

COST SHARING AGREEMENT

THIS COST SHARING AGREEMENT ("Agreement") is entered into as of the latter signature date below, by and between GTE MOBILNET OF CALIFORNIA LIMITED PARTNERSHIP, d/b/a Verizon Wireless, By Cellco Partnership, Its General Partner ("Verizon Wireless") and the MARIN EMERGENCY RADIO AUTHORITY ("MERA").

WHEREAS, pursuant to that certain Option and Land Lease Agreement dated April 21, 2008 (the "Verizon Wireless Lease") between Verizon Wireless and Lois Parks, trustee of the Lois Parks Trust, as to an undivided ½ interest and Lois M. Parks and Robert Edward Parks, as co-trustees of the trusts set forth under the last will of Roy A. Parks, deceased, Marin County probate case No. 27980, as to an undivided ½ interest (collectively, "Lessor"), Lessor leases to Verizon Wireless a portion (the "Verizon Wireless Premises") of that certain real property located at 28375 State Route 1, Tomales, Marin County, California, as shown in Book 100 of Parcel Maps recorded in the Office of the Marin County Tax Assessor at Page at Page 5, Lot 42 (the "Site"). Pursuant to the Verizon Wireless Lease, Verizon Wireless leases the Verizon Wireless Premises for the purpose of constructing, maintaining, repairing and operating its communications facility ("VZW Facility") and uses incidental thereto; and

WHEREAS, in connection with the VZW Facility, Verizon Wireless constructed and installed a twelve foot (12') wide access road ("Access Road") extending from the nearest public right-of-way, State Route 1, to the VZW Facility, substantially as shown on Exhibit A attached hereto; and

WHEREAS, pursuant to that certain Communications Site Lease Agreement dated August 24, 2016 (the "MERA Lease") between MERA and Lessor, Lessor leased to MERA a portion (the "MERA Premises") of the Site. Pursuant to the MERA Lease, MERA leases the MERA Premises for the purpose of constructing, maintaining, repairing and operating its communications facility ("MERA Facility") and uses incidental thereto; and

WHEREAS, MERA desires to use the Access Road for ingress and egress to and from the MERA Facility and the parties desire to enter into this Agreement to (i) provide for MERA's payment to Verizon Wireless of a portion of the initial construction costs for the Access Road and (ii) provide for the mutual maintenance, repair and upkeep of said Access Road, upon the terms set forth in this Agreement;

NOW, THEREFORE, in consideration of their mutual promises, and subject to the terms and conditions stated herein, Verizon Wireless and MERA agree as follows:

1. **Use.** Verizon Wireless and MERA shall each have the right to use the Access Road in conjunction with the Verizon Wireless Premises and MERA Premises, respectively. The right of MERA to use the Access Road is expressly contingent upon MERA paying its proportionate share of the costs for installing the Access Road as set forth in paragraph 2 herein below. Each party agrees that it will use the Access Road in a manner that will not interfere with the use of the Access Road by the other party.

2. **Payment of Construction Costs.** MERA shall pay to Verizon Wireless its proportionate share (i.e., fifty percent (50%)) for the design, construction and installation of the Access Road, including, without limitation, the material, labor and contractor fees associated with such work (collectively, "Construction Costs"). The parties acknowledge and agree that the total amount of the Construction Costs is Fifty Thousand and No/100 Dollars (\$50,000) and MERA's share of the Construction Costs is Twenty Five Thousand and No/100 Dollars (\$25,000) ("MERA's Share"). Mera shall remit MERA's Share of the Construction Costs to Verizon Wireless at the following address no later than ten (10) days after the commencement date of the MERA Lease. Thereafter, Verizon Wireless and MERA shall each have a fifty percent (50%) ownership interest in the Access Road. Verizon Wireless' payment address for MERA's Share of the Construction Costs is GTE Mobilnet of California Limited Partnership, d/b/a Verizon Wireless, 2785 Mitchell Drive, Building 9, Walnut Creek, California 94598, Attention: Mr. Thomas D. Miller.

3. **Term.** The right of MERA to use the Access Road shall commence upon Verizon Wireless' receipt of MERA's payment of its proportionate share of the Construction Costs. The right to MERA to use the Access Road and this Agreement shall terminate on (i) the date that the MERA Lease expires or earlier terminates, (ii) upon an event of default as described in Paragraph 5 below, or (iii) upon the date MERA no longer uses the Access Road due to a relocation of the MERA Premises under the terms of the MERA Lease or otherwise. The right for Verizon Wireless to use the Access Road and this Agreement shall terminate on the date that the Verizon Wireless Lease expires or earlier terminates or upon an event of default as described in Paragraph 5 below (the "Term").

4. **Maintenance.** Verizon Wireless and MERA each agree that it shall maintain and repair the Access Road during the Term of this Agreement. In the event either Verizon Wireless or MERA determines that maintenance and/or repairs to the Access Road is required, then it shall advise the other party in writing. Thereafter, the parties shall agree in writing that such maintenance and repairs are required and shall further agree in writing as to the cost of such repairs and maintenance. Each party agrees to reimburse to the other party, respectively, an amount equal to one-half (1/2) of the cost of such maintenance and repair actually paid within thirty (30) days after receipt of an invoice including all reasonable supporting documentation, provided such costs are previously approved by all parties in writing. Notwithstanding the foregoing, neither party shall have any obligation to reimburse the other party for any repair costs resulting from damage to the Access Road caused by the negligent acts or omissions or intentional misconduct of the other party or its employees, officers, agents or contractors. In the event the Access Road is damaged by the negligent acts or omissions or intentional misconduct of Verizon Wireless or MERA, then the party which caused such damage shall repair the Access Road at its sole cost and expense within thirty (30) days after the date of such damage. In the event such party does not repair the Access Road within such thirty (30) day period, then the other party (Verizon Wireless or MERA, as the case may be) may repair the Access Road and the party which caused the damage shall reimburse to the other party, an amount equal to one hundred percent (100%) of the cost of such repair actually paid within thirty (30) days after receipt of an invoice including all reasonable supporting documentation.

5. **Termination.** This Agreement may be terminated by any non-defaulting party without further liability on thirty (30) days prior written notice upon a default of any covenant or term hereof by the other party, which default is not cured within thirty (30) days of receipt of written notice of default; provided that the defaulting party shall have such extended period as may be required beyond the thirty (30) days if the nature of the cure is such that it reasonably requires more than thirty (30) days and the defaulting party commences the cure within the thirty (30) day period and thereafter diligently pursues the cure to completion; and provided further that the grace period for any monetary default is fifteen (15) days from receipt of written notice. In the event that the Verizon Wireless Lease or the MERA Lease expires or otherwise terminates prior to the expiration or earlier termination of the lease of the other party, or if either party's participation in this Agreement is otherwise terminated for any reason (the "Termination"), the Access Road shall not be removed and the other party (Verizon Wireless or MERA, as the case may be (either, the "Remaining Party")), shall then automatically become the sole owner of the Access Road without the need for the party whose interest in this Agreement is terminated ("Terminated Party") to execute and deliver to the Remaining Party any documents of transfer, and the Remaining Party shall thereafter be solely responsible for all subsequent cost and expense of repair, maintenance and removal (if applicable) of the Access Road. The parties acknowledge and agree the Terminated Party shall not be released from its share of the maintenance costs described in Paragraph 4 above applicable to the period of time prior to the effective date of the Termination. The terms and conditions of this Agreement, which by their sense and context are intended to survive, will survive the termination of this Agreement.

