbate the effects of other diseases on amphibians or increase the sensitivity of the amphibian to environmental changes (e.g., water pH) that reduce normal immune response capabilities (Bosch et al. 2001). Implementation of the "Declining Amphibian Populations Task Force Fieldwork Code of Practice" during any aquatic survey activity will likely prevent transfer of diseases through contaminated equipment or clothing.

Soil disturbing activities and vegetation removal can facilitate the invasion and establishment by species not native to the area (Gelbard and Belnap 2003) such as the bullfrog or are native and are better competitors than the California red-legged frog that could feed on or compete with, the listed amphibian or its food sources. Disturbance and alteration of habitat adjacent to roads and newly paved areas may create favorable conditions for non-native plants and animals. These exotic species can spread along roadsides and then into adjacent habitat. Non-native animals may use modified habitats adjacent to roads to disperse into California red-legged frog habitat.

These animals could compete with the listed ranid for resources such as food or cover, or directly injure or kill the amphibians. Non-native plants and animals may reduce habitat quality for the threatened frog, and reduce the productivity or the local carrying capacity for the animals. Introductions of non-native species could cause California red-legged frogs to alter behavioral patterns by avoiding or abandoning areas near roads or pavement. The addition of non-native plants or animals in the action area has the potential to spread throughout the Suisun Creek watershed.

Disturbed areas adjacent to roads and pavement provide favorable habitat conditions for a number of non-native plant species. Some of these taxa are aggressively invasive and they can alter natural communities and potentially affect habitat quality. A problematic species within the range of the California red-legged frog is yellow star thistle (*Centaurea melitensis*). Dense stands of this plant can form along roadsides and then spread into adjacent habitat. This plant displaces native vegetation, competes with native plants for resources, and it may be difficult for the animals to move through due to the plant's numerous sharp spines. Other species that may disperse along roads and invade adjacent riparian habitats include mustards (*Brassica* species) and Russian thistle (*Salsola tragus*) (Tellman 1997). Disturbed soils and reduced competition from native plants are some of the conditions that facilitate invasion along roads by non-native plant species. At least 28 non-native plant species were found in the action area, including yellow star thistle and mustard (Caltrans 2008). Given the local seed sources, there is great potential for these species to spread into areas of temporary disturbance, including frog habitat within the Suisun Creek riparian area.

Negative effects to wildlife populations from roads and pavement may extend some distance from the actual road, as the proposed project. The phenomenon can result from any of the effects already described in this biological opinion, such as vehicle-related mortality, habitat degradation, and invasive exotic species. Forman and Deblinger (1998) described the area affected as the "road effect" zone. Along a 4-lane road in Massachusetts, they determined that this zone extend for an average of approximately 980 feet to either side of the road for an average total zone width of approximately 1970 feet. However, in other places they detected an effect > 0.6 mile from the road. Rudolph et al (1999) detected reduced snake abundance up to 2790 feet from roads in Texas. They estimated snake abundance out to 2790 feet, so the effect may have been greater. Extrapolating to a landscape scale, they concluded the effect of roads on snake populations in Texas likely was significant, given that approximately 79% of the land area of the Lone Star State is within 1640 feet of a road. The "road-zone" effects can be subtle. Van der Zandt et al. (1980) reported that lapwings (*Vanellus vanellus*) and black-tailed godwits (*Limosa limosa*) feeding at 1575 feet-6560 feet from roads were disturbed by passing vehicles. The heart rate, metabolic rate and energy expenditure of female bighorn sheep (*Ovis canadensis*) increases near roads (MacArthur et al. 1979). Trombulak and Frossell (2000) described another type of "road-zone" effect. Heavy metal concentrations from vehicle exhaust were greatest within 66 feet of roads, by elevated levels of metals in both soil and plants were detected at 660 feet of roads. The "road-zone" apparently varies with habitat type and traffic volume. Based on responses by birds, Forman (2000) estimated the effect zone along primary roads of 1000 feet in

woodlands, 1197 feet in grasslands, and 2657 feet in natural lands near urban areas. Along secondary roads with lower traffic volumes, the effect zone was 656 feet. As previously stated in this section, the new truck scales facility is designed to receive up to 1,000 trucks an hour. All of this traffic will be directed to the truck scales via the new bridge over Suisun Creek and the truck scales area will be located approximately 600 feet east of the creek. The "road zone" and the California red-legged frog have not been adequately investigated but based on the effects discussed in this section and the anecdotal information regarding the road effects on other species it is reasonable to conclude that the listed frogs inhabiting the Suisun Creek riparian corridor are likely to experience greater risks with the construction and operation of the proposed project.

The proposed conservation measures are likely to avoid and minimize the take of California red-legged frogs that could result from the potential adverse effects described above. The majority of the proposed action area will be located within open and disked agricultural land which reduces the loss of red-legged frog habitat that could have been locally removed. Designing a clear span bridge structure limits the amount of disturbance needed and permanent structures placed within Suisun Creek. Biological monitoring, worker education, and proper limited localized relocation of red-legged frogs in immediate harm should reduce the death and injury to individual frogs. Post-construction restoration of temporary work areas will likely limit the invasion of non-native vegetation and provide some degree of habitat for the listed frog in the future. The approximately 3.0-acre riparian restoration site on Solano Community College property has the potential to enhance the riparian and upland habitat for frogs displaced by the proposed project as well as the local population that is likely strongly confined to the Suisun Creek riparian corridor.

### **Cumulative Effects within the Action Area**

Cumulative effects include the effects of future State, Tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to section 7 of the Act.

Numerous non-Federal activities continue to negatively affect the valley elderberry longhorn beetle and the California red-legged frog in Solano County. Their habitat is lost or degraded as a result of road and utility construction and maintenance, commercial and residential development, overgrazing, agricultural expansion, and water irrigation and storage projects that may not be funded, permitted, or constructed by a Federal agency. Other threats include contamination, poisoning, increased predation, and competition from non-native species associated with human development. Small private actions that may adversely affect listed species, such as conversion of land, small mammal population control, mosquito control, and residential development, may occur without consultation with or authorization by the Service or the California Department of Fish and Game pursuant to their respectively Endangered Species Act.

