

Draft

# PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT

Initial Study / Mitigated Negative Declaration



Prepared for:  
California Public Utilities Commission

November 2007





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PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT  
Initial Study / Mitigated Negative Declaration



Prepared for:  
California Public Utilities Commission  
505 Van Ness Avenue  
San Francisco, CA 94102

November 2007

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**PUBLIC UTILITIES COMMISSION  
505 VAN NESS AVENUE  
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**To: Interested Parties**  
**From: Michael Rosauer, Environmental Project Manager**  
**Subject: NOTICE OF INTENT TO ADOPT A MITIGATED NEGATIVE DECLARATION –  
PacifiCorp's Morrison Creek Substation Project (A.07-07-018)**  
**Date: November 20, 2007**

The California Public Utilities Commission (CPUC) has prepared a Draft Mitigated Negative Declaration (Draft MND) under the California Environmental Quality Act (CEQA) for consideration of PacifiCorp's Application to Construct the Morrison Creek Substation Project (A.07-07-018). The Draft MND details the Proposed Project, evaluates and describes its potential environmental impacts, identifies those impacts that could be significant, and presents mitigation measures to avoid or minimize these impacts.

**Description of the Proposed Project.** Through its CPUC application (A.07-07-018) filed on July 20, 2007, pursuant to CPUC General Order (GO) 131-D, PacifiCorp seeks a Permit to Construct (PTC) the proposed Morrison Creek Substation and remove the existing Simonson Substation (Proposed Project). The existing Simonson Substation, which currently steps voltage down from 69 kilovolt (kV) to 12.5 kV, would be replaced with the proposed Morrison Creek Substation which would have the same distribution capabilities. The objective of the Proposed Project is to increase system reliability in order to continue safe and reliable electric service to customers in the area.

**Location of the Proposed Project.** The Proposed Project site is in northwest Del Norte County approximately one quarter mile southeast of the community of Smith River, California, and approximately five miles south of the Oregon/California border (see map below). The site is south of Rowdy Creek and adjacent to the eastern side of U.S. Highway 101 and an existing 69 kV transmission line with 12.5 kV distribution underbuild.

**CPUC Actions After Draft MND Publication.** The Draft MND is available for a 30-day public comment period November 20, 2007 through December 21, 2007. The public may present comments and concerns regarding the Proposed Project and the adequacy of the Draft MND. Written comments on the Draft MND must be postmarked or received by fax or e-mail no later than **December 21, 2007**. Please be sure to include your name, address, and telephone number in your correspondence. Written comments on the Draft MND should be sent to:

**Mr. Michael Rosauer  
Morrison Creek Project  
c/o Environmental Science Associates  
225 Bush Street, Suite 1700  
San Francisco, CA 94104  
Fax: (415) 896-0332  
E-mail: [morrisoncreek@esassoc.com](mailto:morrisoncreek@esassoc.com)**

The CPUC will also hold a public information meeting on **December 12, 2007 at the Smith River Community Hall, 241 First Street, Smith River, California (see map below), between 6:30 p.m. and 8:30 p.m.** Following the end of the public comment period, the CPUC will prepare a Final MND that will consider comments received on the Draft MND.



**Availability of Draft MND.** Copies of the Draft MND will be available for public review at the Smith River Community Library and the Crescent City Branch of the Del Norte County Library, and on the project website: <http://www.cpuc.ca.gov/Environment/info/esa/morrisoncreek/morrison.html>. This website will be used to post all public documents during the environmental review process and to announce any upcoming public meetings. Hard copies of the Draft MND may be requested by telephone at (415) 962-8468 or by e-mail at [morrisoncreek@esassoc.com](mailto:morrisoncreek@esassoc.com).

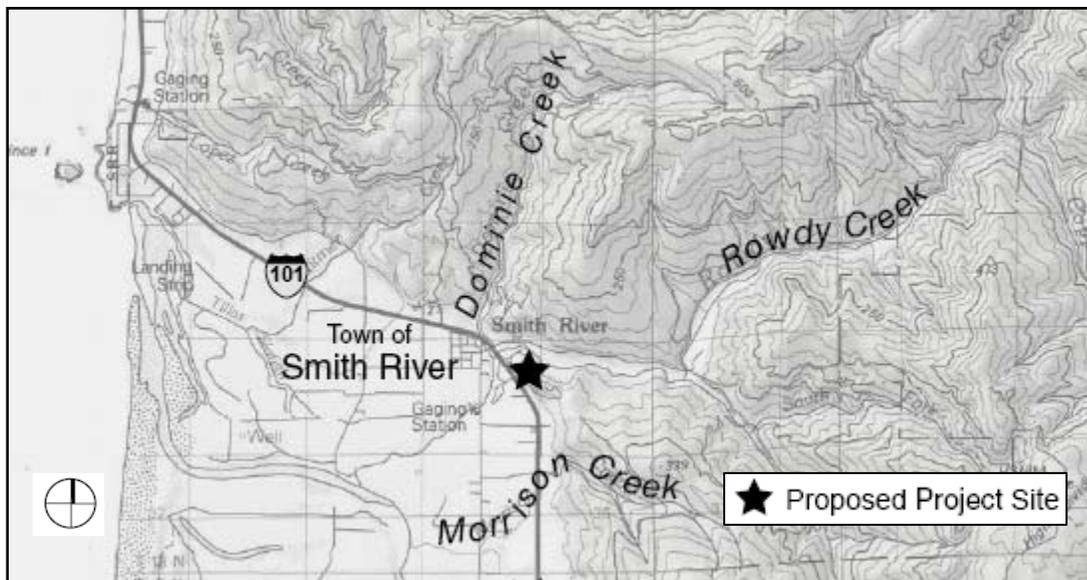
**PROJECT INFORMATION REPOSITORIES**

Smith River Community Library  
 241 First Street  
 Smith River, CA 95567  
 (707) 487-8048  
 Hours: M-F: 1:30PM to 4:30PM  
 Sa: 10AM to 2PM  
 Closed Sunday.

Crescent City Branch Library  
 190 Price Mall Circle  
 Crescent City, CA 95531  
 (707) 464-9793  
 Hours: M-Th: 12PM to 8PM  
 Closed Friday through  
 Sunday.

**REMINDER: Draft MND comments will be accepted by fax, e-mail, or postmark through December 21, 2007. Please be sure to include your name, address, and telephone number.**

**Map of the Proposed Project Location:**



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# EXECUTIVE SUMMARY

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## Introduction

PacifiCorp, in its California Public Utilities Commission (CPUC) application (A.07-07-018) filed on July 20, 2007, seeks a Permit to Construct (PTC) the proposed Morrison Creek Substation and remove the existing Simonson Substation (Proposed Project). The Morrison Creek Substation would be a 69 kilovolt (kV) to 12.5 kV distribution substation that would replace the existing Simonson Substation that is also a 69 kV to 12.5 kV distribution substation. The objective of the Proposed Project is to increase system reliability in order to continue safe and reliable electric service to customers in the area.

## Document Organization

The Draft Initial Study/Mitigated Negative Declaration (IS/MND) is organized as follows:

- This Executive Summary introduces the Proposed Project, describes the method for reviewing and submittal of comments, describes the organization of the document, and provides a summary of the impacts and mitigation measures.
- The Project Description (Section 1) provides objectives and components of the Proposed Project and details of proposed construction activities.
- The Environmental Checklist and Discussion (Section 2) includes all required California Environmental Quality Act (CEQA) checklist items and a discussion of the impacts and their significance for the Proposed Project.
- The Environmental Determination (Section 3) includes a statement by the CPUC as to the type of environmental review that is required.
- The Report Preparers (Section 4) summarizes the names and affiliation of persons involved with development of this IS/MND.
- The Mitigation Monitoring, Reporting, and Compliance Program (MMRCP) (Section 5) summarize the program for ensuring effective implementation of the mitigation measures for the Proposed Project.

## Public Review Period and Comments

CEQA and the CPUC encourage public participation in the planning and environmental review processes. The public may present comments and concerns regarding the Proposed Project and

the adequacy of the Draft IS/MND during a public review and comment period. Written public comments may be submitted to the CPUC at any time during the 30-day public review and comment period, **November 20, 2007 through December 21, 2007**. Information regarding the IS/MND availability and process for submitting comments is as follows:

<b>How to Get a Copy of the IS/MND Study</b>	<b>How to Submit Comments</b>
<p>Review online or download from the website:  <a href="http://www.cpuc.ca.gov/Environment/info/esa/morrisoncreek/morrison.html">www.cpuc.ca.gov/Environment/info/esa/morrisoncreek/morrison.html</a></p> <p>Request by telephone at (415) 962-8468 or email at  <a href="mailto:morrisoncreek@esassoc.com">morrisoncreek@esassoc.com</a></p> <p>Review at the following library branches:  <b>Smith River Community Library</b>                      241 First Street                      Smith River, CA 95567                      (707) 487-8048</p> <p><b>Crescent City Branch, Del Norte County Library District</b>                      190 Price Mall                      Crescent City, CA 95531                      (707) 464-9793</p>	<p><b>Mail to:</b>                      Mr. Michael Rosauer                      PacifiCorp Morrison Creek                      Project                      c/o Environmental Science                      Associates                      225 Bush Street, Suite 1700                      San Francisco, CA 94104</p> <p><b>E-mail:</b>  <a href="mailto:morrisoncreek@esassoc.com">morrisoncreek@esassoc.com</a></p> <p><b>Fax:</b> (415) 896-0332  <b>Phone:</b> (415) 962-8468</p>

## Project Description

PacifiCorp’s Proposed Project includes construction of the new Morrison Creek Substation and removal of the existing Simonson Substation. The new Morrison Creek Substation would be a low-profile design 69 kV/12.5 kV distribution substation with a capacity of 11.2/14 megavolt amperes (MVA). The 69 kV circuit tap would come from a new steel pole that would be installed adjacent to the southwest side of the proposed site. The Morrison Creek Substation would occupy an approximate 275-foot by 275-foot footprint approximately 1,000 feet southeast of the existing Simonson Substation site.

The existing Simonson Substation would be dismantled and completely removed. The existing transmission and distribution taps to the Simonson Substation would also be removed, and the site would be re-graded to generally match the surrounding site contours.

Under CPUC General Order (GO) 131-D, approval of the Proposed Project must comply with CEQA.

## Potential Environmental Impacts

The attached Draft IS/MND presents and analyzes potential environmental impacts that would result from construction and operation of the Proposed Project, and proposes mitigation measures,

as appropriate. Based on the Draft IS/MND, approval of the application would have no impact or less than significant effects in the following areas:

- Agriculture Resources
- Air Quality
- Geology, Soils, and Seismicity
- Hydrology and Water Quality
- Land Use, Plans, and Policies
- Mineral Resources
- Population and Housing
- Recreation
- Transportation.

The Draft IS/MND indicates that approval of the application would result in less than significant impacts with mitigation incorporated in the areas of:

- Aesthetics
- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Noise
- Public Services
- Utilities and Service Systems.

## Mitigation and Monitoring

Each of the identified impacts can be mitigated to avoid the impact or reduce it to a less than significant level. The mitigation measures presented in the Draft IS/MND have been agreed to by PacifiCorp. Table ES-1 provides a complete, condensed presentation of the environmental impacts that require mitigation measures for the proposed Morrison Creek Substation Project. Full descriptions of the Mitigation Monitoring, Reporting, and Compliance Plan are included in Section 5 of this Draft IS/MND to specify how all mitigation measures would be implemented.

**TABLE ES-1  
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PACIFICORP MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Significance after Mitigation
<b>Aesthetics</b>		
<p><b>2.1-1:</b> The Proposed Project would affect views from U.S. 101, an eligible State scenic highway.</p>	<p><b>2.1-1:</b> Landscaping shall be installed outside the perimeter fence at the Morrison Creek Substation to partially screen views from Highway 101 and to integrate the Morrison Creek Substation's appearance with the surrounding landscape.</p> <p>Plant material shall be appropriate to the local/natural landscape setting and shall be consistent with Public Resources Code Section 4292 for vegetation located in proximity to transmission facilities. A landscape plan prepared by a licensed landscape architect or certified arborist shall be submitted to the CPUC. The landscape plan shall show the location, suggested species and size at planting for all proposed plant material. The plan shall also show proposed landscaping in relation to the final placement of the tap pole and substation perimeter fence. The plan shall be submitted to, reviewed and approved by the CPUC prior to commencement of construction.</p>	<p>Less than Significant</p>
<p><b>2.1-2:</b> The Proposed Project could create a new source of substantial glare.</p>	<p><b>2.1-2:</b> A non-reflective or weathered finish shall be applied to all new structures and equipment installed at the Morrison Creek Substation to reduce potential glare effects.</p>	<p>Less than Significant</p>
<b>Agricultural Resources</b>		
<p>No impacts identified.</p>		
<b>Air Quality</b>		
<p>No impacts identified.</p>		
<b>Biological Resources</b>		
<p><b>2.4-1:</b> Construction activities associated with the Proposed Project could result in impacts to the northern red-legged frog, which is a California species of special concern.</p>	<p><b>2.4-1:</b> To minimize or avoid impacts to the northern red-legged frog, preconstruction surveys for the species should occur throughout the Proposed Project site two weeks or less before removing vegetation or carrying out ground-disturbing activities. Pre-construction surveys shall be carried out by a permitted biologist familiar with northern red-legged frog identification and ecology. These are not intended to be protocol-level surveys but designed to clear an area so that individual northern red-legged frogs are not present within the Proposed Project site prior to the initiation of construction. Once the site is cleared it shall be fenced in such a way as to exclude northern red-legged frog for the duration of proposed construction activities. Methods for pre-construction surveys and site fencing shall be developed prior to the start of construction.</p>	<p>Less than Significant</p>

**TABLE ES-1 (continued)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PACIFICORP MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Significance after Mitigation
<p><b>2.4-2:</b> Construction activities associated with the Proposed Project could result in the direct loss of bird nests, death of young, or loss of reproductive potential at active nests of special status bird species located in the vicinity of the Proposed Project site.</p>	<p><b>2.4-2:</b> Direct disturbance, including tree and shrub removal or nest destruction by any other means, or indirect disturbance (e.g., noise, increased human activity in area, etc.) of active nests of raptors and other special-status bird species within or in the vicinity of the proposed Morrison Creek Substation site or in the vicinity of the existing Simonson Substation site shall be avoided in accordance with the following procedures for Pre-Construction Special-Status Avian Surveys and Subsequent Actions. No more than two weeks in advance of any tree or shrub removal or ground-disturbing activity that will commence during the breeding season (i.e., February 1 through July 31), a qualified wildlife biologist shall conduct pre-construction surveys of all potential special-status bird nesting habitat in the vicinity of the planned activity. Pre-construction surveys are not required for construction activities scheduled to occur during the non-breeding season (i.e., August 1 through January 31). Depending on the survey findings, the following actions shall be taken to avoid potential adverse effects on nesting special-status nesting birds:</p> <ul style="list-style-type: none"> <li>• If pre-construction surveys indicate that no nests of special-status birds are present or that nests are inactive or potential habitat is unoccupied, no further mitigation shall be required.</li> <li>• If active nests of special-status birds are found during the surveys, the results of the surveys shall be forwarded to CDFG (as appropriate) and avoidance procedures shall be adopted, as determined necessary by CDFG, on a case-by-case basis. These can include construction buffer areas up to several hundred feet in the case of raptors, relocation of birds, or seasonal avoidance. If buffers are created, a no disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them shall be determined through consultation with the CDFG taking into account factors such as the following: <ul style="list-style-type: none"> <li>a. Noise and human disturbance levels at the Proposed Project site and the nesting site at the time of the survey and the noise and disturbance expected during the construction activity;</li> <li>b. Distance and amount of vegetation or other screening between the Proposed Project site and the nest; and</li> <li>c. Sensitivity of individual nesting species and behaviors of the nesting birds.</li> </ul> </li> </ul>	<p>Less than Significant</p>