6. **Assignment, Use of Joint Facilities by Non-Parties.**

(a) This Agreement may be assigned by either party without the other party's consent to (i) any entity that assumes the assignor's respective lease for its respective leased premises; (ii) to the assignor's principal, affiliates, subsidiaries of its principal; (iii) to any entity which acquires all or substantially all of the assignor's assets in the market defined by the Federal Communications Commission ("FCC") in which the Site is located by reason of a merger, acquisition or other business reorganization; (iv) or to any entity which acquires or receives an interest in the majority of communications towers of the assignor in the market defined by the FCC in which the Site is located. Any other assignment requires the prior written consent of the other party, which consent shall not be unreasonably withheld or delayed.

(b) Verizon Wireless and MERA shall not permit any person or entity not a party to this Agreement to use the Access Road without the prior written consent and approval of the other party. If Verizon Wireless or MERA enters into any agreement with a third party that allows such third party to use a portion of the Access Road ("New User"), Verizon Wireless or MERA, as the case may be, shall include in such agreement a provision that requires such New User to pay its proportionate share of the Construction Costs for the Access Road and subsequent maintenance costs therefor, which payment shall be made to Verizon Wireless and MERA in proportion to the amount of the total Construction Costs for the Access Road that Verizon Wireless and MERA each will have paid.

7. **Intentionally Omitted.**

8. **Insurance.** Verizon Wireless and MERA hereby waive and release any and all rights of action for negligence against the other which may hereafter arise on account of damage to the Site or the Access Road, resulting from any fire, or

other casualty of the kind covered by standard fire insurance policies with extended coverage, regardless of whether or not, or in what amounts, such insurance is now or hereafter carried by the parties, or either of them. These waivers and releases shall apply between the parties and shall also apply to any claims under or through either party as a result of any asserted right of subrogation. Verizon Wireless and MERA each agree that at its own cost and expense, each will maintain commercial general liability and property liability insurance with liability limits of not less than \$1,000,000 for injury to or death of one or more persons in any one occurrence and \$500,000 for damage or destruction to property in any one occurrence. MERA agrees that Verizon Wireless may self-insure against any loss or damage which could be covered by a commercial general liability insurance policy. All policies of insurance covering property damage obtained by either party concerning the Site and the Access Road shall waive the insurer's right of subrogation against the other party.

9. **Indemnity.** Subject to Paragraph 8 above, each party shall indemnify and hold the other harmless against any claim of liability or loss (including reasonable attorneys' fees and costs) from personal injury or property damage resulting from or arising out of the use and occupancy of the Site or the Access Road by the indemnifying party, its employees or agents, excepting, however, such claims or damages as may be due to or caused by the acts or omissions of the other party, or its employees or agents.

10. **Environmental.**

(a) Each party will be responsible for all obligations of compliance with any and all environmental and industrial hygiene laws, including any regulations, guidelines, standards or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene conditions or concerns as may now or at any time hereafter be in effect, that are or were in any way related to activity now conducted in, on, or in any way related to the Access Road, unless such conditions or concerns are caused by the activities of the other. Without limiting the foregoing, with respect to MERA's activities on the Site, MERA acknowledges and agrees that MERA and its agents and contractors shall be required to comply with (i) all requirements implemented by the United States Fish and Wildlife Service ("USFWS") and any tribe having a legitimate interest in the Site, including the Federated Indians of Graton Rancheria ("FIGR"), (ii) the FIGR Treatment Plan attached hereto as Exhibit B, and (iii) the USFWS Biological Opinion dated June 17, 2009 attached hereto as Exhibit C.

(b) Each party shall hold the other harmless and indemnify the other from and assume all duties, responsibility and liability at its sole cost and expense, for all duties, responsibilities, and liability (for payment of penalties, sanctions, forfeitures, losses, costs or damages) and for responding to any action, notice, claim, order, summons, citation, directive, litigation, investigation or proceeding which is in any way related to: i) such party's failure to comply with any environmental or industrial hygiene law, including without limitation any regulations, guidelines, standards, or policies of any governmental authorities regulating or imposing standards of liability or standards of conduct with regard to any environmental or industrial hygiene concerns or conditions as may now or at any time hereafter be in effect; and ii) any environmental conditions arising out of or in any way related to the condition of the Access Road or activities conducted thereon by such party, unless such environmental or industrial hygiene conditions are caused by the other.

11. **Destruction or Condemnation of Access Road.** If all or part of the Access Road is destroyed and cannot be repaired or the property on which the Access Road is located is taken by condemnation, then this Agreement shall terminate. If the Access Road is damaged and can be repaired, then the Access Road shall be repaired in accordance with the terms of Paragraph 4, above. MERA and Verizon Wireless agree to share any condemnation award received for the Access Road in accordance with their proportionate interests in the Access Road.

12. **Notice.** All notices hereunder must be in writing and shall be deemed validly given if sent by certified mail, return receipt requested or by commercial courier, provided the courier's regular business is delivery service and provided further that it guarantees delivery to the addressee by the end of the next business day following the courier's receipt from the sender, addressed as follows (or any other address that the party to be notified may have designated to the sender by like notice):

Verizon Wireless:	GTE Mobilnet of California Limited Partnership d/b/a Verizon Wireless 180 Washington Valley Road Bedminster, New Jersey 07921 Attention: Network Real Estate Reference: Tomales (Site # 173496)
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MERA: Marin Emergency Radio Authority (MERA)
c/o Novato Fire Protection District
95 Rowland Way
Novato, CA 94945
Attn: Executive Officer

Notice shall be effective upon actual receipt or refusal of receipt as shown on the receipt obtained pursuant to the foregoing.

13. **Integration.** It is understood and agreed that this Agreement contains all agreements, promises and understandings between Verizon Wireless and MERA and that no verbal or oral agreements, promises or understandings shall be binding upon either Verizon Wireless or MERA in any dispute, controversy or proceeding at law, and any addition, variation or modification to this Agreement shall be void and ineffective unless made in writing and signed by the parties. In the event any provision of this Agreement is found to be invalid or unenforceable, such finding shall not effect the validity and enforceability of the remaining provisions of this Agreement. The failure of either party to insist upon strict performance of any of the terms or conditions of this Agreement or to exercise any of its rights under this Agreement shall not waive such rights and such party shall have the right to enforce such rights at any time and take such action as may be lawful and authorized under this Agreement, either in law or in equity.

14. **Successors.** This Agreement shall extend to and bind the heirs, personal representatives, successors and assigns of the parties hereto.

15. **Governing Law.** This Agreement shall be governed by the laws of the State of California without regard to its conflicts of laws provisions.

16. **Recitals.** The Recitals set forth on the first page of this Agreement are incorporated herein by reference.

17. **Submission of Agreement.** The submission of this Agreement for examination does not constitute an offer to contract and this Agreement becomes effective only upon the full execution of this Agreement by the parties. If any provision herein is invalid, it shall be considered deleted from this Agreement and shall not invalidate the remaining provisions of this Agreement. Each of the parties hereto warrants to the other that the person or persons executing this Agreement on behalf of such party has the full right, power and authority to enter into and execute this Agreement on such party's behalf and that no consent from any other person or entity is necessary as a condition precedent to the legal effect of this Agreement.

18. **Survival.** The provisions of this Agreement relating to indemnification from one party to the other party shall survive any termination or expiration of this Agreement. Additionally, any provisions of this Agreement which require performance subsequent to the termination or expiration of this Agreement shall also survive such termination or expiration.