As urban development continues along Suisun Creek, it will likely adversely affect the function of upland areas within the action area that are occupied by elderberry shrubs and serve as

dispersal and aestivation habitat for red-legged frogs. Continued development and maintenance of roadways to serve expanding urban areas may further fragment and isolate populations of beetles and red-legged frogs from other nearby populations. Increased predation associated with domesticated pets or feral animals generally accompanies urban expansion. As urban development encroaches on rural areas, the need increases for mosquito abatement programs that may introduce exotic fish into ponds used for breeding by red-legged frogs, thus negatively affecting the reproductive success of this species.

The cumulative local development will result in temporary and permanent habitat fragmentation. The results of fragmentation are inhibition of genetic exchange between populations and impediments to recolonization of habitats from which populations have been extirpated. Small, isolated populations are substantially more vulnerable to stochastic events (e.g., aberrant weather patterns, fluctuations in availability of food) and may exhibit reduced adaptability to environmental (natural or anthropogenic) changes.

Despite the recent economic decline, there will be a continued demand for new housing and commercial development in Solano County and other road and development projects have been recently completed or are planned along Interstate 80, State Route 12, and State Route 680. These developments and further infill could result in the eventual need for additional flood control measures and vegetation removal along Suisun Creek. This would diminish the habitat connectivity between listed species habitat remaining in the action area vicinity and the local region. Development of adjacent wildlife habitat will continue to result in the loss of not only breeding, resting, and foraging habitat, but the loss of dispersal corridors between breeding populations, thereby further isolating and fragmenting wildlife populations. Additionally, development of small reservoirs or water bodies, such as golf course hazards, and water diversions may occur which may pose further threats such as disruption of dispersal corridors for terrestrial species, and competition or predation from non-native species such as bullfrogs for aquatic species.

Cumulative effects to the valley elderberry longhorn beetle and the California red-legged frog include continuing and future conversion of suitable breeding, foraging, sheltering, and dispersal habitat resulting from urban development. Additional urbanization can result in road widening, an increased need for enhanced transportation services, and increased traffic on roads that bisect habitat, thereby increasing road-kill of frogs while reducing in size and further fragmenting remaining habitats.

Additional urbanization could also lead to increased burrowing rodent control efforts (T. Jones, in litt. 1993; Shaffer et al. 1993). Rodent control in rural areas in Solano County could contribute to the decline of red-legged frogs in the region, as well as other sensitive species that utilize burrows created by burrowing rodents.

California red-legged frogs likely are exposed to a variety of pesticides and other chemicals throughout their ranges. This amphibian species could also die from starvation due to the loss of

their insect and small mammal prey base. Hydrocarbon and other contamination from oil production and road runoff; the application of numerous chemicals for roadside and truck scales maintenance; urban/suburban landscape maintenance; and rodent and vector control programs may all have negative effects on red-legged frog populations. In addition, red-legged frogs may be harmed through increased road kill due to the construction and use of new roads and increased traffic in the overall region and collection by amphibian enthusiast and others.

Further habitat fragmentation; additional non-native species introduction; translocation of infected individuals, and increased access to aquatic habitat could facilitate or increase the spread of amphibian diseases within the range of the California red-legged frog. The global mass extinction of amphibians primarily due to chytrid fungus continues to be of significant concern (Norris 2007; Skerratt et al 2007).

The global average temperature has risen by approximately 0.6 degrees centigrade during the 20th Century (International Panel on Climate Change 2001, 2007, Adger et al 2007). There is an international scientific consensus that most of the warming observed has been caused by human activities (International Panel on Climate Change 2001, 2007; Adger et al. 2007), and that it is "very likely" that it is largely due to increasing concentrations of greenhouse gases (carbon dioxide, methane, nitrous oxide, and others) in the global atmosphere from burning fossil fuels and other human activities (Cayan et al. 2005; EPA Global Warming webpage <http://yosemite.epa.gov>; Adger et al. 2007). Eleven of the twelve years between 1995 and 2006 rank among the twelve warmest years since global temperatures began in 1850 (Adger et al. 2007). The warming trend over the last fifty years is nearly twice that for the last 100 years (Adger et al. 2007). Looking forward, under a high emissions scenario, the International Panel on Climate Change estimates that global temperatures will rise another four degrees centigrade by the end of this Century; even under a low emissions growth scenario, the International Panel on Climate Change estimates that the global temperature will go up another 1.8 degrees centigrade (International Panel on Climate Change 2001).

The increase in global average temperatures affects certain areas more than others. The western United States, in general, is experiencing more warming than the rest of the Nation, with the 11 western states averaging 1.7 degrees Fahrenheit warmer temperatures than this region's average over the 20th Century (Saunders et al. 2008). California, in particular, will suffer significant consequences as a result of global warming (California Climate Action Team 2006). In California, reduced snowpack will cause more winter flooding and summer drought, as well as higher temperatures in lakes and coastal areas. The incidence of wildfires in the Golden State also will increase and the amount of increase is highly dependent upon the extent of global warming. No less certain than the fact of global warming itself is the fact that global warming, unchecked, will harm biodiversity generally and cause the extinction of large numbers of species. If the global mean temperatures exceed a warming of two to three degrees centigrade above pre-industrial levels, twenty to thirty percent of plant and animal species will face an increasingly high risk of extinction (International Panel on Climate Change 2001, 2007).

The mechanisms by which global warming may push already imperiled species closer or over the edge of extinction are multiple. Global warming increases the frequency of extreme weather events, such as heat waves, droughts, and storms (International Panel on Climate Change 2001, 2007; California Climate Action Team 2006; Lenihan et al. 2003). Extreme events, in turn may cause mass mortality of individuals and significantly contribute to determining which species will remain or occur in natural habitats. As the global climate warms, terrestrial habitats are moving northward and upward, but in the future, range contractions are more likely than simple northward or upslope shifts. Ongoing global climate change (Anonymous 2007; Inkley et al. 2004; Adger et al. 2007; Kanter 2007) likely imperils the valley elderberry longhorn beetle and the California red-legged frog and the resources necessary for their survival. Since climate change threatens to disrupt annual weather patterns, it may result in a loss of their habitats and/or prey, and/or increased numbers of their predators, parasites, and diseases. Where populations are isolated, a changing climate may result in local extinction, with range shifts precluded by lack of habitat.

### **Conclusion**

After reviewing the current status of the species, the environmental baselines for the action area, the effects of the proposed action and the cumulative effects, it is the Service's biological opinion that the proposed project is not likely to jeopardize the continued existence of the valley elderberry longhorn beetle or the California red-legged frog.