**TABLE ES-1 (continued)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PACIFICORP MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Significance after Mitigation
<p><b>2.4-3:</b> Activities associated with the construction of the proposed Morrison Creek Substation could detrimentally affect special status species utilizing the site, through the temporary and permanent removal of existing vegetation.</p>	<ul style="list-style-type: none"> <li>• Construction activities commencing during the non-breeding season and continuing into the breeding season do not require surveys because it is assumed that any breeding birds taking up nests would be acclimated to Proposed Project-related activities already under way. However, if trees and shrubs are to be removed during the breeding season, the trees and shrubs shall be surveyed for nests prior to their removal, according to the survey and protective action guidelines described in a through c, in the bullet above.</li> <li>• Nests initiated during construction activities would be presumed to be unaffected by the construction activity, and a buffer zone around such nests would not be necessary.</li> <li>• Destruction of active nests of special-status birds and overt interference with nesting activities of special-status birds shall be prohibited.</li> </ul>	Less than Significant
<p><b>2.4-4:</b> The proposed tap line and substation may result in the inadvertent electrocution and collision of raptors and other special status bird species.</p>	<p><b>2.4-3:</b> Areas outside the fenced area of Morrison Creek Substation that will be disturbed by Proposed Project construction activities shall be re-vegetated with native shrubs, trees, and/or grasses. Removal of native trees and shrubs shall be minimized.</p> <p><b>2.4-4:</b> The Morrison Creek substation as well as any associated transmission and distribution line configurations should be designed as recommended in the PacifiCorp Bird Management Program Guidelines (PacifiCorp, 2006), or along recommendations provided by the Avian Power Line Interaction Committee. This shall minimize the chance for electrocution of protected raptors and other protected bird species and provide for a reporting system of any incidental bird mortalities resulting from the Morrison Creek Substation and its associated structures.</p>	Less than Significant
<p><b>Cultural Resources</b></p>	<p><b>2.5-1:</b> In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and PacifiCorp and/or the CPUC shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of PacifiCorp and/or the CPUC and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, as necessary, and a report prepared by a Specialist according to current professional standards.</p>	Less than Significant

**TABLE ES-1 (continued)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PACIFICORP MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Significance after Mitigation
<p><b>2.5-2:</b> The Proposed Project could adversely affect unidentified paleontologic resources at the proposed pole site or the substation locations.</p>	<p>In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the CPUC shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, Proposed Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the Proposed Project site while mitigation for historical resources or unique archaeological resources is carried out.</p> <p>If the CPUC, in consultation with the qualified archaeologist, determines that a significant archeological resource is present and that the resource could be adversely affected by the Proposed Project, the CPUC shall require PacifiCorp to:</p> <ul style="list-style-type: none"> <li>• Re-design the Proposed Project to avoid any adverse effect on the significant archeological resource; or</li> <li>• Implement an archeological data recovery program (ADRP) unless the qualified archaeologist determines that the archeological resource is of greater interpretive use than research significance, and that interpretive use of the resource is feasible. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the Proposed Project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.</li> </ul> <p><b>2.5-2:</b> In the event of an unanticipated paleontological discovery during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist per up to date Society of Vertebrate Paleontology standards. The discovery shall be documented as needed, the potential resource evaluated, and the significance of the find shall be assessed under the criteria set forth in Section 15064.5 of the CEQA Guidelines.</p>	<p>Less than Significant</p>

**TABLE ES-1 (continued)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PACIFICORP MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Significance after Mitigation
<p><b>2.5-3:</b> Proposed Project construction could result in damage to previously unidentified human remains.</p>	<p>The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the CPUC determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the Proposed Project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the CPUC for review and approval.</p> <p><b>2.5-3:</b> In the event that human skeletal remains are uncovered during Proposed Project construction or demolition activities, PacifiCorp shall immediately halt all work, contact the Del Norte County Coroner to evaluate the remains, and follow the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, PacifiCorp shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease until appropriate arrangements are made. The Native American Heritage Commission shall assign a Most Likely Descendant, who shall have the right to access the find and provide a recommendation for treatment of the remains to the property owner, PacifiCorp, and the CPUC.</p>	<p>Less than Significant</p>
<p><b>Geology, Soils, and Seismicity</b></p>		
<p>No impacts identified.</p>		
<p><b>Hazards and Hazardous Materials</b></p>		
<p><b>2.7-1:</b> Construction would require the use of certain materials such as fuels, oils, solvents, and other chemical products that, in large quantities, could pose a potential hazard to the public or the environment if improperly used or inadvertently released.</p>	<p><b>2.7-1a:</b> PacifiCorp and/or its contractor(s) shall implement construction best management practices including but not limited to the following:</p> <ul style="list-style-type: none"> <li>• Follow manufacturer’s recommendations on use, storage, and disposal of chemical products used in construction;</li> <li>• Avoid overtopping construction equipment fuel gas tanks;</li> <li>• Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel;</li> <li>• During routine maintenance of construction equipment, properly contain and remove grease and oils; and</li> <li>• Properly dispose of discarded containers of fuels and other chemicals.</li> </ul>	<p>Less than Significant</p>

**TABLE ES-1 (continued)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PACIFICORP MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Significance after Mitigation
	<p><b>2.7-1b:</b> PacifiCorp shall prepare a <i>Hazardous Substance Control and Emergency Response Plan</i> (Plan) and implement it during construction to ensure compliance with all applicable federal, State, and local laws and guidelines regarding the handling of hazardous materials. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.</p> <p><b>2.7-1c:</b> PacifiCorp shall prepare and implement a <i>Health and Safety Plan</i> to ensure the health and safety of construction workers and the public during construction. The Plan shall include information on the appropriate personal protective equipment to be used during construction. In addition, the Plan shall address emergency medical services in the case of an emergency. The Plan shall list procedures and specific emergency response and evacuation measures that would be required to be followed during emergency situations. PacifiCorp shall prepare the Plan and distribute it to all construction crew members involved in the project prior to construction and operation of the Proposed Project.</p> <p><b>2.7-1d:</b> PacifiCorp shall establish and implement a <i>Workers Environmental Awareness Plan</i> (WEAP) to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention, and shall include a review of the <i>Health and Safety Plan</i> and the <i>Hazardous Substance Control and Emergency Response Plan</i>. PacifiCorp shall submit documentation to the CPUC mitigation monitor prior to the commencement of construction activities that each worker on the Proposed Project has undergone this training program.</p> <p><b>2.7-1e:</b> PacifiCorp shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept at the Proposed Project staging area and adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's <i>Hazardous Substance Control and Emergency Response Plan</i> (see Mitigation Measure 2.7-1b), which shall be implemented during construction.</p>	

**TABLE ES-1 (continued)  
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PACIFICORP MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Significance after Mitigation
<p><b>2.7-2:</b> Construction activities could release previously unidentified hazardous materials into the environment.</p>	<p><b>2.7-2:</b> PacifiCorp's <i>Hazardous Substance Control and Emergency Response Plan</i> shall include provisions that would be implemented if any subsurface hazardous materials are encountered during construction. Provisions outlined in the plan shall include immediately stopping work in the contaminated area and contacting appropriate resource agencies, including the CPUC designated monitor, upon discovery of subsurface hazardous materials. The plan shall include the phone numbers of local, regional, and State agencies and primary, secondary, and final cleanup procedures. The <i>Hazardous Substance Control and Emergency Response Plan</i> shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.</p>	<p>Less than Significant</p>
<p><b>2.7-3:</b> Proposed Project construction activities could ignite dry vegetation and start a fire.</p>	<p><b>2.7-3:</b> Water storage containers or water trucks shall be sited/constantly on-site in the Proposed Project area and be available for fire protection. All construction vehicles and work areas shall have fire suppression equipment and construction personnel shall be required to park vehicles away from dry vegetation. PacifiCorp shall contact and coordinate with the Smith River Fire Protection District (SRFPD) and the California Department of Forestry and Fire Protection (Cal-Fire) to determine the minimum amounts of fire equipment to be located at the construction site and appropriate locations for the water tanks. PacifiCorp shall submit verification of its consultation with SRFPD and Cal-Fire to the CPUC.</p>	<p>Less than Significant</p>
<p><b>Hydrology and Water Quality</b></p>		
<p>No impacts identified.</p>		
<p><b>Land Use, Plans, and Policies</b></p>		
<p>No impacts identified.</p>		
<p><b>Mineral Resources</b></p>		
<p>No impacts identified.</p>		
<p><b>Noise</b></p>		
<p><b>2.11-1:</b> The Proposed Project could generate adverse noise levels during project construction.</p>	<p><b>2.11-1:</b> Construction activity shall be limited to the least noise-sensitive daytime hours between 7:00 a.m. and 8:00 p.m., with some exceptions (as approved by the CPUC) as required for safety considerations or certain construction procedures that cannot be interrupted.</p>	<p>Less than Significant</p>
<p><b>Population and Housing</b></p>		
<p>No impacts identified.</p>		

**TABLE ES-1 (continued)**  
**SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE PACIFICORP MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Significance after Mitigation
<b>Public Services</b>		
<b>2.13-1:</b> Proposed Project construction activities could temporarily increase the demand for fire protection services.	<b>2.13-1a:</b> Implement Mitigation Measure 2.7-1c.  <b>2.13-1b:</b> Implement Mitigation Measure 2.7-3.	Less than Significant
<b>Recreation</b>		
No impacts identified.		
<b>Transportation / Traffic</b>		
No impacts identified.		
<b>Utilities and Service Systems</b>		
<b>2.16-1:</b> Proposed Project construction activities could inadvertently contact underground utility lines and/or facilities during excavation and other ground disturbance, possibly leading to short-term utility service interruptions.	<b>2.16-1:</b> PacifiCorp shall ensure that Underground Service Alert is notified at least two working days prior to initiation of construction activities that require subsurface ground disturbance so that Underground Service Alert can verify the location of all existing underground facilities and alert the other utilities to mark their facilities in the area of anticipated construction activities.	Less than Significant
<b>Mandatory Findings of Significance</b>		
No additional impacts identified.		



# SECTION 1

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## Project Description

### 1.1 Introduction

Through its California Public Utilities Commission (CPUC) application (A.07-07-018) filed on July 20, 2007, pursuant to CPUC General Order (GO) 131-D, PacifiCorp seeks a Permit to Construct (PTC) the proposed Morrison Creek Substation and remove the existing Simonson Substation (Proposed Project). The existing Simonson Substation, which currently steps voltage down from 69 kilovolt (kV) to 12.5 kV for distribution, would be replaced with the proposed Morrison Creek Substation which would have the same distribution capabilities. The application includes the Proponent's Environmental Assessment (PEA) (PacifiCorp, 2007a) prepared pursuant to Rule 2.4 of CPUC's Rules of Practice and Procedure. Under GO 131-D, approval of the Proposed Project must comply with the California Environmental Quality Act (CEQA).

Under CEQA, the CPUC must prepare an Initial Study for discretionary projects such as the Proposed Project to determine whether the project may have a significant adverse effect on the environment. If an Initial Study prepared for a project indicates that such an impact could occur, the CPUC would be required to prepare an Environmental Impact Report (EIR). If an Initial Study does not reveal substantial evidence of such an effect, or if the potential effect would be reduced to a level of insignificance through project revisions, a Negative Declaration could be adopted (Public Resources Code, Division 13, Section 21080(c)(1)-(2)).

A Mitigated Negative Declaration (MND) may be adopted when "the initial study has identified potentially significant effects on the environment, but (1) revisions in the project plans or proposals made by, or agreed to by, the applicant before the proposed negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur, and (2) there is no substantial evidence in light of the whole record before the public agency that the project, as revised, may have a significant effect on the environment" (Public Resources Code, Section 21064.5). This Initial Study/Mitigated Negative Declaration (IS/MND) considers the potential environmental impacts from the Proposed Project.

### 1.2 Project Objectives

PacifiCorp's Simonson Substation serves the Smith River area of Northern California. The substation was constructed in 1957 using a box configuration of wood poles with wood pole cross arms. Structural testing of the poles by PacifiCorp has confirmed that the poles are deteriorating

to the point where making any structural replacement/reinforcement would be difficult and reliability is becoming an issue. The transformers, regulators, breakers, switches, connectors, and bus work at the existing substation are also deteriorating due to age and severe corrosion. Furthermore, PacifiCorp has concerns regarding safe working conditions for employees or contractors that could be working at the substation. Therefore, the objectives of the Proposed Project are to:

- increase system reliability;
- ensure the safety of PacifiCorp's maintenance crews;
- construct a new substation meeting PacifiCorp's current design standards;
- locate the new substation near the existing Simonson Substation and the local load center; and
- locate the new substation near the existing 69 kV transmission line to minimize construction of new transmission facilities.

## 1.3 Project Site

The Proposed Project site is in northwest Del Norte County approximately one quarter mile southeast of the community of Smith River, California, and approximately five miles south of the Oregon/California border (see Figure 1-1). The site is south of Rowdy Creek and adjacent to the eastern side of U.S. Highway 101 (U.S. 101) and an existing 69 kV transmission line with 12.5 kV distribution underbuild. The site was previously used by a lumber mill operation and the mill foundations and paved areas are still present. The proposed Morrison Creek Substation site is approximately 1,000 feet southeast of the existing Simonson Substation site. The site is zoned by Del Norte County as General Industrial. Existing driveways provide access from U.S. 101 to the existing and proposed substation sites, located on private property.

The relatively flat proposed Morrison Creek Substation site was previously disturbed by industrial operations related to the lumber mill. It is partly paved with low-growing grasses between the paved areas. Coniferous trees surround the southeast perimeter of the proposed Morrison Creek Substation site with hills covered in deciduous and coniferous trees located to the east.

## 1.4 Existing System

PacifiCorp provides electric service to approximately 46,500 customers in the extreme northern portion of California, including customers in Smith River. Power to serve customers in and around the area of Smith River is currently transmitted by PacifiCorp's Line 85, which is a 69 kV transmission line that extends from PacifiCorp's Simonson Substation south to the Del Norte Substation. Line 85 runs generally along the east side of U.S. 101. In the Proposed Project area, the transmission line poles, which additionally support 12.5 kV distribution lines, range in height from 55 to 75 feet above the ground surface (ags). At PacifiCorp's existing Simonson Substation, power from the 69 kV line is transformed to 12.5 kV and then transmitted over the local distribution system to serve the surrounding area.