19. **Captions.** The captions contained in this Agreement are inserted for convenience only and are not intended to be part of this Agreement. They shall not affect or be utilized in the construction or interpretation of this Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date last written below.

VERIZON WIRELESS:

GTE MOBILNET OF CALIFORNIA LIMITED
PARTNERSHIP, d/b/a Verizon Wireless

By Cellco Partnership, Its General Partner

By: _____

Name: Brian Mecum

Title: Area Vice President Network

Date: _____

MERA:

MARIN EMERGENCY RADIO AUTHORITY

By: _____

Name: _____

Title: Executive Officer

Date: _____

APPROVED AS TO FORM:

By: _____

Name: _____

Title: MERA COUNSEL

EXHIBIT A

DEPICTION OF ACCESS ROAD

[ATTACHED]

JES ENGINEERING, INC.
 1385 WILLOW WAY, SUITE 100
 CONCORD, CA 94521
 PHONE: (925) 275-6000
 FAX: (925) 874-1314

verizonwireless
 275 WILLOW AVE, SUITE 9
 WALNUT CREEK, CA 94598
 OFFICE: (925) 275-6000
 HOME: (925) 275-6000
 PHONE: (925) 275-6033
 SITE NO. 173498
 28375 SHORELINE HIGHWAY
 SAN RAFAEL, CA 94971
 MARIN COUNTY

VZW CE	SIGNATURE	DATE
VZW RF	SIGNATURE	DATE
VZW PA	SIGNATURE	DATE
VZW EE	SIGNATURE	DATE
PROPERTY OWNER	SIGNATURE	DATE
NSA WIRELESS ZONING	SIGNATURE	DATE
NSA WIRELESS RE	SIGNATURE	DATE
NSA WIRELESS CONSTR	SIGNATURE	DATE

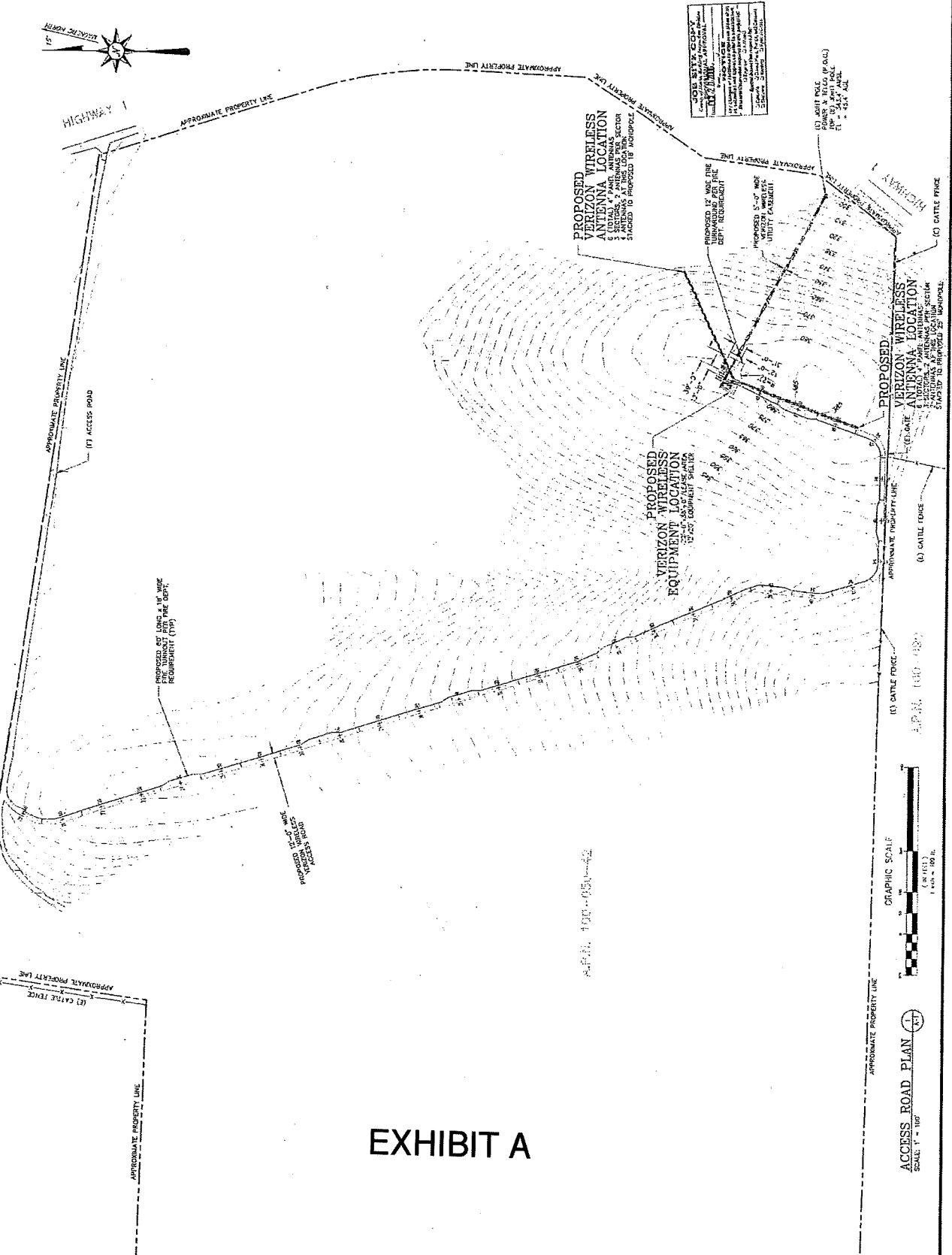


NO.	DATE	ISSUE
A	08/26/08	FOR REVIEW
0	08/26/08	100% CDS

SHEET TITLE
ACCESS ROAD PLAN

SHEET NUMBER
A-1

LES JOB # 07-23518A



JOB SIX COPY
 THIS DRAWING IS THE PROPERTY OF JES ENGINEERING, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF JES ENGINEERING, INC.



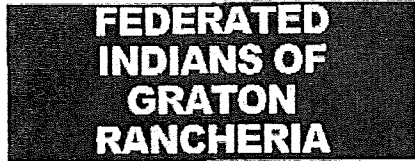
EXHIBIT A

EXHIBIT B

FIGR TREATMENT PLAN

[ATTACHED]

6400 Redwood Drive, Suite 300
Rohnert Park, CA 94928
Office: 707-566-2288
Fax: 707-566-2291
www.gratonrancheria.com



Fax

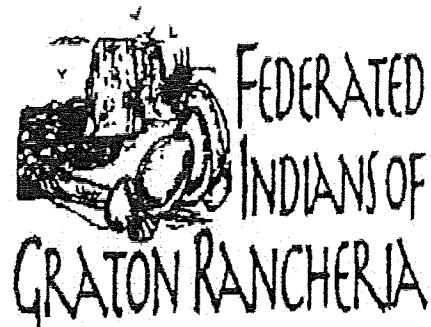
To: Jennifer Gwen Vito	From: Dianna Rush
Fax: 415-525-4760	Pages: 18
Phone: 781-552-9842	Date: May 28, 2009
Re: Treatment Plan	
<input type="checkbox"/> Urgent <input type="checkbox"/> For Review <input type="checkbox"/> Please Comment <input type="checkbox"/> Please Reply <input type="checkbox"/> Please Recycle	

Ms. Vito,

Following is the treatment plan for the Tomales project. Please let me know if you do not receive all 18 pages. I can be reached by phone at 707-566-2288, ext 122 or by email at drush@gratonrancheria.com.