### **INCIDENTAL TAKE STATEMENT**

Section 9(a)(1) of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened fish and wildlife species without special exemption. Take is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. Harass is defined by the Service as an intentional or negligent act or omission which creates the likelihood of injury to a listed species by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering. Harm is defined by the Service to include significant habitat modification or degradation that results in death or injury to listed species by impairing behavioral patterns including breeding, feeding, or sheltering. Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with this Incidental Take Statement.

The measures described below are non-discretionary, and must be implemented by Caltrans in order for the exemption in section 7(o)(2) to apply. Caltrans has a continuing duty to regulate the activity covered by this Incidental Take Statement. If Caltrans (1) fails to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit

or grant document, and/or (2) fails to retain oversight to ensure compliance with these terms and conditions, the protective coverage of section 7(o)(2) may lapse.

### **Amount or Extent of Take**

The Service anticipates incidental take of the valley elderberry longhorn beetle will be difficult to measure because it is difficult to determine the number of beetle larvae and pupae contained within each elderberry plant. Because it is not known how many larvae or pupae each stem 1.0 inch or greater in diameter at ground level can support, the Service quantifies the amount of incidental take of the valley elderberry longhorn beetle in terms of the number of plants or stems 1.0 inch or greater in diameter at ground level that would be lost. The Service anticipates that all valley elderberry longhorn beetles inhabiting the one elderberry plant that may be subject to transplantation or pruning, will be harmed, harassed, or killed, as a result of the proposed action. Due to the proposed implementation of avoidance measures, incidental take is not being issued for the listed beetles that may inhabit other elderberry plants within or adjacent to the action area.

The Service anticipates that incidental take of the California red-legged frog will be difficult to detect because when California red-legged frogs are not in their breeding ponds, they inhabit the burrows of ground squirrels or other rodents; they may be difficult to locate due to their cryptic appearance and behavior; the juvenile and adult animals may be located a distance from the breeding ponds; the migrations occur on a limited period during rainy nights in the fall, winter, or spring; and the finding of an injured or dead individual is unlikely because of their relatively small body size. Recent project monitoring suggests that California red-legged frogs are difficult to find during preconstruction clearance surveys that include excavation of potential upland frog refugia in close proximity to breeding ponds and other aquatic habitat. Losses of California red-legged frogs may also be difficult to quantify due to seasonal fluctuations in their numbers, random environmental events, changes in water regime at their breeding ponds, or additional environmental disturbances. Due to the difficulty in quantifying the number of California red-legged frogs that will be taken as a result of the proposed action, the Service is quantifying take incidental to the project as all of the California red-legged frogs inhabiting or utilizing the 3.43 acres of habitat identified in the action area. A portion of the frog habitat that will be affected by the proposed Interstate 80 Eastbound Cordelia Truck Scales Relocation Project has already been covered under incidental take issued for the Interstate 80 HOV Lanes Project (Service File 1-1-07-F-0146). Due to overlapping action areas the Interstate 80 project accounted for 0.13 acres of frog habitat that will be affected by the truck scales project. Therefore, the Service is issuing incidental take in this biological opinion for the remaining 3.30 acres of frog habitat in the action area. The incidental take is expected to be in the form of harm, harassment, injury, and mortality to adult California red-legged frogs from habitat loss/degradation, construction-related disturbance, capture and relocation, as well as roadkill and other activities associated with the operation and maintenance of the completed truck scales facility.

Upon implementation of the following reasonable and prudent measures incidental take associated with the proposed action described above for the valley elderberry longhorn beetle and

California red-legged frog will become exempt from the prohibitions described under section 9 of the Act.

### **Effect of the Take**

The Service determined that this level of anticipated take is not likely to result in jeopardy to the valley elderberry longhorn beetle or California red-legged frog.

This biological opinion does not include incidental take for take that may occur to the valley elderberry longhorn beetle or the California red-legged frog due to a “frac-out” or implementation of a “frac-out” contingency plan.

### **Reasonable and Prudent Measures**

The following reasonable and prudent measures are necessary and appropriate to minimize the effects of the proposed action on the valley elderberry longhorn beetle and California red-legged frog. Caltrans will be responsible for compliance with these measures:

1. Caltrans will ensure that all the conservation measures in the project description section of this biological opinion will be implemented.
2. Caltrans will ensure adverse effects to the valley elderberry longhorn beetle and California red-legged frog will be minimized.
3. Caltrans will ensure their compliance with this biological opinion.

### **Terms and Conditions**

In order to be exempt from the prohibitions of section 9 of the Act, Caltrans shall ensure compliance with the following terms and conditions, which implement the reasonable and prudent measures described above. These terms and conditions are nondiscretionary.

1. The following Terms and Conditions implement Reasonable and Prudent Measure one (1):
  - a. Caltrans shall minimize the potential for harm, harassment, or killing of federally listed wildlife species resulting from project related activities by implementation of the conservation measures as described in the October 2008, Biological Assessment, the March 18, 2009, letter to the Service, and appearing in the *Project Description* of this biological opinion, except as modified by these *Terms and Conditions*.
  - b. Caltrans shall include Special Provisions that include the Conservation Measures and the *Terms and Conditions* of this biological opinion in the solicitation for bid

information. In addition, Caltrans shall educate and inform contractors involved in the project as to the requirements of the biological opinion.

- c. Caltrans has proposed to provide compensation for the effects to 3.43 acres of California red-legged frog habitat by providing STA with sufficient resource to implement, monitor, and manage a 3.0-acre restoration project on Solano Community College property. Acceptable compensation shall require a Service-approved conservation easement/deed restriction on the 3.0-acre restoration site. Caltrans shall immediately reinitiate consultation with the Service if Solano Community College is unable to secure a conservation easement/deed restriction for the restoration site or if STA is unable to satisfy the success criteria outlined in the March 30, 2009, mitigation and monitoring plan for the restoration site. The conservation easement/deed restriction for the site shall be reviewed and approved by the Service.

An approved ecologically-based conservation easement/deed restriction shall include restricted public access, a long-term management plan, and an in-perpetuity endowment based on a Service-approved property analysis record (PAR). The Service-approved management plan shall be in perpetuity and shall include, but not be limited to, a description of the site, management needs (e.g. non-native vegetation and animal control, etc), when the management activities will be implemented, how often and to what level monitoring of the site shall occur, and a action/contingency plan to address potential management issues.