Legend

-  Existing Substation
-  Proposed Substation
-  Existing 69 kV Transmission Line

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## 1.5 PacifiCorp's Proposed Project

PacifiCorp's Proposed Project includes construction of the proposed Morrison Creek Substation and removal of the existing Simonson Substation. According to PacifiCorp, the approximately 0.25 acre site of the Simonson Substation is too small to accommodate PacifiCorp's standard substation design (which requires approximately 1.74 acres); therefore, the proposed Morrison Creek Substation would be built first and then the existing Simonson Substation would be removed.

As described and analyzed in this IS/MND, the proposed Morrison Creek Substation would be constructed and operated at 69/12.5 kV. However, the proposed substation would be sized to accommodate a possible future conversion to 115 kV, with room for 115 kV circuit breakers and a control building. Such a conversion could take place only if Coos-Curry Electric Cooperative and the Bonneville Power Administration agree to build a 115 kV transmission tie line between Southern Oregon and Northern California. Since construction of such a tie line is highly speculative, both with respect to timing as well as exact location, construction and operation of the proposed Morrison Creek Substation at 115 kV is not included as part of the Proposed Project analyzed within this IS/MND. However, where useful for clarity, some drawings and figures show the location within the substation where the future equipment could be placed. A separate PTC application and CEQA review of such a future conversion and tie line would be required.

Below are descriptions of the components of the Proposed Project.

### 1.5.1 Morrison Creek Substation

The proposed Morrison Creek Substation would be a low-profile design 69 kV/12.5 kV distribution substation with a 12.47 kV/7.2 kV Wye and a capacity of 11.2/14 megavolt amperes (MVA). The 69 kV circuit tap would come from a new steel pole that would be installed adjacent to the southwest side of the proposed site. The steel pole would be directly embedded in a 20-foot hole to be excavated within the existing transmission line right-of-way (ROW). The new pole would extend approximately 70 feet ags, would be self supporting (i.e., require no guy wires), and would not require a concrete foundation. All substation equipment such as the transformer, regulator, and recloser would be installed on new concrete footings. There would also be two 12.47 kV circuit breakers.

Underground distribution feeder circuits would connect from the substation to the base of two existing power poles (poles 5/5 and 6/5) along the Line 85 ROW. These poles would be referred to as riser poles. Pole 5/5 would be south of the 69 kV tap pole and pole 6/5 would be north of the 69 kV tap pole. The distribution circuits would rise up the side of the poles in a pipe to the cross arms and insulation hardware near the top of the poles. There would not be a 12.5 kV circuit between the two riser poles, and between the new steel pole and riser pole 6/5 there would be no 69 kV circuit. See Figure 1-4 for an illustration of the proposed layout of the Morrison Creek



Figure 1-2  
Existing Simonson Substation, looking northeast



Figure 1-3  
Existing Simonson Substation, looking southwest



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Substation. The tallest portions of the substation would be approximately 30 feet tall, while the majority of the equipment would be less than 16 feet in height. See Figures 1-5a through 1-5d for vertical illustrations of the proposed substation equipment.

The entire ground surface of the substation would be covered by gravel except for an oil containment system that would consist of an approximately 50-foot by 40-foot concrete slab. The oil containment system would be constructed at grade and would surround the transformer and the regulators. Rainfall runoff and any spilled oil in the slab area would be drained to an underground sump pit. The sump pit would be equipped with a pump that would contain a built-in oil monitoring system. If oil is not detected by the pump, runoff would be pumped out of the sump pit into a nearby ditch. If any oil is detected by the pump, it would shut off and an alarm would notify PacifiCorp. The oil/water mix would be retained within the sump pit, which would have an 8,000 gallon capacity, until it would be emptied into a tanker truck for proper disposal.

Approximately 2,905 gallons of non-toxic mineral oil would be used for the transformer (2,450 gallons), radiators (80 gallons), and regulators (375 gallons). The 8,000 gallon capacity of the sump pit would allow for storage of all the transformer oil and runoff from a 100-year, 6-hour storm event.

An 8-foot-high chain-link fence would surround the 275-foot by 275-foot footprint of the proposed substation. The area inside the substation footprint would be sized to accommodate a mobile substation for planned transformer maintenance and for unplanned substation outages as well as to accommodate a potential future conversion to 115 kV, with room for 115 kV circuit breakers and a control building.

PacifiCorp has developed a *Conceptual Landscape Plan* for the proposed Morrison Creek Substation (see Figure 1-6). The plan utilizes existing mature Douglas fir and willow trees with new perimeter landscaping to partially screen the proposed substation from travelers along U.S. 101.

## 1.5.2 Removal of Simonson Substation

Once the proposed Morrison Creek Substation has been constructed, the existing Simonson Substation would be removed. The transformer and other oil filled equipment would be hauled from the site to PacifiCorp's Medford, Oregon Service Center for storage. The existing transmission and distribution taps to Simonson Substation would also be removed. Upon removal of the substation components, re-grading of the Simonson Substation site would be conducted.

## 1.5.3 Construction

### Morrison Creek Substation

Construction of the proposed Morrison Creek Substation would begin with the grading and removal of topsoil from the site. Approximately two to five cubic yards of soil would need to be cut from a slope at the east corner of the proposed site. It is estimated that approximately

5,600 cubic yards of topsoil and excavated soil would be stockpiled on Green Diamond Lumber property at a location agreed to by the property owner as part of the land purchase agreement. There are no plans to export soil off-site. A grader would be used to contour the substation footprint, and then the area would be compacted to provide a constant slope across the site in the direction of the natural drainage and at approximately the same slope as the surrounding terrain. The graded area would be backfilled with the excavated material that is re-usable and blended with granular imported fill. Up to 3,000 cubic yards of clean fill would be required. The surface would be topped with approximately 1,000 cubic yards of yard finish rock to complete the site grading requirements (PacifiCorp, 2007b).

PacifiCorp conducted a Level I Environmental Site Assessment for the proposed Morrison Creek Substation site to assess the potential for contaminants to be present at the site (SHN, 2007). The assessment concluded that there were no contaminants of concern likely present. However, during construction, if obvious or suspected contamination of any nature is encountered, construction would stop and samples of the contaminated soil would be obtained. The soil samples would be analyzed by a State certified laboratory for those contaminants associated with the historic lumber mill operations. The analytical results would be compared to both State and federal environmental cleanup standards, as appropriate, and the determination of the manner in which the soil would be handled and disposed would be made at that time (PacifiCorp, 2007b). All soil not suspected of being contaminated that is excavated during construction activities would be stored on the partially asphalted area located between the current Simonson Substation and the proposed location for the Morrison Creek Substation.

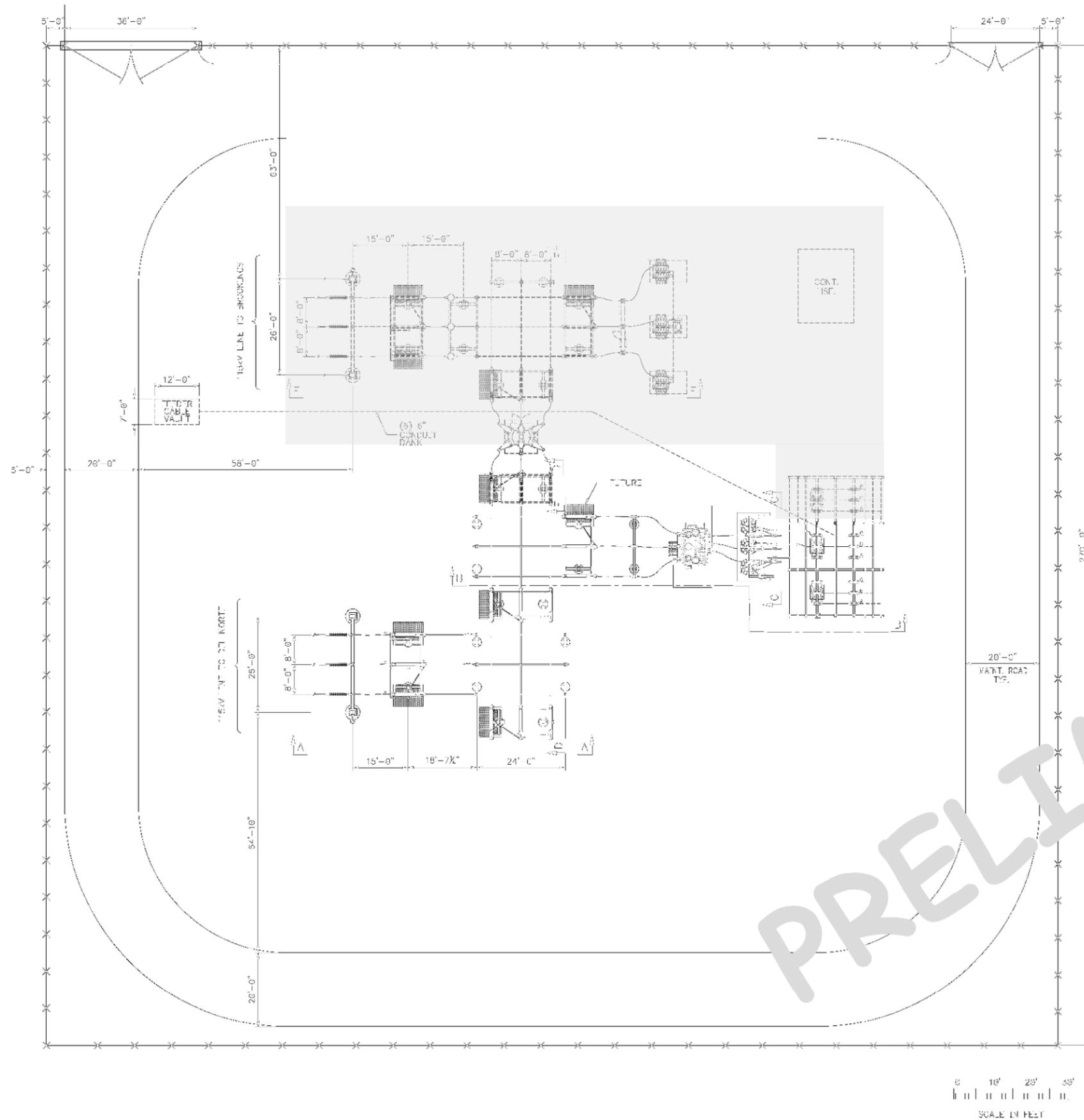
Once the site has been graded and the ground surface prepared, a fence would be installed to secure the site. After the fence has been installed, new concrete foundations, underground conduits, and the ground grid would be installed followed by construction of the oil containment system and the steel structures, framing, and the electrical equipment.

Vegetation, including Himalayan blackberry bushes, a big-leaf maple tree, and several small alder trees, would be required to be removed in the eastern corner of the proposed site. The trunk of the big-leaf maple to be removed is approximately 18 inches diameter at breast height (dbh) while the smaller alder tree trunks range from 0.5 to 2.0 inches dbh.

Construction of the proposed Morrison Creek Substation would be performed entirely on the property site that would be acquired from Green Diamond Lumber Company. Access to the site is currently achieved from an existing driveway and gate off of U.S. 101.

## **Removal of Simonson Substation**

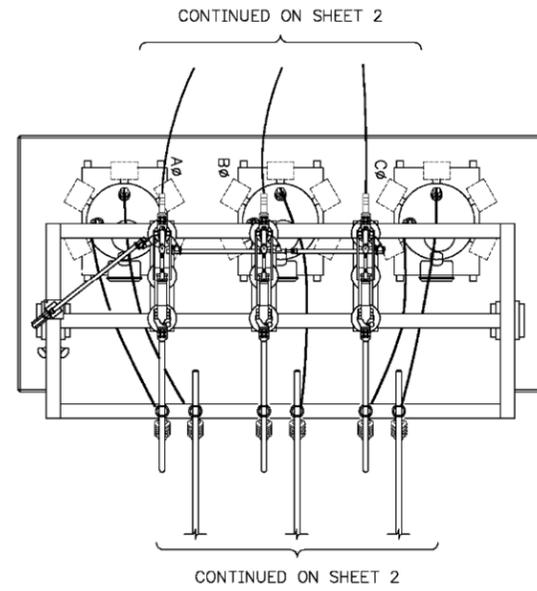
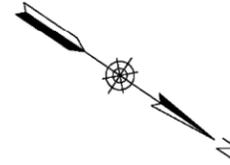
The transformer and other oil filled equipment would be hauled from the Simonson Substation site to PacifiCorp's Service Center in Medford, Oregon for storage. The two existing wood poles that tap the 69 kV power line and the 12.5 kV distribution circuit to the Simonson Substation would be removed, including all subsurface portions of the poles. The poles would be cut off near