Dianna Rush
Administrative Assistant
Federated Indians of Graton Rancheria

EXHIBIT B



Treatment Plan

The Federated Indians of Graton Rancheria

And

VERIZON CELL TOWER

28375 SHORELINE HWY, TOMALES, CA

FIGR Project Number

05062009

Contact Information

Federated Indians of Graton Rancheria
Tribal Administrator
 6400 Redwood Drive, Suite 300
 Rohnert Park, CA 94928
 707 566-2288

Lead Agency Verizon Wireless
 Peter Maasgaard
 2755 Mitchell Drive
 Walnut Creek, CA 94598
 (925) 279-6635
 (510) 504-5021 cell

Contractor
 NSA Wireless, Inc.
 Roger Sharp
 Bishop Ranch 15, First Floor
 12647 Alameda Blvd. Ste 110
 San Ramon, CA 94583
 (925) 244-1890 x225
 (510) 918-9169 cell

JFC Construction Inc.
 Steel Goldworthy
 4901 Pacheco Blvd.
 Martinez, CA 94553
 (925) 228-0524
 (925) 266-0914 cell

Archaeologist Archeological Resources Technology (ART)
 Carolyn Lasec RPM
 135 California Ave
 San Francisco, CA 94103
 307 Decatur
 Windsor, CA 94942
 (415) 603-3143 cell

Treatment Plan

July 2 2009

Cultural Resources Treatment Plan

AN AGREEMENT BETWEEN THE
Federated Indians of Graton Rancheria
And
Verizon Wireless Project
EBI # 61072065
FIGR Project Number
05062009

I. PARTIES

The PARTIES to this Agreement are the Federated Indians of Graton Rancheria, a sovereign government and federally recognized Indian Tribe ("Tribe") and the Verizon Wireless Project, EBI#6107206 (lead agency, land owner or developer) hereafter referred to as the "contractor".

II. PROJECT

This Agreement concerns a specific project site within the traditional territory of FIGR and located at 28375 Shoreline Hwy, Tomales, CA. The project is assigned FIGR Project Number

III. PURPOSE

The purpose of this Agreement is to formalize protocol and procedures for the protection and treatment of, including but not limited to, Native American human remains, funerary objects, cultural and religious landscapes, ceremonial items, and cultural items, in the event that any are discovered in conjunction with the Project's development and use, including archaeological studies, excavation, geotechnical investigations, grading, and all ground-disturbing activity. This Agreement also formalizes procedures for Tribal monitoring during archaeological studies, grading, and ground disturbing activities for the Project. See Attachment One. This Agreement is effective as of the date provided for in Section XVI.

IV. CULTURAL AFFILIATION

The PARTIES agree that the Project area consists of land which has been traced to and traditionally occupied by the Southern Pomo and Coast Miwok people of the Tribe. The Tribe has designated its Sacred Sites Protection Committee to act on the Tribe's behalf with respect to the provisions of this Agreement. Any human remains which are found in conjunction with the development of this Project shall be treated in accordance with Section VII of the Agreement. Any other cultural resources shall be treated in accordance with Section VIII of this Agreement.

V. COORDINATION WITH COUNTY CORONER

The site archaeologist and contractor shall immediately contact the Coroner in the event that any human remains are discovered at the project site. The Coroner shall ensure that notification is provided to the Native American Heritage Commission ("NAHC") as required by California Health & Safety Code Section 7050.5 and Public Resources Code Section 5097.98(a).

VI. MOST LIKELY DESCENDANT (MLD)

In the event that Native American human remains are found at the project site, the PARTIES understand that the determination of Most Likely Descendant ("MLD") under California Public Resources Code Section 5097.98 will be made by the NAHC upon notification to the NAHC of the discovery of said remains at the Project site. Given the location of the site and the history and prehistory of the area, the NAHC has made a determination in previous incidents of the discovery that the human remains are ancestors of the Federated Indians of Graton Rancheria, who have been designated as the MLD.

VII. TREATMENT OF NATIVE AMERICAN HUMAN REMAINS

In the event that Native American human remains are found on the property at any time the following provisions shall apply.

The Coroner shall immediately be notified, ground disturbing activities within 50 feet shall cease and the Tribe shall be allowed, pursuant to California Public Resources Code Section 5097.98(a), to: (1) inspect the site of the

discovery; and, (2) make determinations as to how the human remains and grave goods should be treated and re-interred with appropriate dignity.

The Tribe shall complete its inspection and make its written MLD recommendation within forty-eight (48) hours of being granted access to the site. The PARTIES agree to discuss in good faith what constitutes "appropriate dignity", as that term is used in the applicable statutes and in the Tribe's customs and traditions. The Tribe shall have the final determination as to the disposition and treatment of human remains and grave goods.

The PARTIES acknowledge that FIGR's highest priority is to avoid disturbing human remains through consultation and appropriate avoidance and mitigation measures. It is understood by the PARTIES that avoidance of the human remains and grave goods may require changes to the Project plans and activities.

When there is an inadvertent discovery of human remains, the PARTIES acknowledge the Tribe's desire for the human remains to be left "in situ" and without further and future disturbance. A good faith effort will be made by the contractor to accommodate FIGR's cultural practices.

No pictures may be taken of the remains, except by written authorization from the Coroner and the Tribe. The archaeologist may draw the remains for cataloging purposes.

In the case of inadvertent discoveries of human remains the PARTIES agree the reburial of the remains and their associated funerary objects will be in an area as close as possible to that location or if soil has been moved, to the original location. The human remains should not be subject to any future disturbances and the PARTIES will take appropriate measures to record this information with the appropriate authorities and keep it confidential. Reburial of human remains shall be accomplished in compliance with the California Public Resources Code Section 5097.98(a) and (b). The exact reburial location will be determined after consultation with the Tribe and the location designated will be recorded in a manner to protect it and to notify future users on its location, in accordance with Section VIII. The contractor shall be responsible for reburial costs up to a maximum of \$500.00 per discovery as outlined in the burial agreement labeled "Attachment Two".

The term "human remains" encompasses more than human bones. The Tribe's traditions call for the burial of associated cultural resources (funerary objects) with the deceased, the ceremonial burning of Native American human remains, funerary objects, grave goods and animals. Ashes and other remnants of these burning ceremonies, as well as, funerary objects associated

with or buried with the Native American remains are to be treated in the same manner as bones or bone fragments that remain intact.

The Tribe requests all human remains and associated funerary objects remain at the site until arrangements are made for a location to rebury. The contractor shall provide an appropriate, locked and secure location on the site to store the human remains until final reburial plans have been made by the Tribe's MLD. If this is not possible, the MLD shall determine the appropriate storage location, which may include the Tribal representative taking possession of the remains.

VIII. NON-DISCLOSURE OF LOCATION OF REBURIALS

It is understood by the PARTIES that, unless otherwise required by law, the site of any reburial of Native American human remains shall not be disclosed and will not be governed by public disclosure requirements of the California Public Records Act, California Government Code § 6250 et seq. The Coroner shall withhold public disclosure of information related to such reburial pursuant to the specific exemption set forth in California Government Code Section 6254.5(e).

IX. TREATMENT OF CULTURAL RESOURCES

The ceremonial and cultural items left by our ancestors reflect the religious beliefs, rituals, customs, and practices of the Tribe. This location is part of a sacred, religious or cultural landscape where these items may remain today. They were left in this place for a specific reason and purpose.