- d. Caltrans shall prepare a relocation plan for moving California red-legged frogs that will be submitted to the Service for review and approval at least thirty (30) calendar days prior to the date of groundbreaking.
2. The following Terms and Conditions implement Reasonable and Prudent Measure two (2):
    - a. The Resident Engineer or their designee shall be responsible for implementing the conservation measures and *Terms and Conditions* of this biological opinion and shall be the point of contact for the project. The Resident Engineer or their designee shall maintain a copy of this biological opinion onsite whenever construction is taking place. Their name and telephone number shall be provided to the Service at least thirty (30) calendar days prior to groundbreaking at the project. At least thirty (30) calendar days prior to ground breaking, the Resident Engineer must submit a letter to the Service verifying that they possess a copy of this biological opinion and have read and understand the Terms and Conditions.
    - b. A Service-approved biologist(s) shall be onsite during all activities that may result in the take of the valley elderberry longhorn beetle or California red-legged frog. The qualifications of the biologist(s) must be presented to the Service for review and

written approval at least thirty (30) calendar days prior to ground-breaking at the project site. The Service-approved biologist(s) will keep a copy of this biological opinion in their possession when onsite. The Service-approved biologist(s) shall be given the authority to communicate verbally or by telephone, electronic mail or hardcopy with Caltrans personnel, construction personnel or any other person(s) at the project site or otherwise associated with the project. The Service-approved biologist(s) shall have oversight over implementation of all the *Terms and Conditions* in this biological opinion, and shall have the authority to stop project activities if they determine any of the requirements associated with these *Terms and Conditions* are not being fulfilled. If the Service-approved biologist(s) exercises this authority, the Service shall be notified by telephone and email within 24 hours. The Service contact is Chris Nagano, Division Chief, Endangered Species Program at the Sacramento Fish and Wildlife Office at telephone (916) 414-6600.

- c. An outline of the employee environmental awareness program shall be submitted to the Division Chief of the Endangered Species Program at the Sacramento Fish and Wildlife Office within thirty (30) calendar days prior to the start of construction. The program shall focus on the conservation measures that are relevant to employee's personal responsibility. Documentation of the training, including individual signed affidavits, shall be submitted to the Service with the annual compliance report described in the *Reporting Requirements* on page 46 of this biological opinion.
- d. Caltrans shall submit a "frac-out" contingency plan for Service review and approval within sixty (60) days prior to the onset of any ground breaking activities associated with the proposed project.
- e. Caltrans shall contact the Service within twenty-four (24) hours if access, containment, or clean-up of a "frac-out", or any other activities associated with implementing the "frac-out" contingency plan occurs within California red-legged frog aquatic or upland habitat or has the potential to affect an elderberry shrub. Caltrans shall quantify, report, and reinitiate consultation for the listed beetle and frog if activities occur outside the action area described in this biological opinion.
- f. Caltrans shall contact the Service within twenty-four (24) hours if activities associated with implementing the "frac-out" contingency plan or any other project activities occur within 100 feet of an elderberry shrub or habitat for other listed species.
- g. The Service will be notified that (1) the construction and revegetation contractors have been advised that all on-site personnel must receive valley elderberry longhorn beetle and California red-legged frog training prior to commencing work on the project and (2) if elderberry shrubs in the construction zone are disturbed, the details surrounding the incident and the corrective measures taken will be reported to the Service within five (5) working days of any such disturbance.

- h. An experienced, licensed, revegetation contractor or landscape architect will carry out the elderberry transplanting and planting activities.
  - i. If the identified elderberry shrub is transplanted, a Service approved biologist will monitor the removal of the elderberry shrubs and subsequent transplanting to the restoration site and will ensure that proper transplanting procedures are used.
  - j. During transplanting, the biologist will inspect the stems and roots of the transplant to determine presence or absence of valley elderberry longhorn beetle exit holes, which will be recorded. Existing holes on stems will be marked with white paint (exterior, flat, latex) around each hole. Paint should not enter the hole. Marking holes in this manner will allow monitors in subsequent years to distinguish new exit holes from old ones.
  - k. If the elderberry shrubs cannot be successfully transplanted because it is in a state of decline, in obvious poor health, or for other reasons such that it would not likely survive transplanting, it will be transported to the Solano Community College Suisun Creek restoration site and left to decompose. Elderberry stems and cuttings will also be left in the restoration site. Cuttings will not be chipped or destroyed because they may contain developing larvae and/or pupae that could complete development and successfully emerge from dead wood.
  - l. During transplanting, Caltrans will ensure that existing elderberry shrubs adjacent to the construction area and the restoration area are not adversely affected.
  - m. The transplanted elderberry shrub will be tagged and identified as a transplant opposed to the container-grown elderberries that will be planted in the restoration area. The success of the transplanted elderberry shall be reported in the annual restoration site monitoring report. Monitoring and maintenance shall be done according to the Service's September 19, 1996, *Mitigation Guidelines for the Valley Elderberry Longhorn Beetle*.
3. The following Terms and Conditions implement Reasonable and Prudent Measure three (3):
- a. If requested, before, during, or upon completion of ground breaking and construction activities, Caltrans shall allow access by Service and California Department of Fish and Game personnel or their designated agent to the project site to inspect project effects to the valley elderberry longhorn beetle and California red-legged frog, and their habitat.
  - b. Caltrans shall comply with the reporting requirements outlined below.

## Reporting Requirements

Proof of environmental training and fulfillment of compensation requirements shall be provided to the Division Chief of the Endangered Species Program, Sacramento Fish and Wildlife Office, 2800 Cottage Way, Room W-2605, Sacramento, California 95825-1846, phone (916) 414-6600.

Observations of valley elderberry longhorn beetles (including exit holes in dead or living stems), California red-legged frogs, or of any listed or sensitive animal species should be reported to the CNDDDB within thirty (30) calendar days of the observation.

The Service's Sacramento Field Office is to be notified within three (3) working days of the finding of any dead, sick, or injured valley elderberry longhorn beetles or any harm to beetles or elderberry plants associated with the Interstate 80 Eastbound Cordelia Truck Scales Relocation Project. The Service contact person for this information is the Coast-Bay Branch Chief, Endangered Species Program at (916) 414-6600. Any salvaged valley elderberry longhorn beetle specimens taken shall be properly preserved in accordance with the Natural History Museum of Los Angeles County's policy of accessioning (10% formalin in a quart jar or freezing). Information concerning how the specimen was taken, length of the interval between death and preservation, the environmental conditions, the incidental take permit number (81420-2008-F-1929), and any other relevant information shall be written on 100% rag content paper, with indelible ink, and included in the container with the specimen. Preserved specimens shall be delivered to the Service's Division of Law Enforcement at 2800 Cottage Way, Room W-2928, Sacramento, California 95825 [telephone: (916) 414-6660].