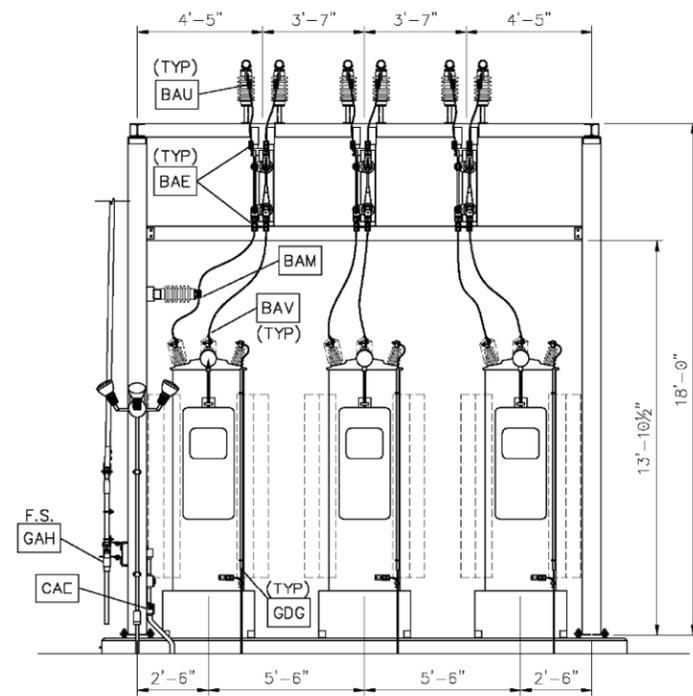
PRELIMINARY





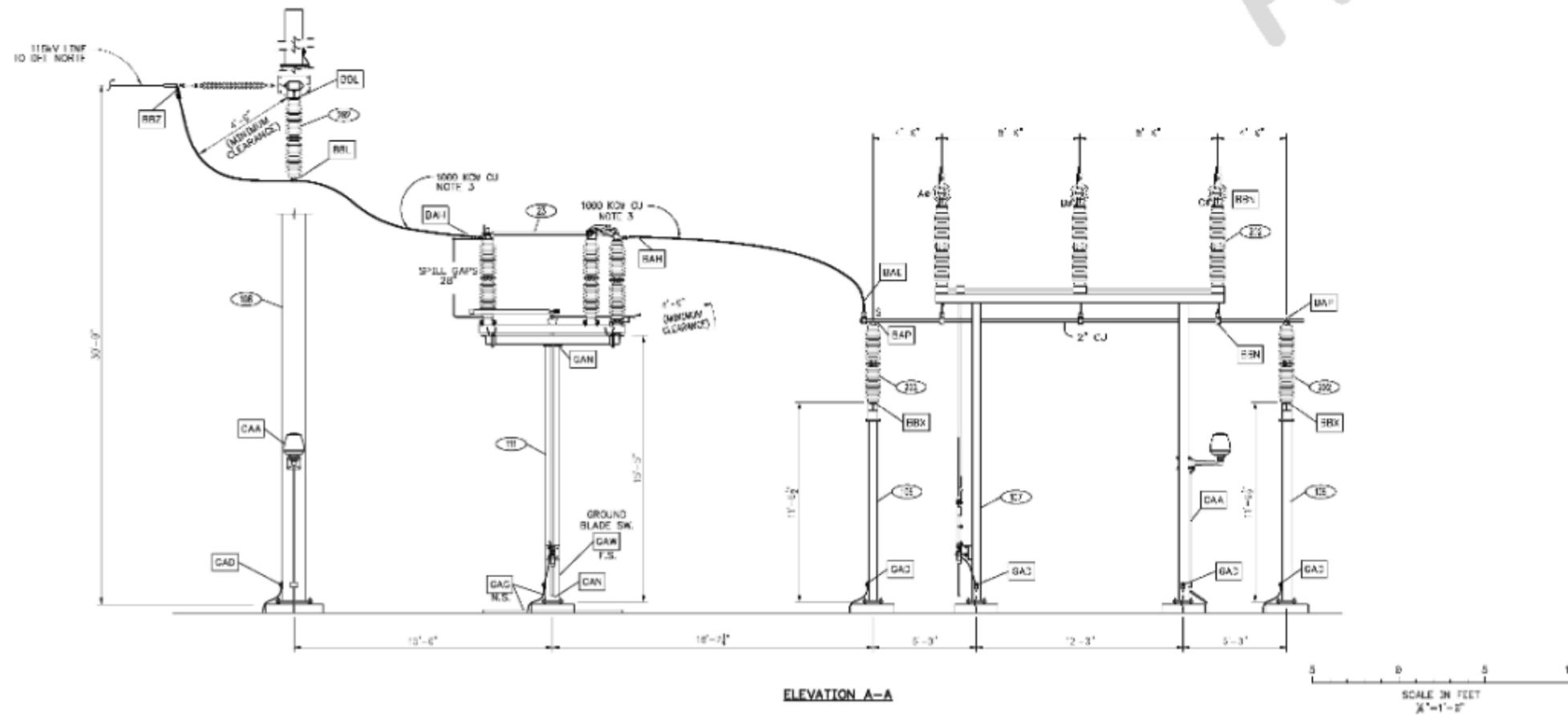
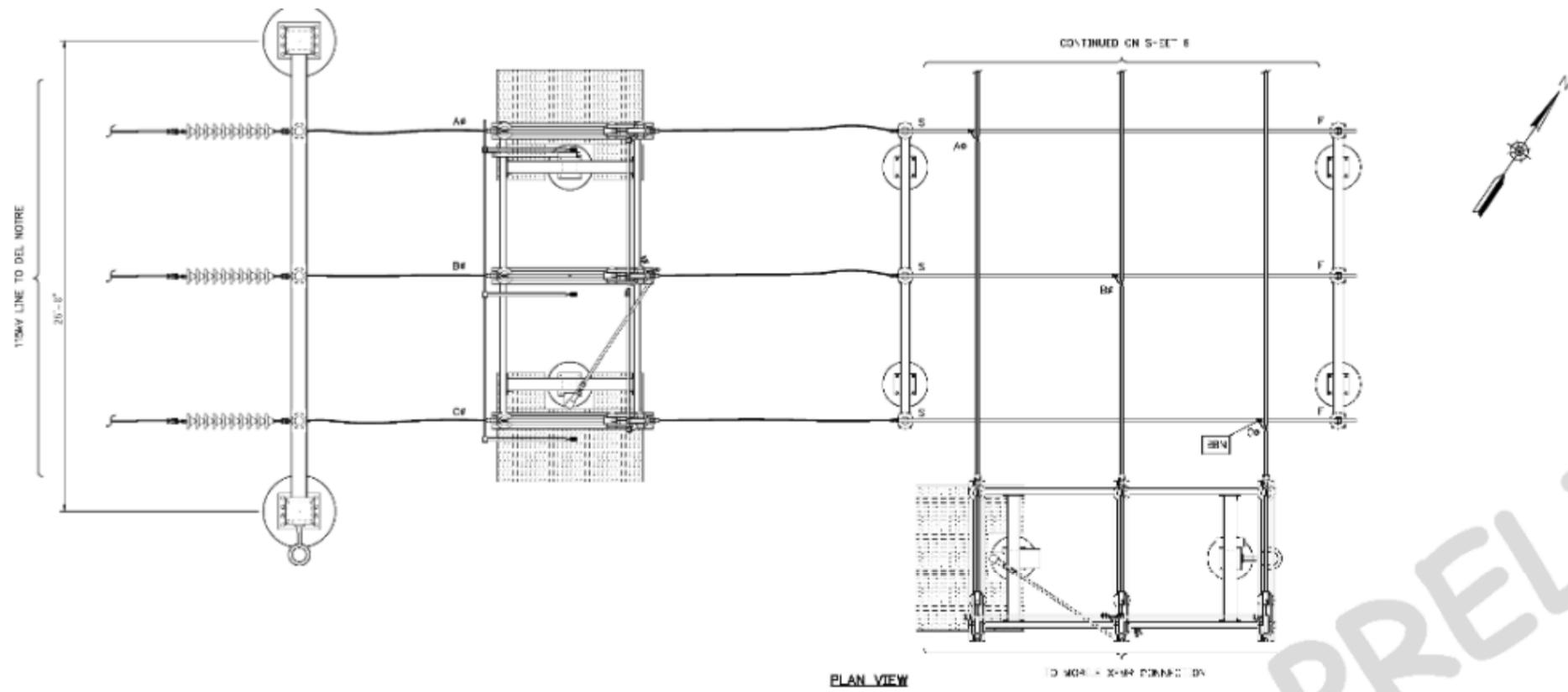


**PLAN**



**ELEVATION C-C**

PRELIMINARY

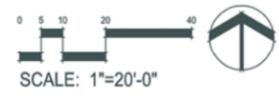


PRELIMINARY



**PLANT LIST**

-  EXISTING DOUGLAS FIR  
*Pseudotsuga menziesii*
-  EXISTING WILLOW  
*Salix sp.*
-  LARGE EVERGREEN TREE  
*Pseudotsuga menziesii*- Douglas fir
-  LARGE DECIDUOUS TREE  
*Acer macrophyllum*- Bigleaf maple
-  LARGE SHRUBS  
*Holodiscus discolor*- Ocean spray  
*Rhamnus californica* spp. *californica*- California coffeeberry  
*Rhododendron macrophyllum*- Pacific rhododendron  
*Vaccinium membranaceum*- Big huckleberry
-  SMALL SHRUBS & GROUNDCOVER  
*Rubus parviflorus* var. *velutinus*- Velvet thimbleberry  
*Vaccinium ovatum*- Black huckleberry  
*Lupinus*- Lupine  
*Polystichum munitum*- Sword fern  
*Xerophyllum tenax*- Bear grass
-  NATIVE SEED MIX



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the ground surface, and then the buried portion of the poles would be removed with a backhoe, bulldozer, or trackhoe. The remaining holes would be backfilled with clean fill material. The removed poles would be characterized for contamination potential and disposed of at an appropriate solid waste facility in accordance with State and federal solid and hazardous waste regulations. The four poles between the existing tap to Simonson Substation and the proposed tap to Morrison Creek Substation would continue to support the existing 12.5 kV distribution circuit; however, the 69 kV circuit and associated hardware would be removed from these poles.

PacifiCorp would adhere to the following process after the demolition and removal of the Simonson Substation to identify and determine the extent of, and dispose or treat any existing polychlorinated biphenyls (PCBs)-contaminated soil at the Simonson Substation site (PacifiCorp, 2007c):

1. Once all equipment and concrete footings have been removed and transported offsite, the property would be sampled in accordance with the U.S. Environmental Protection Agency (USEPA) grid sampling method developed for releases of oil potentially containing PCBs.
2. All samples would be analyzed for PCB contamination by an independent certified laboratory.
3. The analytical results would be compared to State and federal guidance documents for acceptable concentrations of PCBs in industrial and residential sites.
4. If necessary, a remediation plan would be developed based on the analytical results received. The remediation plan would be limited to excavation and removal of soil identified as contaminated for disposal offsite either at an incinerator or at a hazardous waste landfill.
5. Confirmation sampling would be conducted by PacifiCorp or its environmental consultant after excavation of all known contaminated soil has occurred to verify that no remaining contamination, if any, is above acceptable construction onsite.
6. Once all contaminated soil above acceptable concentrations has been removed, the site would be backfilled with clean soil and grading to match the existing topography.

## Staging Area

PacifiCorp anticipates that it and Green Diamond Lumber would enter into an agreement allowing PacifiCorp to use Green Diamond Lumber's land that surrounds the proposed substation site for a staging area. It is likely that existing paved areas could be used for the staging area. PacifiCorp estimates that an area of approximately two acres would be required for the proposed staging area. Materials, equipment, a mobile office, and a tool van would be located at this staging area. A temporary pole with a transformer may be installed at the site to provide temporary power for the mobile office and power tools. PacifiCorp has not proposed to install security lighting at the staging area because the entire site is currently secured by fencing.

## Construction Workforce and Equipment

Outside contractors would complete most of the proposed construction activities. PacifiCorp employees from Grants Pass and Medford, Oregon would perform final control wire terminations,

dress-out of the transformer, and final test and start-up. Company crew sizes would be two to four persons. Contract civil construction crews, substation electrical crews, and line construction crews would consist of approximately four people. The greatest number of workers on site at any one time would be ten, and that would likely occur only a few days during overlap of tasks.

A variety of heavy construction equipment types would be required to implement the Proposed Project. Refer to Table 1-1 for an estimation of the types of construction equipment that would be required at the site as well as the estimated duration of use for each piece of equipment. In addition to the equipment listed in Table 1-1, off-site equipment such as semi-tractor trucks and several light duty trucks would be required.

**TABLE 1-1  
ON SITE SUBSTATION CONSTRUCTION EQUIPMENT ESTIMATES**

<b>Equipment</b>	<b>Days of Use</b>	<b>Horsepower</b>
Crane	2 – 4 days	430 – 450 hp
Pickup Trucks	25 days	325 hp
Backhoe	5 days	97 – 101 hp
Bulldozer	5 days	232 – 498 hp
Vibratory Roller	3 days	133 hp
Bucket Truck	4 days	210 hp
Dump Truck	3 days	395 hp

SOURCE: PacifiCorp, 2007b

## **Construction Schedule**

PacifiCorp anticipates that construction activities associated with the Proposed Project would begin in July 2008. The construction period for the Proposed Project is expected to last approximately three months and would be finished in October 2008. PacifiCorp seeks to have the Proposed Project in operation by November 2008. Clean-up and landscaping activities would be completed by December 2008.

### **1.5.4 Operation and Maintenance**

The proposed Morrison Creek Substation would be an unmanned facility that would operate 24 hours a day, 7 days a week, and would receive routine maintenance comparable to what the existing Simonson Substation receives. Table 1-2 presents the anticipated maintenance schedule for the proposed Morrison Creek Substation.

**TABLE 1-2  
MORRISON CREEK SUBSTATION MAINTENANCE SCHEDULE**

<b>Maintenance Task</b>	<b>Interval</b>
Substation Inspection	Monthly
Infrared Scan	24 Months
Circuit Breaker Overhaul	96 Months
Circuit Breaker Relay Test and Calibrate	144 Months
Circuit Breaker Relay Diagnostic	48 Months
Circuit Breaker Uninterruptible Power Supply (UPS) Battery Test	36 Months
Transformer Test and Calibrate Relays	96 Months
Transformer Dissolved-Gas Analysis (DGA) and Oil Quality	36 Months
Transformer Spare Power Fuse Testing	60 Months

SOURCE: PacifiCorp, 2007b

## 1.5.5 General System Monitoring and Control

PacifiCorp uses industry standard monitoring and protection equipment on its transmission system, which would include the proposed Morrison Creek Substation. The substation would include distribution circuit breakers and related line relay protection equipment. If conductor failure were to occur, then power automatically would be removed from the distribution line. Failure of the 69 kV circuit would result in breakers opening at the Del Norte Substation. There would not be any 69 kV line relay protection equipment installed at the proposed Morrison Creek Substation. All faults downstream of the 69 kV transformer fuse at the proposed Morrison Creek Substation would be cleared by local protection.

## 1.6 Electric and Magnetic Fields Summary

### 1.6.1 Electric and Magnetic Fields

This IS/MND does not consider electric and magnetic fields (EMF) in the context of the CEQA analysis of potential environmental impacts because [1] there is no agreement among scientists that EMF creates a potential health risk, and [2] there are no defined or adopted CEQA standards for defining health risk from EMF. However, recognizing that there is a great deal of public interest and concern regarding potential health effects from human exposure to EMF from transmission lines and substations, this document does provide information regarding EMF associated with electric utility facilities and human health and safety. Thus, the EMF information in this IS/MND is presented for the benefit of the public and decision makers.

Potential health effects from exposure to *electric fields* from transmission lines and substations (i.e., the effect produced by the existence of an electric charge, such as an electron, ion, or proton, in the volume of space or medium that surrounds it) typically do not present a human health risk

since electric fields are effectively shielded by materials such as trees, walls, etc. Therefore, the majority of the following information related to EMF focuses primarily on exposure to *magnetic fields* (i.e., the invisible fields created by moving charges) from transmission lines and substations. Additional information on electric and magnetic fields generated by transmission lines and substations is presented in Appendix A.

After several decades of study regarding potential public health risks from exposure to power line EMF, research results remains inconclusive. Several national and international panels have conducted reviews of data from multiple studies and state that there is not sufficient evidence to conclude that EMF causes cancer. Most recently the International Agency for Research on Cancer (IARC) and the California Department of Health Services (DHS) both classified EMF as a *possible* carcinogen.

Presently, there are no applicable federal, State, or local regulations related to EMF levels from power lines or related facilities, such as substations. However, the CPUC has implemented a decision (D.06-01-042) requiring utilities to incorporate “low-cost” or “no-cost” measures for managing EMF from power lines up to approximately four percent of total project cost. PacifiCorp has incorporated low-cost and no-cost measures to reduce magnetic field levels in the vicinity of the proposed substation, as described below.