The contractor agrees to consult with the Tribe on the curation or disposition of all cultural items, including ceremonial items, which may be found at the property. The contractor may waive any and all claims to ownership of Tribal ceremonial and cultural items, including archaeological items which may be found on the site in favor of the Tribe. If the contractor curates the materials in an institution meeting State guidelines, the location must be within FIGR's ancestral territory (as that territory is defined by Congress in the restoration of the Tribe).

If temporary possession of cultural items by an entity or individual other than the Tribe is necessary, said entity or individual shall not possess those items for longer than is reasonably necessary for cataloging. This shall not exceed one calendar year. The Tribe will receive two copies of the archaeological report from the contractor.

It is especially important that non human cultural resources and artifacts be left "in situ" to the greatest degree possible. If the Tribal monitor determines the resources are in danger of being damaged or stolen if left "in situ", the Tribe, through the MLD will work with the agency/owner to determine an appropriate location to rebury for their preservation. If the articles are to be studied, their treatment and disposition must be defined in an addendum to the Treatment Plan.

Native plants at the property may have been used to make ceremonial items, such as baskets, and for other religious rituals or healing. Many continue to thrive to this day despite other use. The contractor and the Tribe agree to develop a plan to protect, preserve and restore these plants to the greatest extent possible for the use of current and future Native Americans. The parties agree to discuss gathering and harvesting of the plant materials for Tribal use in the future.

The contractor also agrees that the treatment procedures for any discovery, planned or inadvertent, and the disposition of any cultural resources shall be determined by the Tribe. The Tribe shall make these treatment procedures available to the contractor and its contractors as guidance in complying with the provisions of this Agreement prior to the implementation of any project activities. The contractor its agents agree to consult with and immediately advise the Tribe of any discoveries of cultural resources associated with this Project.

X. UNRECORDED SIGNIFICANT SITES IMPACTED BY PROJECT

The PARTIES agree additional significant sites or sites not identified in the original environmental review process will be subjected to further archaeological and cultural significance evaluation by the contractor and the Tribe. Further evaluation shall include a determination of additional mitigation measures to treat sites in a culturally appropriate manner consistent with Tribal policies, this Treatment Plan and CEQA requirements for mitigation of impacts to cultural resources.

XI. TRIBAL MONITORS

The description of responsibilities and authority for Tribal monitors operations at the site is attached. It specifies the authority and limitations, responsibilities and compensation of the Tribal monitors. It is considered a separate contract from the Treatment Plan, further explaining the monitor's duties, responsibilities and pay. (See Attachment One)

XII. ENVIRONMENTAL COMPLIANCE

Nothing in this Agreement shall excuse the "contractor" from their obligations under any applicable state or federal laws or regulations, including but not limited to the California Environmental Quality Act CEQA; California Public Resources Code § 21000 et seq., the California Civil Code § 815.3; the California Government Code § 65040.2, 65092, 65351, 65352, 65560, 65352.3, 65352.4, 65562.5, the National Historic Preservation Act ("NHPA") 16 United States Code ("U.S.C.") § 470 et seq.; California Public Resources Code 5097.98, 5097.98C, and 5097.99; California Health and Safety Code Sections 7050.5C; California Government Code Section 6254; the Native American Graves Protection and Repatriation Act, 25 U.S.C. § 3001 et seq.; the California Native American Graves Protection and Repatriation Act of 2001, California Health and Safety Code § 8010 et seq.; the Native American Free Practice of Religion Act, 16 U.S.C. § 1996, et seq.; and the First Amendment to the United States Constitution. Nothing in this Agreement is intended to make any of the above-referenced laws applicable where such laws would otherwise be inapplicable.

XIII. SEVERABILITY

Should any part of this Agreement be found by any court or agency of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby and shall be valid and enforceable to the fullest extent permitted by law.

XIV. LIMITATION ON SCOPE

This Agreement is unique to this Project only and does not set a precedent for other projects.

Attachment One

FIGR Monitoring Contract

FIGR Project Number

05062009

TRIBAL MONITORING

1. SPECIFICATIONS

There are many sensitive and sacred cultural resources the PARTIES agree to preserve and protect. Consultation between the parties will occur well before the project is finalized and the "Treatment Plan" will specify the conditions for Native American monitoring at the site. The monitor will be employed by the "contractor" and works as a "contract employee" of the Tribe.

The Tribal Monitor will be present during archaeological testing, conduction of studies and surveys, geological/geotechnical testing, and during mitigation, grading, and all ground-disturbing activities in the project. Given the nature and sensitivity of known archaeological sites and cultural resources that are in the project area, all soil disturbance and excavation will be monitored by a monitor identified by FIGR.

In the event that human remains are found during these activities, Tribal monitors are empowered to stop or relocate excavation activities pending further investigation by the Coroner and the FIGR's as the MLD. The monitors are further empowered to recommend stoppage or relocate excavation activities, for short periods of time, to conduct further controlled excavation for evaluation of the significance of discovered cultural items. Surface or subsurface artifacts of significance are mapped during the survey.

If Native American human remains are found, coordination of the treatment of Native American remains and funerary objects and any cultural, archaeological and ceremonial items will be conducted in accordance with Sections V through X of this Agreement.

All modifications to the project's activities requiring soil disturbance shall be discussed with the monitor prior to the commencement of the work with the agency/owner to clarify mitigation measures and monitoring activities. The Sacred Sites Protection Committee representative(s) and/or the Tribe's designated representative shall be invited to participate in this discussion. If necessary, a written amendment to the treatment plan will be agreed to for the project.

If necessary, a qualified archaeologist may be required to be present during grading activities to identify and /or ascertain the significance of any subsurface cultural resources or to aid in the avoidance of sensitive areas.

2. MONITORED PROJECTS

The PARTIES agree the project site has significant known and unknown cultural resources and is possibly a "cultural landscape" of importance to the Tribe. All soil disturbances within the scope of work and the "Area of Potential effect" (APE) will therefore be monitored by a FIGR monitor to protect and preserve these resources, unless otherwise specified in an attached document. A notice of the work schedule for the Native American monitor shall be provided by the contractor or its agents to the monitor as early as possible or a minimum of ten (10) working days prior to the specified work commencing.

3. COMPENSATION

The agency/owner shall hire a Native American monitor identified by the Tribe for the soil disturbing or excavation activities of the project and shall be responsible for coordinating the activities of the project to provide protection of cultural resources. The monitor identified by FIGR will work as a "contract employee" of the Tribe.

The Tribe recognizes that dangerous working conditions can exist at a work site, particularly during grading and excavation operations. The monitors will review safety procedures with the site supervisor and attend all safety meetings.

The agency/owner shall compensate the Native American monitors at a rate no less than \$ 55.00 per hour and mileage at a rate of \$0.55 per mile or the current rate established by the Federal government. A minimum half-day charge (four hours) will be charged to the owner/developer for unannounced work stoppages for monitors. The hourly rate will not be applicable to travel time to and from the project site. If week end work is required the rate is 150% of the base rate. If work is required between the hours of 7:00 PM to 7:00AM or on a Federal or State holiday, the hourly rate is 200% of the base rate. These rates are commensurate with industry standards for pay during non standard times.

The parties agree that the Tribe will invoice signatory agency. The monitors will send copies of their daily logs to the Tribal Office with their invoice and copies of these documents will be forwarded to the lead agency / contractor / developer. The contractor also agrees to remit payment in full directly to the Tribal Office within thirty (30) days of receipt of the Tribe's invoice or be charged a late fee of 5% of the total invoice for each monitor.