Injured California red-legged frogs shall be cared for by a licensed veterinarian or other qualified person such as the on-site biologist; dead individuals must be placed in a sealed plastic bag with the date, time, location of discovery, and the name of the person who found the animal; the carcass should be kept in a freezer; and held in a secure location. The Service and the California Department of Fish and Game will be notified within one (1) working day of the discovery of death or injury to a California red-legged frog that occurs due to project related activities or is observed at the project site. Notification will include the date, time, and location of the incident or of the finding of a dead or injured animal clearly indicated on a USGS 7.5 minute quadrangle and other maps at a finer scale, as requested by the Service, and any other pertinent information. The Service contacts are Chris Nagano, Division Chief, Endangered Species Program at the Sacramento Fish and Wildlife Office [(916) 414-6600], and Dan Crum, Resident Agent-in-Charge of the Service's Law Enforcement Division at (916) 414-6660. The California Department of Fish and Game contact is Mr. Scott Wilson at telephone (707) 944-5563.

Caltrans shall submit a post-construction compliance report prepared by the on-site biologist to the Sacramento Fish and Wildlife Office within sixty (60) calendar days following each year of construction or within sixty (60) calendar days of any break in construction activity lasting more than sixty (60) calendar days. This report shall detail (i) dates that construction occurred; (ii) pertinent information concerning the success of the project in meeting compensation and other

conservation measures; (iii) an explanation of failure to meet such measures, if any; (iv) known project effects on the valley elderberry longhorn beetle and/or California red-legged frog, if any; (v) occurrences of incidental take of either of these species; (vi) documentation of employee environmental education; and (vii) other pertinent information. The reports shall be addressed to the Coast-Bay Branch Chief, Endangered Species Program, Sacramento Fish and Wildlife Office.

Caltrans shall report to the Service any information about take or suspected take of listed wildlife species not authorized by this biological opinion. Caltrans must notify the Service via electronic mail and telephone within twenty-four (24) hours of receiving such information. Notification must include the date, time, location of the incident or of the finding of a dead or injured animal, and photographs of the specific animal. The individual animal shall be preserved, as appropriate, and held in a secure location until instructions are received from the Service regarding the disposition of the specimen or the Service takes custody of the specimen. The Service contacts are Chris Nagano, Division Chief, Endangered Species Program, Sacramento Fish and Wildlife Office at Chris\_Nagano@fws.gov and (916) 414-6600, and Resident Agent-in-Charge Dan Crum of the Service's Law Enforcement Division at (916) 414-6660.

### CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities that can be implemented to further the purposes of the Act, such as preservation of endangered species habitat, implementation of recovery actions, or development of information and data bases.

We propose the following conservation recommendations:

1. Caltrans should assist the Service in implementing recovery actions identified in the *Valley Elderberry Longhorn Beetle Recovery Plan* (Service 1984) and the *Recovery Plan for the California Red-legged Frog* (Service 2002).
2. Caltrans should consider participating in the planning for regional habitat conservation plans for the valley elderberry longhorn beetle and California red-legged frog, other listed species, and sensitive species.
3. Caltrans should consider establishing functioning preservation and creation conservation banking systems to further the conservation of the valley elderberry longhorn beetle, California red-legged frog, and other listed species. Such banking systems also could possibly be utilized for other required mitigation (i.e., seasonal wetlands, riparian habitats, etc.) where appropriate. Efforts should be made to preserve habitat along roadways in association with wildlife crossings.
4. Roadways can constitute a major barrier to critical wildlife movement. Therefore, Caltrans should incorporate culverts, tunnels, or bridges on highways and other roadways that allow

safe passage by California red-legged frogs, other listed animals, and wildlife. Photographs, plans, and other information should be included in biological assessments if “wildlife friendly” crossings are incorporated into projects. Efforts should be made to establish upland culverts designed specifically for wildlife movement rather than accommodations for hydrology. Transportation agencies should also acknowledge the value of enhancing human safety by providing safe passage for wildlife in their early project design.

5. Caltrans should continue to pursue multifaceted compensation packages such as the one developed for the proposed U.S. Interstate 580/Isabel Avenue Interchange Construction Project (Service File 1-1-07-F-0280) on future formal consultations with the Service.
6. Caltrans should continue to develop and implement their Early Statewide Biological Mitigation Planning Project that has been developed by the University of California at Davis, Road Ecology Center through Caltrans funding.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed and/or proposed species or their habitats, the Service requests notification of the implementation of these recommendations.

#### **REINITIATION--CLOSING STATEMENT**

This concludes formal consultation on the proposed Interstate 80 Eastbound Cordelia Truck Scales Relocation Project in Solano County, California. As provided in 50 CFR §402.16 and in the terms and conditions of this biological opinion, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the final project design exceeds the described action area in the October 2008, Biological Assessment; (2) the amount or extent of incidental take is exceeded; (3) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (4) the agency action is subsequently modified in a manner that causes an effect to listed species or critical habitat that was not considered in this opinion; or (5) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, any operations causing such take must cease pending reinitiation.

Mr. James Richards

49

If you have questions concerning this opinion on the proposed Interstate 80 Eastbound Cordelia Truck Scales Relocation Project in Solano County, California, please contact John Cleckler ([John\\_Cleckler@fws.gov](mailto:John_Cleckler@fws.gov)) or Ryan Olah ([Ryan\\_Olah@fws.gov](mailto:Ryan_Olah@fws.gov)) at the letterhead address or at (916) 414-6600.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan K. Moore". The signature is written in a cursive style and is positioned above the printed name.