## 1.6.2 EMF and the Proposed Project

PacifiCorp’s EMF design guidelines include the following measures as options for reducing the magnetic field strength levels from electric power lines: (1) increase the height of overhead lines to reduce EMF strength at ground level; (2) reduce conductor spacing to increase cancellation of the magnetic field and decrease the resultant field strength; (3) minimize current through energy efficiency measures; and (4) optimize phase configuration by cross-phasing individual circuits to cancel magnetic fields. Use of any of these measures by PacifiCorp is dependent on the configuration of the particular project.

The EMF Decision and PacifiCorp’s Guidelines require PacifiCorp to prepare an EMF Field Management Plan (FMP) that specifically delineates the no-cost and low-cost EMF measures that would be installed as part of the final engineering design for the Proposed Project. The area with the highest calculated electric field increase that would be associated with the Proposed Project would occur where the 69 kV circuit would be tapped and dropped into the substation. However, the presence of the substation fence and other nearby objects would shield the electric field within the immediate vicinity. Outside of the substation, calculated electric field levels would remain virtually unchanged (except underneath the 69 kV circuit drop into the substation). A no-cost/low-cost mitigation option, which PacifiCorp proposes to implement, is to extend the proposed fence line on the southwest side of the substation to the edge of the proposed property line, which would restrict public access from the area where the 69 kV circuit would drop into the substation.

With respect to magnetic fields, the primary source in the area near the proposed substation is due to the presence of the 12.47 kV distribution circuit. To reduce the magnetic field, the height of the pole supporting the existing 69 kV and 12.47 kV circuits would need to be increased. However, this would be mitigating an existing condition rather than a new condition resulting from the proposed substation. In addition, a significant increase in pole height would have to be implemented to achieve a moderate field reduction. Increasing the pole height would potentially create a visual impact. Given these offsetting factors, PacifiCorp does not intend to raise existing pole heights to mitigate the level of magnetic fields.

## 1.7 Required Permits and Approvals

The CPUC is the CEQA lead agency for the Proposed Project. In addition to the CEQA review, PacifiCorp would obtain permits, approvals, and/or licenses as needed from a number of other State and local agencies. The agency requirements anticipated for the Proposed Project are listed in Table 1-3.

**TABLE 1-3  
SUMMARY OF PERMIT REQUIREMENTS**

<b>Agency</b>	<b>Permits and Other Requirements</b>	<b>Jurisdiction/Purpose</b>
<b>State Agencies</b>		
California Public Utilities Commission	Permit to Construct	Project approval and CEQA review
State Water Resources Control Board	NPDES General Permit for Storm water	Construction impacting 1 or more acres
California Department of Transportation	Oversized Load Permit	All oversized truck trips on State highways, such as U.S. 101
<b>Local Agencies</b>		
Del Norte County	Conditional Use Permit	Change in use of property

## References – Project Description

PacifiCorp, 2007a. *Proponent's Environmental Assessment for the Morrison Creek 69 kV Substation Project*, July 10, 2007.

PacifiCorp, 2007b. *PacifiCorp's Response to Energy Division's Data Request 1*, August 28, 2007.

PacifiCorp, 2007c. *PacifiCorp's Response to Energy Division's Data Requests 2*, September 28, 2007.

SHN Consulting Engineers and Geologists, Inc., (SHN). 2007. *Phase 1 Environmental Site Assessment, Morrison Creek Substation, Smith River, Del Norte County, California*, June.



# SECTION 2

## Environmental Checklist and Discussion

### 2.1. Aesthetics

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>1. AESTHETICS—Would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Setting

The purpose of this section is to document the existing visual or aesthetics resources in the study area and to assess the potential aesthetics impacts that might occur as a result of construction, operation, and maintenance of the Proposed Project. A summary of public regulations and policies pertaining to visual quality in the vicinity of the Proposed Project vicinity is also provided. Where applicable, mitigation measures were identified to address potential impacts from the Proposed Project.

For purposes of this analysis, aesthetic resources are generally defined as the natural and built features of the landscape that can be seen. The combination of landform, water, and vegetation patterns represents the natural landscape features that define an area’s visual character whereas built features such as buildings, roads, and other structures reflect human or cultural modifications to the landscape. These natural and built landscape features or visual resources contribute to the public’s experience and appreciation of the environment. Depending on the extent to which a project’s presence would alter the perceived visual character and quality of the environment, visual or aesthetic impacts may occur.

This visual analysis employs assessment methods based, in part, on U.S. Department of the Transportation, Federal Highway Administration methods (FHWA, 1988) and other accepted visual analysis techniques as summarized by Smardon et al. (1986). The analysis is also designed to respond to the California Environmental Quality Act (CEQA) Guidelines for visual impact analyses.

## **Regional and Local Setting**

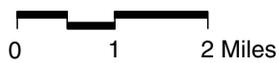
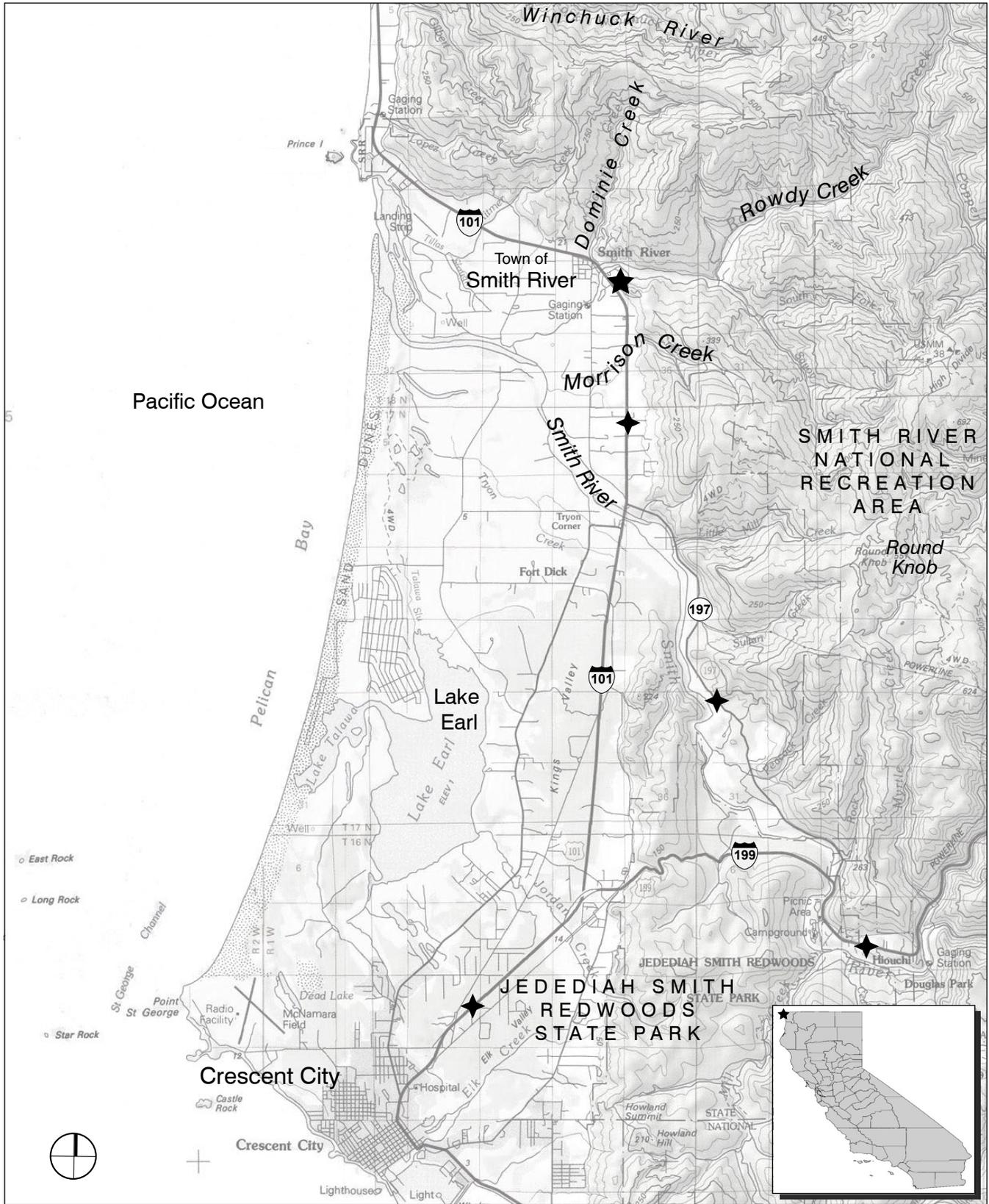
Located in northwest Del Norte County, the Morrison Creek Substation project site is situated approximately five miles south of the Oregon/California border and three miles east of the Pacific Ocean. The site lies approximately a quarter-mile southeast of the town of Smith River, a small community in the northern metropolitan area of Crescent City. Figure 2.1-1 shows the Proposed Project's location within its regional landscape context.

Landform in Del Norte County is predominantly mountainous, and at most locations along the coast, the mountains end at the shoreline. At other places, such as the level terrain west and south of the Proposed Project site, marine terraces form an intermittent coastal plain that extends as wide as five miles across. Situated near the outlet of the Smith River, the site lies at the edge of a marine terrace which is approximately four miles wide and 13 miles long. Crescent City, the largest town in the County with an estimated population of 7,860 (census.gov), is to the south and Lake Earl and Lake Talaw to the west.

North coast forest vegetation, dominated by Douglas fir, big-leaf maple, and Sitka spruce, covers much of the surrounding mountain ranges. The vegetation pattern on the flatter marine terrace to the west and south consists of low coastal scrub and grasses. Wetlands are found throughout this area particularly around the opening of Smith River to the west and around the lakes which lie south of the Proposed Project site. The regional climate can be characterized as having generally mild temperatures, with most of the rainfall occurring during the winter months. Fog and overcast conditions, typical of this coastal-marine setting, influence the region's visual character. During periods of foggy, overcast weather, the general level of visibility and discernable detail is diminished, particularly with respect to views of landscape features seen beyond the foreground, at distances greater than one-half mile.

The area's coastal and forested landscape setting fosters a variety of tourist and recreational activity. Numerous State and County parks along the coast and inland forests provide a setting for recreational activities including sport fishing, bird watching, hiking, boating, and camping. To the east of the Proposed Project site is the Smith River National Recreation Area which can be reached via Rowdy Creek Road. To the west along Pelican Bay are approximately ten miles of public beaches and dunes including Tolowa Dunes State Park and the Lake Earl Wildlife Park.

U.S. Highway 101 (U.S. 101), a major regional transportation corridor, runs northwest-southeast through the vicinity of the study area. U.S. 101 provides access to Oregon and metropolitan areas to the south in California. A network of narrower, rural roads also serves the vicinity of the Proposed Project. Land uses in the vicinity of the Proposed Project site include a mixture of agriculture, open space, and small scale rural settlements on the gently sloped plain.



- ◆ Eligible State Scenic Highway
- ★ Proposed Project Site

SOURCE: USGS

CPUC Morrison Creek . 206320

**Figure 2.1-1**  
Regional Landscape Context

A number of gravel extraction areas are located along the lower Smith River, the nearest within two miles of the Proposed Project site. Extensive timber production also occurs on the hills to the east; however, most of the mill sites in the area are vacant (Del Norte County, 2003).

## **Local Visual Character**

The visual character found in the vicinity of the Proposed Project site encompasses a variety of natural and built features typically found in a rural coastal landscape setting. Figure 2.1-2, an aerial photograph of the site and surrounding area, conveys a sense of the Proposed Project's local visual context. The Proposed Project site itself is located in a generally level plain enclosed by Rowdy Creek to the north, steep forested hills to the south and east, and U.S. 101 to the west. Within the vicinity of the Proposed Project site, the area is open with scattered tree groupings and large shrubs. The Proposed Projects site's visual character reflects its former use as a lumber mill as the mill foundation and areas of surrounding pavement are evident.

Figures 2.1-3a and 2.1-3b present a set of photographs taken in the vicinity of the Proposed Project site that portray the visual character of the area. Figure 2.1-2 shows the photo viewpoint locations.

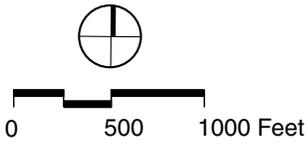
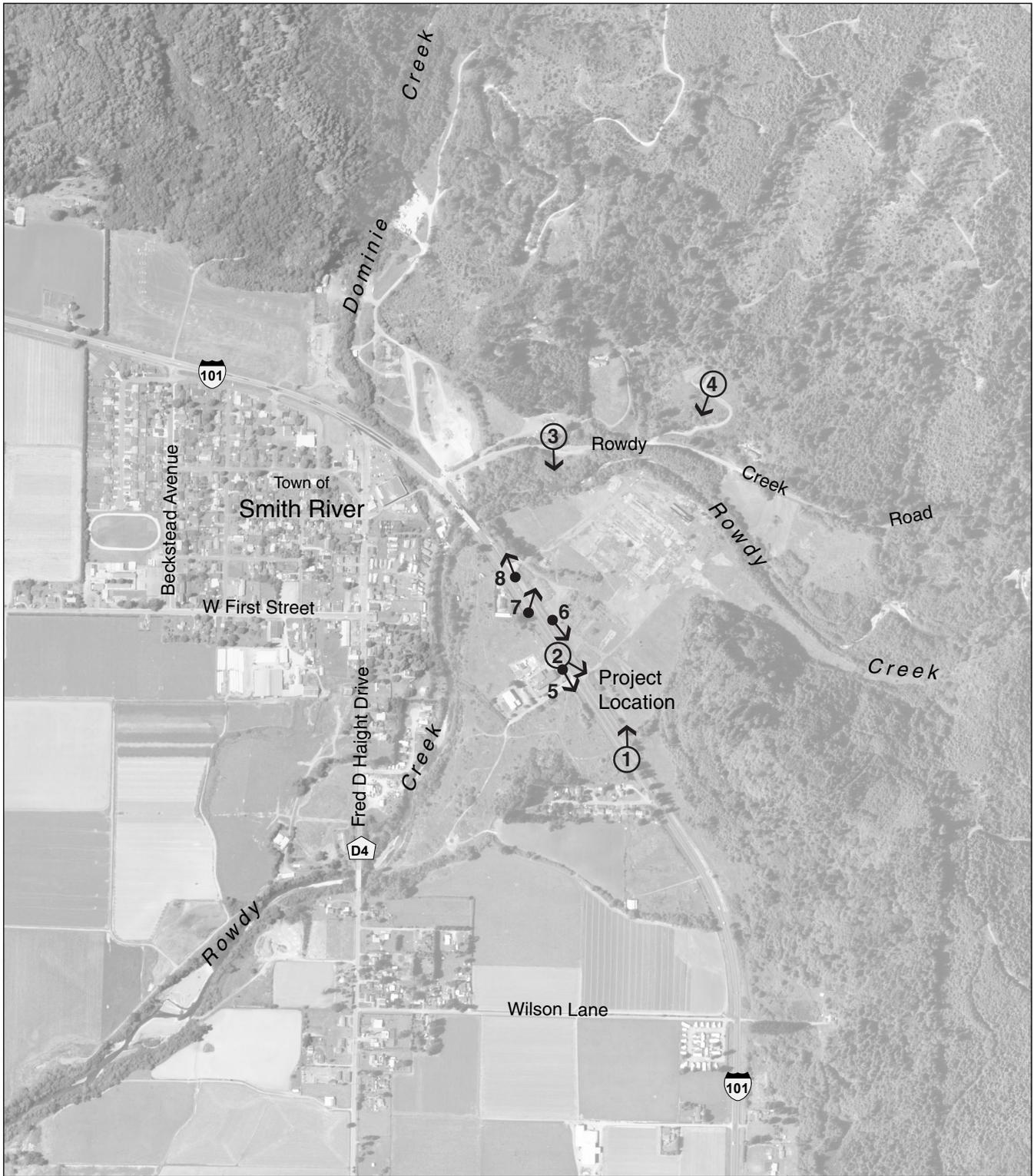
### ***U.S. Highway 101 Corridor***

The Proposed Project site lies to the east and adjacent to the U.S. 101 corridor. In the vicinity of the Proposed Project, U.S. 101 is a two lane roadway with intermittent access driveways and intersections. Photos 1, 2, and 5 through 8 (Figures 2.1-3a and 2.1-3b) are views from various points along the highway corridor in the vicinity of the Proposed Project site. These photographs convey the heavily forested character typically seen along much of this roadway.