Ernie C. Ball

05-22-09

Por K

5-20-09

[Signature]
5-20-09

The Tribal Office will mail a pay check to the monitors on a monthly basis within 14 days of receiving their invoice and daily logs.

4. INSURANCE

The Tribal Office will provide, on request, the lead agency/contractor/developer with certificates of insurance provided for FIGR's monitors by the Tribe. The insurance will include workman's comp, liability, use of private vehicle and errors and omissions. Copies of the type and limits of the coverage will be provided to the monitors and developer on request.

Ernest C. Best 05-27-09
Council Liaison: Sacred Sites Protection Committee Date

Manana Holleran
Signature for financially responsible agency
21 B Street
Address
Burlington, MA 01803
City, State, Zip
(781) 273-2500 (781) 273-3311
Phone FAX

FIGR Tribal Administrator Date

Project Title: Verizon Wireless Project EBI #61077065

FIGR Project Number: 05-27-267

Agency Contract Number: Tomales, CA

Attachment Two

Burial Agreement

Burial Contract

The Treatment Plan specifies the procedures for the dignified handling of Native American human remains and associated funerary objects, if they are unearthed during construction. The following procedures and agreements are meant to guide and speed the reburial of our ancestors.

1. The reburial will take place in the following location. (The lead agency is responsible for securing permission from the land owner after consultation with FIGR). Guidelines from the Treatment Plan will be used to determine the location.

2. The reburial is a private Tribal function, not open to the public.
3. The financially responsible agency will have the location GPS coordinates recorded and provide the information to the Tribe and the Northwest Information Center.
4. The financially responsible agency will pay the Tribe to dig the grave at a rate of \$20.00 per hour or be responsible to have the grave dug according to FIGR specifications.
5. The financially responsible agency will pay Tribal members and elders to present the reinterment ceremony. They will be reimbursed for mileage from the Tribal Office, a meal and a \$50.00 reburial fee per participant up to 5 Tribal members. The amount shall not exceed \$500.00.
6. All Parties will keep the location of the reburial confidential, according to public laws.

The financially responsible agency initials: TH

Attachment Three

FIGR Monitoring Log

FIGR Tribal Monitor Daily Record Form

Monitor Name		Date	
Arrival	Departure	Location and Mileage	
Known cultural, sacred or gathering sites in close proximity			
FIGR Project Number <i>05062009</i>		Site Archaeologist and firm name	
Reason for Monitoring			
<input type="checkbox"/> Evaluation/Testing		<input type="checkbox"/> Presence/Absence	<input type="checkbox"/> Soil Excavation/Disturbance
Description and scope of work (attach map if possible)			
Soil description/type			
Type of excavation <input type="checkbox"/> Unit <input type="checkbox"/> STP <input type="checkbox"/> Trench <input type="checkbox"/> Pit <input type="checkbox"/> Auger		Size of excavation Depth Width Length	
Description of cultural resources and disposition			
Recommendations and agreements suggested			
Monitor Signature		Archaeologist or Site Supervisor Signature	

Treatment Plan

July 2, 2008

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EXHIBIT C

USFWS BIOLOGICAL OPINION

[ATTACHED]



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:

81420-2007-F-1711-2

JUN 17 2009

Mr. Daniel Abeyta
Environmental Coordinator
Federal Communication Commission
1445 12th Street Southwest
Washington, D.C. 20554

Subject: Biological Opinion for the Proposed Telecommunication Facility in Tomales, Marin County, California (EBI Project No. 61082577)

Dear Mr. Abeyta:

This is in response to your September 20, 2007 request for informal consultation with the U.S. Fish and Wildlife Service (Service) on the Proposed Telecommunication Facility in the Town of Tomales, in Marin County, California. At issue are the potential effects of the proposed project on the threatened California red-legged frog (*Rana aurora draytonii*) (red-legged frog), the endangered Myrtle's silverspot butterfly (*Speyeria zerene myrtilae*), the endangered yellow larkspur (*Delphinium luteum*), and the endangered Baker's larkspur (*Delphinium bakeri*). According to the revised botanical survey done by Michael Brandman Associates, yellow larkspur, Baker's larkspur and blue violet were not found on the proposed site. Based on these results and other information available, the Service has therefore determined that the proposed project is not likely to adversely affect the yellow larkspur, Baker's larkspur or the Myrtle's silverspot butterfly. This document represents the Service's biological opinion on the red-legged frog. This document has been prepared under the authority of the Endangered Species Act of 1973, as amended (16 U.S.C. §1531 *et seq.*) (Act).

This document is based on: (1) your letter dated September 20, 2007, with enclosures; (2) your letter and biological assessment dated August 22, 2008, and enclosures; (3) your botanical survey results dated April 21, 2009 and May 1, 2009; (4) other electronic mail and telephone conversations between EBI Consulting and the Service; and (5) other information available to the Service.

CONSULTATION HISTORY

September 20, 2007: The Service received a letter dated September 21, 2007, from the EBI Consulting requesting informal consultation.

EXHIBIT C

- January 10, 2008: The Service sent an email to the EBI Consulting recommending formal consultation and requesting additional information about the proposed project.
- August 21, 2008: The Service received a biological assessment from EBI Consulting.
- March 11, 2009: The Service sent a letter requesting additional information, including a botanical survey.
- April 21, 2009: The Service received the botanical survey results from EBI Consulting.
- April 30, 2009: The Service received the complete set of construction drawings for the proposed project from EBI Consulting.
- May 1, 2009: The Service received the revised botanical survey results from EBI Consulting.

BIOLOGICAL OPINION

Description of the Proposed Action

Verizon Wireless proposes to construct a 25-foot monopole and an 18-foot monopole 1-mile north of Tomales. Each monopole will be within a four foot by four foot lease area and surrounded by cattle fence. Two antennas will be collocated on the 25-foot monopole and four antennas will be collocated on the 15-foot monopole. A 12-foot by 20-foot telecommunication equipment shelter, two mounted HVAC units, two mounted GPS antennas, a pad-mounted transformer, a generator, and a 210-gallon diesel fuel tank will be constructed between the two monopoles in a 20-foot by 30-foot leased area. This area will also be fenced. Utilities will run 500 feet underground from Shoreline Highway to the shelter. Coax cables will run underground from the shelter 250 feet to the 25-foot monopole and 250 feet to the 15-foot monopole. A 3,000 foot dirt trail will be widened to 12-feet and to 18-feet at 7 locations for turn-outs and then graveled.

Avoidance and Conservation Measures – California red-legged frog

The FCC proposes the following measures to avoid, minimize, and compensate for effects to the California red-legged frog, by implementing the following measures:

1. At least 15 days prior to the onset of activities, Verizon shall submit the name(s) and credentials of biologists who would conduct activities specified in the following measures. No project activities shall begin until proponents have received written approval from the Service that the biologist(s) is qualified to conduct the work.
2. A Service-approved biologist shall survey the work site two weeks before the onset of activities. If California red-legged frogs, tadpoles, or eggs are found, the approved biologist shall contact the Service to determine if moving any of these life-stages is appropriate. In making this determination, the Service shall consider if an appropriate

relocation site exists. If the Service approves moving animals, the approved biologist shall be allowed sufficient time to move California red-legged frogs from the work site before work activities begin. Only Service-approved biologists shall participate in activities associated with the capture, handling, and monitoring of California red-legged frogs.