Susan K. Moore  
Field Supervisor

cc:

Ahmad Hashemi, California Department of Transportation, Oakland, California

Scott Wilson, Melissa Escaron, Liam Davis, Marcia Grefsrud, California Department of Fish and Game, Yountville, California

Dale Dennis, Solano Transportation Authority, Suisun City, California

Stephanie Myers, ICF Jones & Stokes, Sacramento, California

### Literature Cited

- Adger, N., P. Aggarwal, S. Agrawala, J. Alcamo, A. Allali, O. Anisimov, N. Arnell, M. Boko, O. Canziani, T. Carter, G. Cassa, U. Confalonieri, R. Cruz, E. de Alba Alcaraz, W. Eastreling, C. Field, A. Fischlin, B. Fitzharris, C.G. Garcia, C. Hanson, H. Harasawa, K. Hennessy, S. Huq, R. Jones, L. K. Bogataj, D. Karoly, R. Kliein, Z. Kundzewicz, M. Lal, R. Lasco, G. Love, X. Lu, G. Magrin, L.J. Mata, R. McLean, B. Menne, G. Midgley, N. Mimura, M.Q. Mirza, J. Moreno, L. Mortsch, I. Niang-Diop, R. Nichols, B. Novaky, L. Nurse, A. Nyon, M. Oppenheimer, J. Palutikof, M. Parry, A. Patwardhan, P. R. Lankao, C. Rosenzweig, S. Schneider, S. Semenov, J. Smith, J. Stone, J van Ypersele, D. Vaughan, C. Vogel, T. Wilbanks, P. Wong, S. Wu, and G. Yohe. 2007. Working Group II Contribution to the Intergovernmental Panel on Climate Change Fourth Assessment Report. Climate Change 2007: Climate change impacts, adaptation and vulnerability. Brussels, Belgium.
- Anonymous. 2007. Global warming is changing the World. *Science* 316:188-190.
- Barr, C.B. 1991. The Distribution, Habitat, and Status of the Valley Elderberry Longhorn Beetle *Desmocerus californicus dimorphus* Fisher (Insecta: Coleoptera: Cerambycidae). U.S. Fish and Wildlife Service, Sacramento, California. 134 pp.
- Bronny, C. 2006. Valley Elderberry Longhorn Beetle [ds45, occurrence #211]. California Department of Fish and Game. Biogeographic Information and Observation System (BIOS). Observation made July 10, 2006. Data Retrieved April 17, 2009 from <http://bios.dfg.ca.gov>
- Buechner, M. 1987. Conservation in insular parks: simulation models of factors affecting the movement of animals across park boundaries. *Biological Conservation* 41:57-76.
- Bulger, J. B., N. J. Scott Jr., and R. B. Seymour. 2003. Terrestrial activity and conservation of adult California red-legged frogs *Rana aurora draytonii* in coastal forests and grasslands. *Biological Conservation* 110:85-95.
- California Department of Transportation (Caltrans). 2006. Interstate 80 high-occupancy vehicle lane project. Initial study/proposed mitigated negative declaration. District 4, 04-Sol-80 KP18.23/31.65 (PM 11.45/20.1) EA 04-0A5300. December 2006. Oakland, California.
- \_\_\_\_\_. 2007. Biological assessment for the restoration of the hydraulic capacity of the Cowan Storm Drain Canal within the U.S. Highway 101/Millbrae Avenue Interchange. EA 3A0400. December 2007. Caltrans District 4, Oakland, California.

- \_\_\_\_\_. 2008. Biological assessment for the California red-legged frog and the valley elderberry longhorn beetle for the Interstate 80 Eastbound Cordelia Truck Scales Relocation Project. EA 0A5350. October 2008. Caltrans District 4, Oakland, California.
- California Climate Action Team. 2006. Climate Action Team Final Report to the Governor and Legislature. [http://www.climatechange.ca.gov/climate\\_action\\_team/index.html](http://www.climatechange.ca.gov/climate_action_team/index.html).
- California Natural Diversity Database (CNDDDB). 2008. Version 3.1.1, Government Version – Dated November 1, 2008. Natural Heritage Division, California Department of Fish and Game. Sacramento, California.
- Carr, L.W., and L. Fahrig. 2001. Effect of road traffic on two amphibian species of differing vagility. *Conservation Biology* 15: 1071-1078.
- Casagrandi, R., and M. Gatto. 1999. A mesoscale approach to extinction in fragmented habitats. *Nature* 400: 560-562.
- Collinge, S.K., M. Holyoak, C.B. Barr, and J.T. Marty. 2001. Riparian habitat fragmentation and population persistence of the threatened valley elderberry longhorn beetle in central California. *Biological Conservation* 100:103-113.
- Drews, C. 1995. Road kills of animals by public traffic in Mikumi National Park, Tanzania, with notes on baboon mortality. *African Journal of Ecology* 33: 89-100.
- Emlen, S. T. 1977. "Double clutching" and its possible significance in the bullfrog. *Copeia* 1977(4):749-751.
- Fahrig, L. 1998. When does fragmentation of breeding habitat affect population survival? *Ecological Modeling* 105: 273-292.
- Fahrig, L., and G. Merriam. 1985. Habitat patch connectivity and population survival. *Ecology* 66:1762-1768
- Fahrig, L., J.H. Pedlar, S.E. Pope, P.D. Taylor, and J. F. Wegner. 1995. Effect of road traffic on amphibian density. *Biological Conservation* 73: 177-182.
- Fellers, G. 2005. *Rana draytonii* Baird and Girard, 1852b California red-legged frog. Pages 552-554 in M. Lannoo (editor). *Amphibian declines the conservation status of United States species*. University of California Press. Berkeley, California.
- Forman, R. T. T. 2000. Estimate of the area affected ecologically by the road system in the United States. *Conservation Biology* 14: 31-35.