In some locations to the north and south of the Proposed Project site, roadway travelers experience open views towards the Pacific Ocean. However, the roadway is approximately three miles from the coastline in the vicinity of the Proposed Project and the ocean generally is not visible. An existing 69 kV transmission line parallels the eastern side of the roadway. As shown in Photos 1, 2, and 5 through 8 (Figures 2.1-3a and 2.1-3b), the existing transmission line appears in foreground views from the road. Approximately 1,000 feet northwest of the Proposed Project site, adjacent to U.S. 101 and south of Rowdy Creek, is the existing Simonson Substation site. Motorists experience an unobstructed view of the existing Simonson Substation from a limited portion of U.S. 101 (Photo 7).

### ***Rowdy Creek/Area to the North***

The Proposed Project site lies south of Rowdy Creek, a tributary of the Smith River. Dense vegetation lines much of the creek corridor. Nestled on the hillside to the north across Rowdy Creek are several residences as well as the Tolowa Tribe Headquarters' office. Mature intervening trees and shrubs, including riparian vegetation, provide a measure of screening with respect to public views of the site from the north (Figure 2.1-3a, Photos 3 and 4).



- 5 ●➔ Photo Viewpoint
- ① ➔ Simulation Viewpoint

SOURCE: USGS (2005) CPUC Morrison Creek . 206320

**Figure 2.1-2**  
Visual Context and Photo Viewpoint Locations



1. Highway 101 looking northeast



2. Highway 101 looking southeast



3. Tolowa Tribe Headquarters (2nd. floor) on Rowdy Creek Road looking south



4. Hight's View Road looking southwest

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320



5. Highway 101 looking south



6. Highway 101 at Simonson Substation looking south



7. Highway 101 looking northeast toward Simonson Substation



8. Highway 101 near Rowdy Creek looking north

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

### ***Area to the East and South***

To the east, the landform slopes upward and is heavily forested with a mixture of mature deciduous and coniferous trees. Views from the southeast and east are generally screened by vegetation and landform.

Across U.S. 101 to the south of the Proposed Project site lie a small cluster of single family residences along East Denney Lane. Views from this area are partially screened by mature trees associated with this development as well as vegetation on the Proposed Project site.

### ***Smith River/Area to the West***

The town of Smith River lies to the west, across U.S. 101 and Rowdy Creek. This community is comprised of a mix of land uses including businesses, single-family residences and a mobile home park located adjacent to the creek. Vegetation along Rowdy Creek and existing structures generally screen views of the site from places within the town.

## **Regulatory Context**

### ***Federal***

No federal visual resource policies are applicable to the Proposed Project; however, the Del Norte County segment of U.S. 101 is eligible for inclusion in the Tri-State Pacific Coast Scenic Byway, which extends from Olympia, Washington to Eureka, California (see Del Norte County Regional Transportation Plan, below, for a more detailed discussion).

### ***State***

#### **California Department of Transportation**

According to the California State Scenic Highways program, there are no designated State scenic highways in the vicinity of the Proposed Project site. However, U.S. 101 is an eligible State scenic highway in the vicinity of the Proposed Project site. In this location, U.S. 101 is a two lane roadway with a posted speed limit of 55 mph. The Proposed Project site is adjacent to U.S. 101 in an area where views from both northbound U.S. 101 and southbound U.S. 101 are partially screened by existing trees.

### ***Local***

#### **Del Norte County General Plan**

The Proposed Project site is located within the Smith River planning subarea of the *Del Norte County General Plan* (Del Norte County, 2003). Chapter 6, Scenic Resources, has a number of goals and objectives regarding the protection of visual resources. These policies address scenic resources as well as scenic highways.

The plan has a general goal to “[p]reserve and enhance the scenic quality of life in Del Norte County for both residents and visitors.” Part of this the plan contains lighting and signage policies to minimize annoying glare particularly towards residential areas.

The General Plan recommends maintaining coastal viewpoints in scenic corridors and designates portions of U.S. 101 north and south of the Proposed Project area as scenic corridors; U.S. 101 where it passes by the Proposed Project is not a County-designated scenic corridor. The plan has a goal to maintain and improve the scenic quality of this highway and specifically lists policies limiting signage and billboards. The General Plan also recommends that the County should develop an underground utilities priority list utilizing identified scenic highways, scenic drives, and/or scenic areas for use when funding for undergrounding is available. Smith River Public Fishing Access, three miles away from the Proposed Project site, is the nearest County designated scenic viewpoint within the U.S. 101 corridor.

Additionally, the plan directs the County to continue to work with California Department of Transportation (Caltrans) and the States of Oregon and Washington in updating the *U.S. Tri-State Pacific Coast Scenic Byway Corridor Management Plan*.

### **Del Norte County Regional Transportation Plan**

The *Del Norte County Regional Transportation Plan*, prepared by the Del Norte Local Transportation Commission (2007), contains a number of provisions that pertain to visual resources. The plan recommends that the County apply for State scenic route designation for all of U.S. 101. Additionally, the Del Norte County segment of U.S. 101 is eligible for inclusion in the Tri-State Pacific Coast Scenic Byway, which extends from Olympia, Washington to Eureka, California. A draft corridor management plan was prepared by Caltrans staff in 1997. However, efforts to pursue National Highway System Scenic byway status stalled due to reservations about potential restrictions that might come with designation.” (DNLTC, 2007).

Applicable provisions from the Policy Element of the Plan also include supporting the designation of segments of U.S. Highways 101 and 199, and State Route 197 in the Federal Scenic Highway Program, as soon as a method for designation is available. The plan also encourages the undergrounding of new or relocated utility lines particularly where those utilities interfere with a scenic view and recommends limitations on signage within these roadways.

### **Del Norte County Zoning Ordinance**

The Proposed Project site is zoned by Del Norte County as *Manufacturing and Industrial* (Del Norte County Zoning, Chapter 20.30). Building height limits in this zoning area are seventy-five feet. The Zoning Ordinance does not limit lot setbacks or coverage except in cases where the parcel abuts residential land uses. The Proposed Project site does not abut residential land uses.

## **Aesthetics Impacts and Mitigation Measures**

### ***Visual Simulations***

Visual simulations, presented as part of this aesthetic analysis, illustrate representative “before” and “after” visual conditions in the Proposed Project area. In the text below, the evaluation of potential visual impacts associated with the Proposed Project is based, in part, on comparing the “before” and “after” visual conditions as portrayed in the set of simulations and assessing the degree of visual change that the Proposed Project would bring about. The significance determination is based on several evaluation criteria including the extent of project visibility from sensitive viewing areas such as designated scenic routes or residential areas; the degree to which project elements would contrast with or be integrated into the existing landscape; the extent of change in the landscape’s composition and character; and the number and sensitivity of viewers. Project conformance with public policies regarding visual quality was also taken into account.

The simulations presented in this section illustrate the location, scale, and conceptual appearance of the Proposed Project as seen from four key viewing locations. Visual simulations are presented in color, one image per page with the existing visual condition photo on a page opposite from a visual simulation depicting the Proposed Project. The images were photographed in September 2007 with a 50 millimeter (mm) equivalent lens which represents a horizontal view angle of 40 degrees. With the exception of the photo taken from the second story of the Tolowa Tribal Headquarters (Figure 2.1-6), the simulations portray representative public views. The four simulation vantage points include:

1. Northbound U.S. 101 (Figures 2.1-4a, b, and c),
2. Southbound U.S. 101 (Figures 2.1-5a, b, and c),
3. The Tolowa Tribal Headquarters on Rowdy Creek Road (Figures 2.1-6a, b, and c), and
4. Hight’s View Road (Figures 2.1-7a, b, and c).

For each vantage a set of three images is presented including an existing or “before” view and two “after” or visual simulation images. The first simulation image (b) shows the Proposed Project without landscaping, as it would appear immediately following construction. The second simulation image (c) shows the Proposed Project with proposed landscaping at 10 years after installation. For each of the simulations, proposed vegetation was simulated using landscape design data provided by the Proposed Project engineers. Tree heights at 10 years of growth are based on data from SelecTree (Reimer and Mark, 2007) and the U.S. Department of Agriculture Plants Profile data (USDA, 2007).

### ***Project Characteristics***

Section 1 includes a detailed description of the Proposed Project and Figures 1-4 and 1-5a through 1-5d present plan and elevation drawings of the proposed Morrison Creek Substation. As shown in the drawings, the height of the tallest portions of the substation would be approximately 30 feet tall, while the majority of the equipment would be less than 16 feet in height. The 69 kV circuit tap would extend from a new 70 foot-tall self-supporting steel pole that would be installed adjacent to the southwest side of the proposed site and within the existing transmission line right-

of-way (ROW). An 8-foot-high chain-link fence would enclose the 275-foot by 275-foot footprint of the proposed Morrison Creek Substation.

As indicated in the project description, the proposed Morrison Creek Substation would be constructed and operated at 69 kV. However, the proposed Morrison Creek Substation would be sized to accommodate a possible future conversion to 115 kV. Timing for construction and operation of the proposed Morrison Creek Substation at 115 kV is unknown and speculative, and so is not analyzed as part of the Proposed Project.

### **Project Landscaping and Vegetation Removal**

New landscaping designed to screen the new facilities from public view is proposed as part of the project (Figure 1-6). Vegetation, including Himalayan blackberry bushes, a big-leaf maple tree, and several small alder trees, would be required to be removed in the eastern corner of the proposed site. The trunk of the big-leaf maple to be removed is approximately 18 inches diameter at breast height (dbh) while the smaller alder tree trunks range from 0.5 to 2.0 inches dbh.

### **Existing Facility Removal**

The Proposed Project also includes removal of existing structures, including the existing Simonson Substation located approximately 1,000 feet to the northwest and two existing wood tap poles associated with the existing substation.

**a) Substantial adverse effect on a scenic vista: *Less than significant.***

A scenic vista is considered an open and expansive public view encompassing valued landscape features including ridgelines and mountains.

According to the *Del Norte County General Plan*, the Smith River Public Fishing Access that is located about three miles from the Proposed Project site is a designated scenic viewpoint. The Proposed Project would not be visible from this location. The Pacific coast lies approximately three miles away, and, on clear days, the ocean is visible from hillside locations to the east of the site. Figure 2.1-7a and Figure 2.1-7b present “before” and “after” views of the Proposed Project as seen from Hight’s View Road looking southwest across the Proposed Project site. The photo conveys the low fog and overcast conditions which frequently obscure views of the coastline. As indicated by the visual simulation (Figure 2.1-7b), the elements of the Proposed Project would be relatively low profile and would appear against a backdrop of topography and vegetation. Furthermore, over time the Proposed Project landscaping would provide additional screening from this viewpoint (Figure 2.1-7c). The visual simulation demonstrates that the Proposed Project would not obstruct distant views of the coast that may be available from this location.

Figures 2.1-4a and 2.1-4b, as well as Figures 2.1-5a and 2.1-5b, present “before” and “after” views of the Proposed Project site that include views of adjacent forested ridgelines that are available from U.S. 101 in both north and south directions. The figures indicate that the Proposed Project elements would not obscure views of the ridgelines. Additionally, as shown in Figures 2.1-4c and 2.1-5c, over time the proposed landscaping

would provide effective screening of the proposed Morrison Creek Substation from U.S. 101.

As described above, it is expected that the Proposed Project would not obstruct views of scenic vistas, including the distant coast or nearby ridgelines, which currently are available to the public. Therefore, the impact would be less than significant and no mitigation would be required.

**b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway: *Less than significant with mitigation.***

As indicated in the visual setting, there are no federally or State designated scenic highways found within the vicinity of the Proposed Project site; therefore, the Proposed Project would not affect scenic resources within a federal or State scenic highway. However, U.S. 101 is an eligible State scenic highway.

Figures 2.1-4a and 2.1-4b, as well as Figures 2.1-5a and 2.1-5b, present “before” and “after” views of the Proposed Project site from northbound and southbound U.S. 101, respectively. The visual simulations indicate that portions of the Proposed Project (i.e., parts of the substation and perimeter fence) would be visible from U.S. 101 although effects to motorist views would be brief in duration. The proposed structures would appear briefly in the foreground and would be seen against a landscape backdrop. As shown in the Figure 2.1-4c and 2.1-5c simulations, over time the project landscaping would provide effective screening from the highway. Because the roadway is an eligible State scenic highway, the aesthetic effect associated with the Proposed Project could be significant.

With respect to U.S. 101 motorist views, the Proposed Project would also result in changes associated with removing the existing Simonson Substation structure located approximately 1,000 feet northwest of the proposed substation site. In addition, two existing wood tap poles associated with the Simonson Substation would be removed. Since U.S. 101 motorists in the study area currently have unobstructed foreground views of these utility structures, the aesthetic effect associated with their removal would be beneficial.

**Impact 2.1-1: The Proposed Project would affect views from U.S. 101, an eligible State scenic highway. This impact would be reduced to less than significant with implementation of Mitigation Measure 2.1-1.**

**Mitigation Measure 2.1-1:** Landscaping shall be installed outside the perimeter fence at the Morrison Creek Substation to partially screen views from Highway 101 and to integrate the Morrison Creek Substation’s appearance with the surrounding landscape.

Plant material shall be appropriate to the local/natural landscape setting and shall be consistent with Public Resources Code Section 4292 for vegetation located in proximity to transmission facilities. A landscape plan prepared by a licensed landscape architect or certified arborist shall be submitted to the CPUC. The landscape plan shall show the location, suggested species and size at planting for all proposed plant material. The plan shall also show proposed landscaping in relation to the final placement of the tap pole and substation perimeter fence. The plan shall be submitted to, reviewed and approved by the CPUC prior to commencement of construction.