3. Before any construction activities begin on a project, a Service-approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the California red-legged frog and its habitat, the importance of the California red-legged frog and its habitat, the general measures that are being implemented to conserve the California red-legged frog as they relate to the project, and the boundaries within which the project may be accomplished. Personnel will also be instructed on the penalties for not complying with avoidance and minimization measures. If new construction personnel are added to the project, the contractor will ensure that the personnel receive the mandatory training before starting work. Brochures, books, and briefings may be used in the training session, provided that a qualified person is on hand to answer any questions.
4. To prevent California red-legged frogs from moving through the project site during construction, temporary exclusion fencing will be placed around a defined work area two days prior to the start of construction activities and immediately after the pre-construction survey. The fence should be made of a material that does not allow California red-legged frogs to pass through, and the bottom should be buried to a depth of two inches so that these species cannot crawl under the fence. To avoid potential entanglement of listed species, the use of plastic monofilament netting will be prohibited.
5. To ensure that no California red-legged frogs are present in the study area when construction begins, Verizon will conduct a preconstruction survey within the area to be disturbed including under all construction vehicles that have been on the site overnight. If any California red-legged frogs are found during pre-construction surveys or during construction, all construction activities will cease and the Service will be notified. Biologists handling the species must be in possession of appropriate federal and state permits to move the species.
6. Prior to the start of daily construction activities during initial ground disturbance, the biological monitor will inspect the perimeter fence to ensure that it is neither ripped nor has holes and that the base is still buried. The fenced area will also be inspected to ensure that no frogs are trapped in it. Any frogs found along and outside the fence will be closely monitored until they move away from the construction area.
7. A Service-approved biologist shall be present at the work site until such time as all removal of California red-legged frogs, instruction of workers, and habitat disturbance has been completed. After this time, the contractor or Verizon shall designate a person to monitor on-site compliance with all minimization measures. The Service-approved biologist shall ensure that this individual receives training outlined above in measure 3 and in the identification of California red-legged frogs. The monitor and the Service-approved biologist shall have the authority to halt any action that might result in impacts

that exceed the levels anticipated by the Service during review of the proposed action. If work is stopped, the Service shall be notified immediately by the Service-approved biologist or on-site biological monitor.

8. During project activities, all trash that may attract predators shall be properly contained, removed from the work site, and disposed of regularly. Following construction, all trash and construction debris shall be removed from work areas.
9. All fueling and maintenance of vehicles and other equipment and staging areas shall occur at least 60 feet from any riparian habitat or water body. Verizon shall ensure contamination of habitat does not occur during such operations. Prior to the onset of work, Verizon shall prepare a plan to allow a prompt and effective response to any accidental spills. All workers shall be informed of the importance of preventing spills and of the appropriate measures to take should a spill occur.
10. A Service-approved biologist shall ensure that the spread or introduction of invasive exotic plant species shall be avoided to the maximum extent possible. When practicable, invasive exotic plants in the project areas shall be removed.
11. Project sites shall be revegetated with an appropriate assemblage of native upland vegetation suitable for the area.
12. The number of access routes, number, and size of staging areas, and the total area of the activity shall be limited to the minimum necessary to achieve the project goal. Routes and boundaries shall be clearly demarcated, and these areas shall be outside of riparian and wetland areas. Where impacts occur in these staging areas and access routes, restoration shall occur as identified in measures 10 and 11 above.
13. Work activities shall be completed between April 1 and November 1. If ground-disturbing activities are necessary after the onset of the rainy season, the project proponent will contact the Service to determine whether additional measures are necessary to minimize potential affects.
14. To control erosion during and after project implementation, Verizon shall implement best management practices, as identified by the appropriate Regional Water Quality Control Board.
15. A Service-approved biologist shall permanently remove, from within the project area, any individuals of exotic species, such as bullfrogs (*Rana catesbeiana*), crayfish, and centrarchid fishes, to the maximum extent possible. Verizon shall have the responsibility to ensure that their activities are in compliance with the California Fish and Game Code.

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.” The action area is located approximately one mile north of Tomales, California at 28375 Shoreline Highway in

Marin County. The proposed project will occur on 1.51-acres of a 196.8-acre lot which is predominantly undeveloped pasture land.

Analytical Framework for the Jeopardy Analysis

Jeopardy Determination

In accordance with policy and regulation, the jeopardy analysis in this Biological Opinion relies on three components: (1) the *Status of the Species and Environmental Baseline*, which evaluates the California red-legged frog range-wide conditions, the factors responsible for that condition, and their survival and recovery needs; and evaluates the condition of this listed species in the action area, the factors responsible for that condition, and the relationship of the action area to the survival and recovery of this animal; (2) 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 this species; and (3) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on them.

In accordance with policy and regulation, this jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the California red-legged frog 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 any of this species in the wild.

The jeopardy analysis in this Biological Opinion places an emphasis on consideration of the range-wide survival and recovery of the California red-legged frog and the role of the action area in the survival and recovery of this listed species as the context for evaluating the significance of the effects of the proposed Federal action, taken together with cumulative effects, for purposes of making the jeopardy determination.

STATUS OF THE SPECIES/ENVIRONMENTAL BASELINE

California Red-legged Frog

Status of the Species

The California red-legged frog was listed as a threatened species on May 23, 1996 (Service 1996). 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). A recovery plan was published for the California red-legged frog on September 12, 2002 (Service 2002).

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 (3.81 to 12.95 centimeters) 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

(1.52 to 7.87 centimeters) 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).

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 1,500 meters 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 breed between November and April in still or slow-moving water at least 2½ feet (0.7 meters) in depth with emergent vegetation, such as cattails (*Typha* spp.), tules (*Scirpus* spp.) or overhanging willows (*Salix* spp.) (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). Red-legged frogs breed from November through March with earlier breeding records occurring in southern localities (Storer 1925). 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 1-2 miles (1.6-3.2 kilometers) 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 (*Baccharis pilularis*), California blackberry thickets (*Rubus ursinus*), and root masses associated with willow (*Salix species*) and California bay (*Umbellularis californica*) 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 (1.8-meter) 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 (45.7 centimeters) 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 (0.8 kilometers), with a few individuals moving up to 1-2 miles (1.6-3.2 kilometers) (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 (60 meters) 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 (0.4 kilometers) to more than 2 miles (3.2 kilometers) 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 (0.5 cm) of precipitation. Movements away from the source pools tapered off into spring. Upland movement activities ranged from 3 to 233 feet (1 to 71 m), averaging 80 feet (24.38 m), 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 3½ 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 1 percent of eggs laid reaching metamorphosis (Jennings et al. 1992). Sexual maturity normally is reached at 3 to 4 years of age (Storer 1925; Jennings and Hayes

1985). Red-legged frogs may live 8 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 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 frogs is not well studied, but their diet probably is similar to other ranid frogs 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 impacted 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).

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.

Environmental Baseline

The action area is located 0.11 miles north of the Point Reyes Peninsula Core Area- Unit 13 for the red-legged frog (Service 2002). The conservation needs for the Point Reyes Peninsula Core Area are: (1) protect existing populations; (2) control bullfrogs; (3) continue genetics research on *Rana aurora* and *Rana draytonii*; and (4) manage livestock and horse corrals to prevent nutrient loading problems. The action area is also 1.19 miles east of the proposed red-legged frog critical habitat unit MRN-1 and 2.8 miles north west of the existing red-legged frog critical habitat unit MRN-1 (Service 2008). According to the California Natural Diversity Database (CNDDB), there is a red-legged frog occurrence 0.5 miles north of the action area. Therefore, the Service has determined it is reasonable to conclude the red-legged frog inhabits the proposed action area, based on the biology and ecology of the species, the presence of suitable upland habitat, the presence of nearby breeding habitat, as well as observations of the species in the vicinity of the proposed project.