- Forman, R. T. T., and R. D. Deblinger. 1998. The ecological road-effect zone for transportation planning. and a Massachusetts highway example. Pages 78-96 in G. L. Evink, P. Garrett, D. Zeigler, and J. Berry, editors. Proceedings of the international conference on wildlife ecology and transportation. Publication FL-ER-69-98. Florida Department of Transportation, Tallahassee.
- Gibbs, J.P. 1998. Amphibian movements in response to forest edges, roads, and streambeds in southern New England. *Journal of Wildlife Management* 62: 584-589.
- H.T. Harvey & Associates. 2009. Interstate 80 HOV Lanes/Eastbound Cordelia Truck Scales Relocation Project Mitigation and Monitoring Plan. Prepared for the Solano Transportation Authority. Dated March 30, 2009. Los Gatos, California.
- Halstead, J.A., and J.A. Oldham. 1990. Revision of the nearctic *Desmocerus Audinet-Serville* with emphasis on the federally threatened valley elderberry longhorn beetle (Coleoptera: Cerambycidae). Environmental Section Staff Report, Kings River Conservation District, Fresno, California.
- Hanski, I. 1982. Dynamics of regional distribution: the core and satellite hypothesis. *Oikos* 38:210-221.
- \_\_\_\_\_. 1991. Single species metapopulation systematics: concepts, models and observations. *Biological Journal of the Linnean Society* 42:3-16.
- \_\_\_\_\_. 1994. A practical model of metapopulation dynamics. *Journal of Animal Ecology* 63: 151-162.
- Hayes, M. P., and M. R. Jennings. 1988. Habitat correlates of distribution of the California red-legged frog (*Rana aurora draytonii*) and the foothill yellow-legged frog (*Rana boylei*): implications for management. Pages 144-158 in R. Sarzo, K. E. Severson, and D. R. Patton (technical coordinators). Proceedings of the symposium on the management of amphibians, reptiles, and small mammals in North America. United States Department of Agriculture, Forest Service, Rocky Mountain Range and Experiment Station, Fort Collins, Colorado. General Technical Report (RM-166): 1-458.
- Hayes, M. P. and D. M. Krempels. 1986. Vocal sac variation among frogs of the genus *Rana* from western North America. *Copeia* 1986(4):927-936.
- Hayes, M. P. and M. M. Miyamoto. 1984. Biochemical, behavioral and body size differences between *Rana aurora aurora* and *R. a. draytonii*. *Copeia* 1984(4):1018-1022.
- Hayes, M. P., and M. R. Tennant. 1985. Diet and feeding behavior of the California red-legged frog, *Rana aurora draytonii* (Ranidae). *Southwestern Naturalist* 30(4): 601-605.

- Hels, T. and E. Buchwald. 2001. The effect of road kills on amphibian populations. *Biological Conservation* 99: 331-340.
- Holyoak, M., and T. S. Talley. 2001. Population biology and management of the threatened Valley elderberry longhorn beetle. Presentation to U.S. Fish and Wildlife Service November 2001:33 slides.
- Ingles, L.G. 1932a. Four new species of *Heamatoloechus* (Trematoda) from California. *University of California Publications in Zoology* 37: 189-201.
- \_\_\_\_\_ 1932b. *Cephalogonimus brevicirrus*, a new species of trematoda from the intestine of *Rana aurora* from California. *University of California Publications in Zoology* 37:203-210.
- \_\_\_\_\_ 1933. Studies on the structure and life history of *Ostiolum oxyorchis* (Ingles) from the California red-legged frog *Rana aurora draytonii*. *University of California Publication in Zoology* 39:135-162.
- Inkley, D.B., M.G. Anderson, A.R. Blaustein, V.R. Burkett, B. Felzer, B. Griffin, J. Price, and T.L. Root. 2004. Global climate change and wildlife in North America. *Wildlife Society Technical Review* 04-2.
- Jennings, M. R., and M. P. Hayes. 1985. Pre-1900 overharvest of California red-legged frogs (*Rana aurora draytonii*): The inducement for bullfrog (*Rana catesbeiana*) introduction. *Herpetological Review* 31(1):94-103.
- \_\_\_\_\_ 1990. Final report of the status of the California red-legged frog (*Rana aurora draytonii*) in the Pescadero Marsh Natural Preserve. Final report prepared for the California Department of Parks and Recreation, Sacramento, California, through Agreement (4-823-9018). Department of Herpetology, California Academy of Sciences, Golden Gate Park, San Francisco, California. 30 pages.
- Jennings, M. R., M. P. Hayes, and D. C. Holland. 1992. A petition to the U.S. Fish and Wildlife Service to place the California red-legged frog (*Rana aurora draytonii*) and the western pond turtle (*Clemmys marmorata*) on the list of endangered and threatened wildlife and plants. 21 pages.
- Kanter, J. 2007. Scientists detail climate changes, Poles to Tropics. *New York Times*. April 10, 2007.
- Kruse, K. C. and M. G. Francis. 1977. A predation deterrent in larvae of the bullfrog, *Rana catesbeiana*. *Transactions of the American Fisheries Society* 106(3):248-252.

- Kupferberg, S. J. 1996a. Hydrologic and geomorphic factors affecting conservation of a river-breeding frog (*Rana boylei*). *Ecological Applications* 6: 1322-1344.
- 1996b. The ecology of native tadpoles (*Rana boylei* and *Hyla regilla*) and the impacts of invading bullfrogs (*Rana catesbeiana*) in a northern California river. PhD dissertation. University of California, Berkeley, California.
- Lande, R. 1988. Genetics and demography in biological conservation. *Science* 241:1455-1460.
- Lenihan, J. M., R. Drapek, D. Bachelet, R. P. Neilson. 2003. Climate Change Effects on Vegetation Distribution, Carbon, and Fire in California. *Ecological Applications* 13(6): 1667-1681.
- Lindenmayer, D.B., and H.P. Possingham. 1996. Modeling the interrelationships between habitat patchiness, dispersal capability and metapopulation persistence of the endangered species, Leadbeater's possum, in southeastern Australia. *Landscape Ecology* 11:79-105.
- Mao, J., D. E. Green, G. M. Fellers, and V. G. Chincar. 1999. Molecular characterization of iridoviruses isolated from sympatric amphibians and fish. *Virus Research* 6: 45-52.
- Mallick, S.A., G.J. Hocking, and M.M. Driessen. 1998. Road-kills of the eastern barred bandicoot (*Perameles gunnii*) in Tasmania: an index of abundance. *Wildlife Research* 25: 139-145.
- Monk, G. 2005. California Red-Legged Frog [ds45, occurrence #820]. California Department of Fish and Game. Biogeographic Information and Observation System (BIOS). Observation made June 8, 2005. Data Retrieved April 17, 2009 from <http://bios.dfg.ca.gov>
- Munguira, M.L. and J.A. Thomas. 1992. Use of road verges by butterfly and moth populations, and the effect of roads on adult dispersal and mortality. *Journal of Applied Ecology* 29: 316-329.
- Rosen, P.C. and C.H. Lowe. 1994. Highway mortality of snakes in the Sonoran desert of southern Arizona. *Biological Conservation* 68: 143-148.
- Saunders, S., C. Montgomery, and T. Easley. 2008. Hotter and drier: The West's changing climate. The Rocky Mountain Climate Organization, and Natural Resources Defense Council. New York, New York.
- Schoener, T.W. and D. A. Spiller. 1992. Is extinction rate related to temporal variability in population size? An empirical answer for orb spiders. *The American Naturalist* 139: 1176-1207.