**Significance after Mitigation:** Less than significant.

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c) **Substantially degrades the existing visual character or quality of the site and its surroundings: *Less than significant.***

Figures 2.1-4a through 2.1-7c present “before”, “after,” and “mature landscaping” views of the Proposed Project site as seen from four vantage points, including three that represent public views and one that is a view from the Tolowa Tribal Headquarters building located on Rowdy Creek Road. As presented in the visual simulations, it is anticipated that the Proposed Project would affect views from limited areas in the immediate vicinity of the study area.

Due to existing screening provided by intervening vegetation and topography, the Proposed Project would not be seen from the town of Smith River or from more distant locations. Additionally, the Proposed Project would be located on a disturbed site with large areas of existing pavement and remnants of old lumber mill foundations. The Proposed Project would include new landscaping designed to screen public views of the substation, and Mitigation Measure 2.1-1 would ensure that the landscaping is appropriate and effective. Over time as the landscaping matures, views of the substation structures would be screened and the site would appear more similar to the surrounding wooded landscape seen on the nearby forested hillside. Therefore, impacts to the existing visual character or quality of the site and its surroundings would be less than significant. In addition, as discussed above, the Proposed Project would involve removing existing structures associated with the Simonson Substation. The visual effect associated with removing these structures would be beneficial.



**Existing View from Northbound Highway 101 (VP 1)**

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-4a**  
Existing View from Northbound Highway 101 (VP 1)



**Visual Simulation of Proposed Project from Northbound Highway 101 (VP 1)**

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-4b**

Visual Simulation of Proposed Project from Northbound Highway 101 (VP 1)



**Visual Simulation of Proposed Project and Landscaping at 10 years maturity from Northbound Highway 101 (VP 1)**

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-4c**

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**Existing View from Southbound Highway 101 (VP 2)**

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek, 206320

**Figure 2.1-5a**

Existing View from Southbound Highway 101 (VP 2)



**Visual Simulation of Proposed Project from Southbound Highway 101 (VP 2)**

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-5b**

Visual Simulation of Proposed Project from Southbound Highway 101 (VP 2)



**Visual Simulation of Proposed Project and Landscaping at 10 years maturity from Southbound Highway 101 (VP 2)**

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-5c**

Visual Simulation of Proposed Project and Landscaping at 10 years Maturity from Southbound Highway 101 (VP 2)

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**Existing View from Tolowa Tribe Headquarters (VP 3)\***

\*View from second floor of building at 140 Rowdy Creek Road.

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-6a**

Existing View from Tolowa Tribe Headquarters (VP 3)



**Visual Simulation of Proposed Project from Tolowa Tribe Headquarters (VP 3)**

\*View from second floor of building at 140 Rowdy Creek Road.

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-6b**

Visual Simulation of Proposed Project from Tolowa Tribe Headquarters (VP 3)



**Visual Simulation of Proposed Project and Landscaping at 10 years maturity from Tolowa Tribe Headquarters (VP 3)**

\*View from second floor of building at 140 Rowdy Creek Road.

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-6c**

Visual Simulation of Proposed Project and Landscaping at 10 years Maturity from Tolowa Tribe Headquarters (VP 3)

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**Existing View from Hight's View Road (VP 4)**

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-7a**  
Existing View from Hight's View Road (VP 4)



**Visual Simulation of Proposed Project from Hight's View Road (VP 4)**

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-7b**

Visual Simulation of Proposed Project from Hight's View Road (VP 4)



**Visual Simulation of Proposed Project and Landscaping at 10 years maturity from Hight's View Road (VP 4)**

SOURCE: Environmental Vision (2007)

CPUC Morrison Creek. 206320

**Figure 2.1-7c**

101607

Visual Simulation of Proposed Project and Landscaping at 10 years Maturity from Hight's View Road (VP 4)

**d) Creation of a new source of substantial light or glare, which would adversely affect day or nighttime views in the area: *Less than significant with mitigation.***

Lighting at the facility would be restricted to areas required for safety, security, and operation. Exterior lights would be hooded, and lights would be directed downward onsite so that significant light or glare would be minimized. Fixtures of a non-glare type would be specified. The proposed Morrison Creek Substation would be continually operational, but would not be staffed on site. Switched lighting circuits would be provided so that the site would not be lit at most times, thus minimizing the amount of lighting that could be potentially visible to the public. Therefore, impacts associated with creation of a new source of substantial light are less than significant.

Additionally, the Proposed Project would involve removing the existing substation approximately 1,000 feet northwest of the proposed substation site. Lighting associated with this existing substation would also be removed.

In regards to creation of a new source of substantial glare, the substation equipment proposed to be installed (e.g., transformer, regulator, recloser, fence, etc.) could cause a glare from reflected sunlight.

**Impact 2.1-2: The Proposed Project could create a new source of substantial glare. This impact would be reduced to less than significant with implementation of Mitigation Measure 2.1-2.**

**Mitigation Measure 2.1-2:** A non-reflective or weathered finish shall be applied to all new structures and equipment installed at the Morrison Creek Substation to reduce potential glare effects.

**Significance after Mitigation:** Less than significant.

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## References - Aesthetics

- Del Norte County. 2003. *Del Norte County General Plan*. Adopted on January 28, 2003.
- Del Norte Local Transportation Commission (DNLTC). 2007. *Del Norte County Regional Transportation Plan*. June 2007.
- Reimer, Jeffrey L. and W. Mark. 2007. "SelecTree: A Tree Selection Guide." Online at: <http://selectree.calpoly.edu/>. Site visited September 2007.
- Smardon, Richard C., Palmer, James F., Felleman, John P., editors. 1986. *Foundations for Visual Project Analysis*. New York: Wiley.
- U.S. Department of Agriculture, USDA Plants Profile Website. "plants.usda.gov/" Site visited September 17 and October 11, 2007.
- U.S. Department of Transportation, Federal Highway Administration. 1988. *Visual Impact Assessment for Highway Projects*. Washington, D.C.: Publication No: FHWA-HI-88-054.



## 2.2 Agricultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>2. AGRICULTURE RESOURCES</b>				
In determining whether impacts to 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 as an optional model to use in assessing impacts on agriculture and farmland.				
<b>Would the project:</b>				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or 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 which, 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"/>

This section provides a description of local agricultural resources on parcels in and adjacent to the Proposed Project site. A general overview of applicable State and County regulations is also provided. The impact analysis evaluates the Proposed Project's potential to adversely affect existing agricultural resources.

### Setting

The Proposed Project would be located on private property that is not currently, nor historically, used for agriculture. The closest agricultural land to the study area is located to the south and southwest of the proposed Morrison Creek Substation site, on the west side of U.S. Highway 101 (U.S. 101).

### Important Farmland

To characterize the environmental baseline for agricultural resources, Important Farmland Maps produced by the Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) are reviewed. Important Farmland maps show categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance (if adopted by a county), Grazing Land, Urban and Built-up Land, Other Land, and Water. Thus far, the FMMP has not created an Important Farmland map for Del Norte County (CDC, 2007).

### Williamson Act Contracts

Williamson Act contracts are a tool often used by local governments to preserve agricultural and open space lands by discouraging premature and unnecessary conversion to urban uses. Under the provisions of the Williamson Act (Section 51200 of the California Land Conservation Act of 1965), landowners contract with the county to maintain agricultural or open space use of their

lands in return for a reduced property tax assessment. In 1994, the Williamson Act was amended to include specific language regarding “conditional compatibility” (Government Code Section 51238.1), mining compatibility (Section 51238.2), and grandfather provisions (Section 51238.3). Del Norte County is one of the five California counties that does not offer Williamson Act contracts (CSAC, 2007).

## Regulatory Context

### Del Norte County General Plan

The existing Simonson Substation and proposed Morrison Creek Substation sites are located on parcels that are designated by the Del Norte County General Plan as *General Industrial* (GI), *Light Industrial* (LI), and *Riparian Corridor* (RC) uses (Del Norte County, 2007). Agricultural related uses are generally not appropriate within these land use designations, as the *General Industrial* and *Light Industrial* designations are primarily intended to provide for commercial, industrial, and manufacturing industries in both rural and urban areas of Del Norte County and the *Riparian Corridor* designation applies to areas containing riparian vegetation immediately adjacent and contiguous to a natural water course (e.g., Rowdy Creek) (Del Norte County, 2003).

### Del Norte County Code

The existing Simonson Substation and proposed Morrison Creek Substation sites are located on parcels that are currently zoned *Manufacturing and Industrial* (M) (Del Norte County, 2007). Agricultural uses are not a permitted use on land with this zoning (Del Norte County, 1967).

## Agriculture Resources Impacts and Mitigation Measures

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use: *No Impact*. See discussion under c).**
  
- c) **Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use: *No Impact*.**

The Proposed Project site is located on private property that is neither currently, nor historically, used for agriculture. The Proposed Project would not result, directly or indirectly, in any conversion of land designated by the Department of Conservation FMMP as *Prime Farmland*, *Farmland of Statewide Importance*, or *Unique Farmland*. As stated above in the Setting, the parcels through which the Proposed Project would traverse are not mapped by the FMMP (CDC, 2007). Thus, the Proposed Project would not result in the conversion of land designated as *Prime Farmland*, *Farmland of Statewide Importance*, or *Unique Farmland*.

b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract: *No Impact.***

As previously noted, the Proposed Project site is located on parcels that are currently zoned *Manufacturing and Industrial* (M). The Proposed Project site is not located on parcels that are under a Williamson Act contract. Therefore, the Proposed Project would not result in any conflicts with existing zoning for agricultural use or a Williamson Act contract.

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## References – Agricultural Resources

California Department of Conservation (CDC), 2007. Farmland Mapping and Monitoring Program (FMMP). Geographic Information System data obtained from [http://www.consrv.ca.gov/DLRP/fmmp/map\\_products/download\\_gis\\_data.htm](http://www.consrv.ca.gov/DLRP/fmmp/map_products/download_gis_data.htm) on October 11, 2007.

California State Association of Counties (CSAC), 2007. *Percentage of County Acreage in Williamson Act*, [http://www.csac.counties.org/legislation/williamson\\_act/williamson\\_act\\_county\\_acreage.pdf](http://www.csac.counties.org/legislation/williamson_act/williamson_act_county_acreage.pdf), accessed October 11, 2007.

Del Norte County, 1967. *Del Norte County Code: Chapter 20.30: M District – Manufacturing and Industrial (Ord. 67-10 §3.1301)*, 1967.

Del Norte County, 2003. *Del Norte County General Plan*, January 28, 2003.

Del Norte County, 2007. Email communication with Randy Hooper, Planner II, Del Norte County, on October 11, 2007.



## 2.3 Air Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>3. AIR QUALITY</b>				
Where 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. <b>Would the project:</b>				
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 non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which 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 checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in substantial long-term emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

This section evaluates the Proposed Project's potential to impact regional and local air quality from stationary and mobile sources of air emissions from construction activities and operational sources. This section is based on a review of existing documentation of air quality conditions in the region, air quality regulations from the U.S. Environmental Protection Agency (USEPA), the California Air Resources Board (CARB), and the North Coast Unified Air Quality Management District (NCUAQMD).

### Setting

Air quality is a function of both the rate and location of pollutant emissions under the influence of meteorological conditions and topographic features that influence pollutant movement and dispersal. Atmospheric conditions such as wind speed, wind direction, atmospheric stability, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants, which affects air quality.

### Regional Topography, Meteorology, and Climate

The potential for high pollutant concentrations developing at a given location depends upon the quantity of pollutants emitted into the atmosphere in the surrounding area or upwind, and the ability of the atmosphere to disperse the air pollutants. The atmospheric pollution potential, as the term is used in this analysis, is independent of the location of emission sources and is instead a function of factors such as topography and meteorology.

The Proposed Project area is located just south of the community of Smith River, in Del Norte County, approximately five miles south of the Oregon Border. Del Norte, Trinity, and Humboldt Counties define the North Coast Air Basin (North Coast). The climate of the region is maritime, with high humidity prevailing throughout the year. Annual average rainfall in Fort Dick, which is approximately five miles south of the Proposed Project site, is approximately 78 inches (WRCC, 2007). The primary rainy season is from October through April, accounting for approximately 90 percent of annual precipitation in the area. May through September is typically dryer and is marked by regular intrusions of low clouds and fog.

During a typical year, the low temperatures in the Proposed Project area are in the mid-30s, and the highs will reach the mid-70s. The reason for the small temperature range is the area's proximity to the Pacific Ocean. The prevailing northwest wind blows across the cold, up-welling water that is almost always present along the Pacific north coast. During the warm season, typically from June to October, northerly winds prevail over the coastal waters as a semi-permanent ridge dominates the Eastern Pacific, and a semi-permanent trough develops over interior California. In the cool season, the North Coast periodically has strong southerly winds as East Pacific storms make landfall.

## Existing Air Quality

The NCUAQMD operates one air quality monitoring station in the vicinity of the Proposed Project. Existing levels of air quality in the vicinity of the Proposed Project can generally be inferred from ambient air quality measurements conducted by NCUAQMD at its Crescent City – 880 Northcrest Drive monitoring station. The Crescent City monitoring station only measures particulate matter equal to or less than 10 microns (PM<sub>10</sub>) concentrations.

Background ambient concentrations of pollutants are determined by pollutant emissions in a given area as well as wind patterns and meteorological conditions for that area. As a result, background concentrations can vary among different locations within an area. However, areas located close together and exposed to similar wind conditions can be expected to have similar background pollutant concentrations. Table 2.3-1 shows a five-year (2002 – 2006) summary of monitoring data collected from the Crescent City station, compared with California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). As indicated in the table, no violations of the PM<sub>10</sub> standards were recorded in Crescent City during the five year study period.

## Sensitive Receptors

For the purposes of air quality and public health and safety, sensitive receptors are generally defined as land uses with population concentrations that would be particularly susceptible to disturbance from dust and air pollutant concentrations, or other disruptions associated with project construction and/or operation. Sensitive receptor land uses generally include schools, day care centers, libraries, hospitals, residential area, and parks. Some sensitive receptors are considered to be more sensitive than others to air pollutants. The reasons for greater than average

**TABLE 2.3-1  
AIR QUALITY DATA SUMMARY (2002–2006) FOR THE PROJECT AREA**

Pollutant	Standard	Monitoring Data by Year				
		2002	2003	2004	2005	2006
Particulate Matter (PM <sub>10</sub> ):						
Highest 24 Hour Average (µg/m <sup>3</sup> )		39.4	37.0	44.0	31.4	43.0
Estimated Days over State Standard	50	0	0	0	0	0
Annual Average (µg/m <sup>3</sup> )	30	18.7	14.1	17.9	18.0	11.3

NOTES: µg/m<sup>3</sup> = micrograms per cubic meter  
SOURCE: CARB 2007a

sensitivity include pre-existing health problems, proximity to emissions sources, or duration of exposure to air pollutants. Schools, hospitals, and convalescent homes are considered to be relatively sensitive to poor air quality because children, elderly people, and the infirmed are more susceptible to respiratory distress and other air quality-related health problems than the general public. Residential areas are considered sensitive to poor air quality because people usually stay home for extended periods of time, with associated greater exposure to ambient air quality. Recreational uses are also considered sensitive due to the greater exposure to ambient air quality conditions because vigorous exercise associated with recreation places a high demand on the human respiratory system. The closest sensitive receptors to the Proposed Project site are residences along E. Denny Street, approximately 500 feet to the south.