Effects of the Proposed Action

California red-legged frog

The construction of two towers and an equipment shelter, the burying of utility lines, and the widening and graveling of the access road is likely to adversely affect the California red-legged frog through direct mortality, injury, or harassment of individual frogs. There is a likelihood that California red-legged frogs may be affected by being crushed; entombed in their burrows or cover sites; hit and injured or killed by vehicle strikes; or harassed by noise, and vibration during these proposed actions. Accidental spills of hazardous materials or careless fueling or oiling of vehicles or equipment could degrade habitat to a degree where frogs are adversely affected. Some potential also exists for disturbance of habitat which could result in the spread or establishment on non-native invasive plant species.

Temporary effects comprise areas denuded, manipulated, or otherwise modified from their existing, pre-project conditions thereby removing one or more essential components of a listed species' habitat as a result of project activities that include, but are not limited to, construction,

staging, storage, lay down, vehicle access, parking, etc. Temporary effects must be restored to baseline habitat values or better within one year following initial disturbance. Areas subjected to ongoing operations and maintenance are not considered temporary even if they are restored within one year following initial disturbance. Affected areas not fulfilling these criteria are considered permanent. Essential behaviors will be modified from the proposed actions by blocking movement, dispersal, or migration. Frogs dispersing may have to alter their route to go around the permanent structures and will have less upland refugia in this area, subjecting individual frogs to predation that otherwise would not occur. The proposed action will result in permanent and temporary effects to the California red-legged frog. 0.95 acre of upland and dispersal habitat will be permanently lost due to the construction of the equipment shelter, two monopoles, and the widening and graveling of the access road. 0.56 acre of upland and dispersal habitat will be temporarily affected by the burying of the utility lines and coax cables and the equipment and lay down areas.

The Conservation Measures outlined in the Description of the Proposed Action will minimize adverse effects to the California red-legged frog by restricting the construction work window to the dry season when frogs are less likely to utilize habitats away from water sources; erecting exclusion fencing to minimize the likelihood a frog entering the construction area; installing construction fencing to keep construction workers from straying outside of the project footprint and disturbing additional habitat and/or species; educating workers about the presence of California red-legged frogs, their habitat, species identification, regulatory laws, and avoidance measures; conducting preconstruction surveys to locate, avoid or minimize take of individual frogs; revegetating 0.56 acre of upland with native upland vegetation suitable for the area, and outlining emergency actions and preventative measures for spills and refueling.

Cumulative Effects

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 unrelated to the proposed action are not considered in this section, because they require separate consultation pursuant to section 7 of the Act.

Range wide habitat loss is a contributing factor to the decline of red-legged frogs. Habitats may be lost or degraded as a result of a number of activities including road and utility construction and maintenance, overgrazing, agricultural expansion, and water irrigation and storage projects that may not be funded, permitted, or constructed by a Federal agency.

Additional threats resulting from urbanization include contamination, poisoning, increased predation, and competition from non-native species associated with human development. Non-federal actions that may impact listed species, such as conversion of land, ground squirrel reduction efforts, 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 respective Endangered Species Act.

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 red-legged frog and the resources necessary for its 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 baseline 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 California red-legged frog.

INCIDENTAL TAKE STATEMENT

Section 9 of the Act and Federal regulation pursuant to section 4(d) of the Act prohibit the take of endangered and threatened species, respectively, 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. The Service defines harass 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 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 under the Act, provided such taking is in compliance with this Incidental Take Statement.

The measures described below are non-discretionary, and must be implemented by the Federal Communication Commission (FCC) so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, in order for the exemption in section 7(o)(2) to apply. The FCC has a continuing duty to regulate the activity covered by this incidental take statement. If the FCC (1) fails to require the applicant 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

California red-legged frog

The Service anticipates incidental take of the California red-legged frog will be difficult to detect or quantify for the following reasons: the elusive nature of this species; its small size and cryptic coloration; seasonal fluctuations in its population numbers; and its occurrence in habitat that make individuals difficult to detect. For these reasons, the Service anticipates that all California red-legged frogs inhabiting 1.51 acres of upland habitat will be taken in conjunction with temporary and permanent effects of the project. Take is expected to be in the form of harm, capture, harassment, injury, and mortality. Upon implementation of the reasonable and prudent measures, incidental take associated with the proposed project will become exempt from the prohibitions described under section 9 of the Act.

Effect of the Take

The Service has determined that the level of anticipated take is not likely to result in jeopardy to the red-legged frog.

Reasonable and Prudent Measure

The Service believes the following reasonable and prudent measure is necessary and appropriate to minimize the effects of take on listed species:

Minimize the potential for harm, harassment, injury, and mortality to red-legged frogs resulting from project related activities by implementation of the conservation measures as described in this biological opinion.

Terms and Conditions

To be exempt from the prohibitions of section 9 of the Act, the FCC shall ensure the applicant complies with the following Terms and Conditions, which implement the Reasonable and Prudent Measure described above. These Terms and Conditions are non-discretionary.

1. Verizon Wireless shall minimize the potential for harm, harassment, or killing of California red-legged frogs resulting from the proposed action by implementing the conservation measures appearing in the Description of the Proposed Action in this Biological Opinion.
2. Verizon Wireless shall submit to the Service for approval, a revegetation plan within 90 days of issuance of this biological opinion.

Reporting Requirements

Injured California red-legged frogs must be cared for by a licensed veterinarian or other qualified person such as the Service-approved biologist. Dead individuals must be placed in a zip-lock® plastic bag containing a piece of paper with the date, time, and location where the animal was found, and who found it written in permanent ink, and then placed in a freezer located in a secure location. The Service and the California Department of Fish and Game must 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 if any are observed at the project site. Notification must 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, Chief, Endangered Species Division at the Sacramento Fish and Wildlife Office at telephone (916) 414-6600, and Scott Heard, Resident Agent-in-Charge of the Service's Law Enforcement Division at telephone (916) 414-6660. The California Department of Fish and Game contact is Scott Wilson at telephone (707) 944-5563.

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 to implement recovery actions, to help implement recovery plans, to develop information, or otherwise further the purposes of the Act.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefiting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations. We have the following recommendations:

1. The FCC should assist the Service in implementing recovery actions identified in the *Recovery Plan for the California Red-legged Frog* (Service 2002).
2. Encourage or require the use of appropriate California native species in revegetation and habitat enhancement efforts associated with projects authorized by the FCC.
3. Sightings of any listed or sensitive species should be reported to the California Natural Diversity Database of the California Department of Fish and Game. A copy of the reporting form and a topographic map clearly marked with the location the species were observed also should be provided to the Service.

REINITIATION - CLOSING STATEMENT

This concludes formal consultation on the Proposed Telecommunication Facility in Tomales, Marin County, California. As provided in 50 CFR § 402.16, 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 amount or extent of incidental take is exceeded; (2) 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; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this opinion; or (4) 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.

If you have any questions regarding our response on the Proposed Telecommunication Facility in Tomales, please contact Andrew Raabe or Ryan Olah at the letterhead address, telephone (916) 414-6600, or electronic mail at Andrew_Raabe@fws.gov or Ryan_Olah@fws.gov.

Sincerely,



for
Susan K. Moore
Field Supervisor

cc:

Marianne Holleman, EBI Consulting, Phoenix, Arizona
Peter Maushardt, Version Wireless, Walnut Creek, California
Scott Wilson, California Department of Fish and Game, Yountville, California

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