- Sjogren-Gulve, P. 1994. Distribution and extinction patterns within a northern metapopulation of the pool frog, *Rana lessonae*. *Ecology* 75: 1357-1367.
- Stebbins, R. C. 2003. A field guide to western reptiles and amphibians. Houghton Mifflin Company, Boston, Massachusetts.
- Storer, T. I. 1925. A synopsis of the amphibia of California. University of California Publications in Zoology 27:1-1-342.
- \_\_\_\_\_. 1933. Frogs and their commercial use. California Department of Fish and Game 19(3)203-213.
- Stuart, J. M., M. L. Watson, T. L. Brown, and C. Eustice. 2001. Plastic netting: an entanglement hazard to snakes and other wildlife. *Herpetological Review* 32(3): 162-164.
- Talley, T.S., D.A. Piechnik, and M. Holyoak. 2006. The effects of dust on the federally threatened Valley elderberry longhorn beetle. *Environmental Management* 37:647-658.
- Tellman, B. 1997. Exotic pest plant introduction in the American southwest. *Desert Plants* 13:3-10.
- Twedt, B. 1993. A comparative ecology of *Rana aurora* Baird and Girard and *Rana catesbeiana* Shaw at Freshwater Lagoon, Humboldt County, California. Unpublished. Master of Science thesis. Humboldt State University, Arcata, California. 53 pages plus appendix.
- U.S. Fish and Wildlife Service (Service). 1980. Listing the valley elderberry longhorn beetle as a threatened species with critical habitat. Friday, August 8, 1980. Sacramento, California. **Federal Register** 45:52803-52807.
- \_\_\_\_\_. 1984. Valley Elderberry Longhorn Beetle Recovery Plan. Portland, Oregon. 62 pp.
- \_\_\_\_\_. 1996. Endangered and threatened wildlife and plants; determination of threatened status for the California red-legged frog. **Federal Register** 61:25813-25833.
- \_\_\_\_\_. 2002. Recovery plan for the California red-legged frog (*Rana aurora draytonii*). Portland, Oregon. 173 pages.
- \_\_\_\_\_. 2005a. Formal Endangered Species Consultation on the Cordelia Road Bridge at Suisun Creek Replacement Project, Solano County, California (HDA-CA File # 04-SOL-0-CR, Document # P51381). Biological Opinion, reference number 1-1-05-F-0027. Sacramento, California. 34 pages.

- \_\_\_\_\_. 2005b. Review of the Suisun Valley Road Bridge (23C-077) Replacement, Solano County, California, for Inclusion with the Valley Elderberry Longhorn Beetle Programmatic Consultation (Service File Number 1-1-96-F-0156). Biological Opinion, reference number 1-1-05-F-0193. Sacramento, California. 8 pages.
- Van der Zande, A.N., W.J. ter Keurs, and W.J. Van der Weijden. 1980. The impact of roads on the densities of four bird species in an open field habitat - evidence of a long-distance effect. *Biological Conservation* 18: 299-321.
- Van Gelder, J.J. 1973. A quantitative approach to the mortality resulting from traffic in a population of *Bufo bufo* L. *Oecologia* 13:93-95.
- Verboom, B., J., K. Lankester, and J.A. Metz. 1991. Linking local and regional dynamics in stochastic metapopulation models. *Biological Journal Linnean Society* 42:39-55.
- Vos, C.C. and J.P. Chardon. 1998. Effects of habitat fragmentation and road density on the distribution pattern of the moor frog, *Rana arvalis*. *Journal of Applied Ecology* 35: 44-56.
- With, K.A. and T. O. Crist. 1995. Critical thresholds in species' responses to landscape structure. *Ecology* 76: 2246-2459.
- Wright, A. H. and A. A. Wright. 1949. Handbook of frogs and toads of the United States and Canada. Comstock Publishing Company, Inc., Ithaca, New York. 640 pages.

Appendix J FHWA Project Level Conformity  
Determination for the I-80 EB  
Cordelia Truck Scales Relocation  
Project

---



U.S. Department  
of Transportation  
**Federal Highway  
Administration**

**Federal Highway Administration  
California Division**

September 25, 2009

650 Capitol Mall, Suite 4-100  
Sacramento, CA 95814  
(916) 498-5001  
(916) 498-5008 (fax)

In Reply Refer To:  
HDA-CA  
EA: 04-0A5350

Bijan Sartipi, District Director  
California Department of Transportation  
111 Grand Avenue  
P.O. Box 23360  
Oakland, CA 94612

Attention: Allen Baradar

Dear Mr. Baradar:

**SUBJECT:** FHWA Project Level Conformity Determination for I-80 EB Cordelia Truck Scales Relocation Project

On August 31, 2009, the California Department of Transportation (Caltrans) submitted to the Federal Highway Administration (FHWA) a request for a project level conformity determination for the I-80 EB Cordelia Truck Scales Relocation Project Solano County. The project is in an area that is designated Nonattainment for Ozone and Maintenance for Carbon Monoxide (CO).

The project level conformity analysis submitted by Caltrans indicates that the transportation conformity requirements of 40 C.F.R. Part 93 have been met. The project is included in the Metropolitan Transportation Commission's (MTC) currently conforming *Transportation 2035 Plan (RTP)* and the *2009 Regional Transportation Improvement Program (RTIP)*. The current conformity determinations for the RTP and RTIP were approved by FHWA and the Federal Transit Administration (FTA) on May 29, 2009. The design concept and scope of the preferred alternative have not changed significantly from those assumed in the regional emissions analysis.

As required by 40 C.F.R. 93.116 and 93.123, the localized CO analyses are included in the documentation. The CO hotspot analysis was conducted using the *Transportation Project-Level Carbon Monoxide Protocol*. The analyses demonstrate that the project will not create any new violation of the standards or increase the severity or number of existing violations.

Based on the information provided, FHWA finds that the Conformity Determination for the I-80 EB Cordelia Truck Scales Relocation project conforms to the State Implementation Plan (SIP) in accordance with 40 C.F.R. Part 93.



If you have any questions pertaining to this conformity finding, please contact Stew Sonnenberg, FHWA Air Quality Specialist, at (916) 498-5889.

Sincerely,

A handwritten signature in cursive script, appearing to read "W. Waidehch, Jr.", written in dark ink.

For  
Walter C. Waidehch, Jr.  
Division Administrator

cc: (email)  
Glenn Kinoshita, Caltrans D-4  
Mike Brady, Caltrans HQ  
Melanie Brent, Caltrans  
Steve Luxenberg, FHWA

SSonnenberg/ac