## Regulatory Context

Air quality within the North Coast is addressed through the efforts of various federal, State, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The air pollutants of concern and agencies primarily responsible for improving the air quality within the air basin and the pertinent regulations are discussed below.

## Criteria Air Pollutants

Regulation of air pollution is achieved through both national and State ambient air quality standards and emission limits for individual sources of air pollutants. As required by the federal Clean Air Act, the USEPA has identified criteria pollutants and has established NAAQS to protect public health and welfare. NAAQS have been established for ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), PM<sub>10</sub>, particulate matter equal to or less than 2.5 microns (PM<sub>2.5</sub>), and lead (Pb). These pollutants are called “criteria” air pollutants because standards have been established for each of them to meet specific public health and welfare criteria.

To protect human health and the environment, the USEPA has set “primary” and “secondary” maximum ambient thresholds for all six criteria pollutants. Primary thresholds were set to protect human health, particularly sensitive receptors such as children, the elderly, and individuals

suffering from chronic lung conditions such as asthma and emphysema. Secondary standards were set to protect the natural environment and prevent further deterioration of animals, crops, vegetation, and buildings.

The NAAQS are defined as the maximum acceptable concentration that may be reached, but not exceeded more than once per year. California has adopted more stringent ambient air quality standards for most of the criteria air pollutants. Table 2.3-2 presents both sets of ambient air quality standards (i.e., national and State) and provides a brief discussion of the related health effects and principal sources for each pollutant. California has also established State ambient air quality standards for sulfates, hydrogen sulfide, and vinyl chloride; however, air emissions of these pollutants are not expected under the Proposed Project and thus, there is no further mention of these pollutants in this IS/MND. The North Coast generally has very good air quality and is in attainment or unclassified for all federal and State ambient air quality standards, with the exception of the State standard for PM<sub>10</sub>.

### **Ozone**

Ozone is a respiratory irritant and an oxidant that increases susceptibility to respiratory infections and that can cause substantial damage to vegetation and other materials. Ozone is not emitted directly into the atmosphere, but is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving reactive organic gases (ROG) and nitrogen oxides (NO<sub>x</sub>). ROG and NO<sub>x</sub> are known as precursor compounds for ozone. Significant ozone production generally requires ozone precursors to be present in a stable atmosphere with strong sunlight for approximately three hours.

Ozone is a regional air pollutant because it is not emitted directly by sources, but is formed downwind of sources of ROG and NO<sub>x</sub> under the influence of wind and sunlight. Ozone concentrations tend to be higher in the late spring, summer, and fall, when the long sunny days combine with regional subsidence inversions to create conditions conducive to the formation and accumulation of secondary photochemical compounds, like ozone.

### **Carbon Monoxide**

CO is a non-reactive pollutant that is a product of incomplete combustion and is mostly associated with motor vehicle traffic. High CO concentrations develop primarily during winter when periods of light winds combine with the formation of ground level temperature inversions (typically from the evening through early morning). These conditions result in reduced dispersion of vehicle emissions. Motor vehicles also exhibit increased CO emission rates at low air temperatures. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart, and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia.

**TABLE 2.3-2  
STATE AND NATIONAL CRITERIA AIR POLLUTANT STANDARDS, EFFECTS, AND SOURCES**

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 Hour 8 Hour	0.09 ppm 0.07 ppm	– 0.08 ppm	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when reactive organic gases and NO <sub>x</sub> react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
Carbon Monoxide	1 Hour 8 Hour	20 ppm 9.0 ppm	35 ppm 9 ppm	Classified as a chemical asphyxiant, CO interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
Nitrogen Dioxide	1 Hour Annual	0.25 ppm –	– 0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum-refining operations, industrial sources, aircraft, ships, and railroads.
Sulfur Dioxide	1 Hour 3 Hour 24 Hour Annual	0.25 ppm – 0.04 ppm –	– 0.5 ppm 0.14 ppm 0.03 ppm	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
Respirable Particulate Matter (PM <sub>10</sub> )	24 Hour Annual	50 µg/m <sup>3</sup> 20 µg/m <sup>3</sup>	150 µg/m <sup>3</sup> 50 µg/m <sup>3</sup>	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
Fine Particulate Matter (PM <sub>2.5</sub> )	24 Hour Annual	– 12 µg/m <sup>3</sup>	35 µg/m <sup>3</sup> 15 µg/m <sup>3</sup>	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO <sub>x</sub> , SO <sub>2</sub> , and organics.
Lead	Monthly Quarterly	1.5 µg/m <sup>3</sup> –	– 1.5 µg/m <sup>3</sup>	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction.	Present source: lead smelters, battery manufacturing & recycling facilities. Past source: combustion of leaded gasoline.

ppm = parts per million  
µg/m<sup>3</sup> = micrograms per cubic meter

SOURCE: CARB 2007b and SCAQMD, 1993

### ***Particulate Matter***

Particulate matter, including PM<sub>10</sub> and PM<sub>2.5</sub>, represent fractions of particulate matter that can be inhaled into air passages and the lungs and can cause adverse health effects. Particulate matter in the atmosphere results from many kinds of dust- and fume-producing industrial and agricultural operations, fuel combustion, and atmospheric photochemical reactions. Some sources of particulate matter, such as demolition and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates can also damage materials and reduce visibility.

### ***Other Criteria Pollutants***

SO<sub>2</sub> is a combustion product of sulfur or sulfur-containing fuels such as coal. SO<sub>2</sub> is also a precursor to the formation of atmospheric sulfate and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) and contributes to potential atmospheric sulfuric acid formation that could precipitate downwind as acid rain. Lead has a range of adverse neurotoxin health effects, and was formerly released into the atmosphere primarily via leaded gasoline. The phase-out of leaded gasoline in California resulted in decreasing levels of atmospheric lead.

## **Greenhouse Gas Emissions and Climate Change**

Some gases in the atmosphere affect the Earth's heat balance by absorbing infrared radiation. These gases can prevent the escape of heat in much the same way as glass in a greenhouse. This is often referred to as the "greenhouse effect," and it is responsible for maintaining a habitable climate. On Earth the gases believed to be most responsible for global warming are water vapor, carbon dioxide (CO<sub>2</sub>), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride (SF<sub>6</sub>). Enhancement of the greenhouse effect can occur when concentrations of these gases exceed the natural concentrations in the atmosphere. Of these gases, CO<sub>2</sub> and methane are emitted in the greatest quantities from human activities. Emissions of CO<sub>2</sub> are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. SF<sub>6</sub> is a greenhouse gas (GHG) commonly used in the utility industry as an insulating gas in transformers and other electronic equipment. SF<sub>6</sub>, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG with 23,900 times the global warming potential as CO<sub>2</sub>.<sup>1</sup> There is widespread international scientific agreement that human-caused increases in GHGs has and will continue to contribute to global warming, although there is much uncertainty concerning the magnitude and rate of the warming.

Some of the potential resulting effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (CARB, 2007c). Globally, climate change has the potential to

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<sup>1</sup> Global warming potential is the potential of a gas or aerosol to trap heat in the atmosphere. CO<sub>2</sub> is assigned a global warming potential of 1.

impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas;
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas;
- Reduced diurnal temperature range over most land areas;
- Increase of heat index over land areas; and
- More intense precipitation events.

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood, and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

The California Energy Commission (CEC) estimated that in 2004, California produced 492 million gross metric tons of CO<sub>2</sub>-equivalent greenhouse gas emissions (CEC, 2006). The CEC found that transportation is the source of 41 percent of the State's GHG emissions; followed by electricity generation at 22 percent and industrial sources at 21 percent.

## **Regulatory Setting**

### ***Federal***

USEPA is responsible for implementing the myriad programs established under the federal Clean Air Act, such as establishing and reviewing the NAAQS and judging the adequacy of State Implementation Plans (SIPs), but has delegated the authority to implement many of the federal programs to the states while retaining an oversight role to ensure that the programs continue to be implemented.

### ***State***

The California Air Resources Board (CARB) is responsible for establishing and reviewing the State standards, compiling the California SIP, securing approval of that plan from USEPA, and identifying toxic air contaminants. CARB also regulates mobile sources of emissions in California, such as construction equipment, trucks, and automobiles, and oversees the activities of California's air quality management districts, which are organized at the county or regional level. County or regional air quality management districts are primarily responsible for regulating stationary sources at industrial and commercial facilities within their geographic areas and for preparing the air quality plans that are required under the federal Clean Air Act and California Clean Air Act.

The regional air quality plans prepared by air quality districts throughout the State are compiled by the CARB to form the SIP. The local air districts also have the responsibility and authority to

adopt transportation control and emission reduction programs for indirect and area-wide emission sources.

### **Assembly Bill 32 – California Global Warming Solutions Act**

California Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006, was enacted as legislation in 2006 and requires CARB to establish a statewide GHG emission cap for 2020 based on 1990 emission levels. AB 32 requires CARB to adopt regulations by January 1, 2008, that will identify and require selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions, and CARB is authorized to enforce compliance with the program that will be developed. Under AB 32, CARB also is required to adopt, by January 1, 2008, a statewide GHG emissions limit equivalent to the statewide GHG emissions levels in 1990, which must be achieved by 2020. By January 1, 2011, CARB is required to adopt rules and regulations (which shall become operative January 1, 2012) to achieve the maximum technologically feasible and cost-effective GHG emission reductions. AB 32 permits the use of market-based compliance mechanisms to achieve those reductions and also requires CARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts.

### **North Coast Unified Air Quality Management District**

The NCUAQMD is the regional agency empowered to regulate air pollution emissions from stationary sources in the Humboldt, Trinity, and Del Norte County portions of the North Coast Air Basin. NCUAQMD regulates air quality through its permit authority over most types of stationary emissions and through its planning and review activities. NCUAQMD operates air quality monitoring stations that provide information on ambient concentrations of criteria air pollutants.

### **PM<sub>10</sub> Attainment Plan**

To address the North Coast Air Basin's nonattainment status with respect to PM<sub>10</sub>, the NCUAQMD prepared a draft PM<sub>10</sub> attainment plan identifying cost-effective control measures that can be implemented to bring ambient PM<sub>10</sub> levels down to the California standards. The control strategies include transportation control measures (public transit, ridesharing, vehicle buy-back program, traffic flow improvement, bicycle incentives, etc.), land use measures to reduce reliance on automobiles, and open burning measures (NCUAQMD, 1995). The NCUAQMD is currently reviewing the attainment plan and expects to update the plan in 2008 (NCUAQMD, 2007).

### **Naturally Occurring Asbestos**

The NCUAQMD is required by State law to implement and enforce all State Airborne Toxic Control Measures (ATCM). The NCUAQMD has instituted a registration program for all construction, grading, quarrying, and surface mining operations within its jurisdiction. An applicant must first register with the NCUAQMD prior to engaging in specific activities covered by the regulation. Registration is also required for existing operations, projects, and facilities. As part of the registration process, the applicant may be required to submit a dust control plan.

Notification must be made to the NCUAQMD at least 14 days before any activity begins. However, the Naturally Occurring Asbestos ATCM includes the series of exemptions. One of the exemptions is for projects that are located in an area not designated as an ultramafic rock unit area by the California Department of Conservation Division of Mines and Geology (NCUAQMD, 2007). This exemption appears to apply to the Proposed Project because the nearest mapped ultramafic rock unit area is approximately four to five miles east of the Proposed Project site (DOC, 2000).

### **Rule 430 – Fugitive Dust Emissions**

NCUAQMD Rule 430 prohibits the handling, transporting, or open storage of materials in such a manner which allows or may allow unnecessary amounts of particulate matter to become airborne. The rule requires project applicants to take reasonable precautions to prevent particulate matter from becoming airborne, including, but not limited to, the following provisions:

- Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.
- Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Containment methods can be employed during sandblasting and other similar operations.
- Conduct agricultural practices in such a manner as to minimize the creation of airborne dust.
- The use of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land
- The application of asphalt, oil, water or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts.
- The paving of roadways and their maintenance in a clean condition.
- The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

### ***Del Norte County***

The Del Norte County General Plan includes several air resources policies that may be applicable to the Proposed Project, including (Del Norte County, 2003):

*Policy 1.F.5:* The County shall continue to encourage project proponents to consult early in the planning process with the County and the NCUAQMD regarding the applicability of transportation control measures (TMC) programs.

*Policy 1.F.6:* The County shall encourage development to be located and designed to minimize direct and indirect air pollutants.

*Policy 1.F.9:* Unless otherwise specifically permitted, the County shall require developers to pave all access roads, driveways, and parking areas serving new commercial and industrial developments.

## Air Quality Impacts and Mitigation Measures

This section presents an analysis of the potential air quality impacts associated with Proposed Project construction and operation. Emissions from construction equipment exhaust and generation of particulate matter (fugitive dust) are the primary concerns in evaluating short-term air quality impacts. Long-term impacts, however, would be negligible since emission-related activities associated with Proposed Project operations would be limited to periodic maintenance and inspection trips similar to what is occurring now for the existing Simonson Substation.

Proposed Project construction would employ a variety of construction and grading equipment. Exhaust pollutants would be emitted during construction activities from motor-driven construction equipment, construction and workers' vehicles, and fugitive dust would be generated by ground disturbing activities. Projected construction emissions are presented in Table 2.3-3. The Urban Emissions model (URBEMIS) 2007 version 9.2.2 program was used to estimate construction emissions for the Proposed Project. URBEMIS 2007 is an approved emissions inventory software program that allows the user to estimate pollutant emissions associated with proposed projects.

**a) Conflict with or obstruct implementation of the applicable air quality plan: *No Impact.***

The applicable air quality plan in the study area is the NCUAQMD's PM<sub>10</sub> Attainment Plan (Plan). The Plan identifies control strategies, including transportation control measures (public transit, ridesharing, vehicle buy-back program, traffic flow improvement, bicycle incentives, etc.), land use measures to reduce reliance on automobiles, and open burning measures (NCUAQMD, 1995). The Plan includes no control strategies directly related to the Proposed Project or construction projects in general; therefore, implementation of the Proposed Project would not obstruct implementation of the applicable air quality plan.

**b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation: *Less than significant.***

Proposed Project construction-related equipment exhaust and fugitive dust emissions would result from a variety of activities, including site preparation and other earth moving activities, construction of the proposed substation and new tap pole, demolition of the existing substation and existing tap poles, and travel by employee vehicles and tractor trailer haul trucks. Onsite heavy equipment that would be required to construct the proposed Morrison Creek Substation and demolish the existing Simonson Substation would include a crane, pick-up trucks, a backhoe, a bulldozer, a roller, a bucket truck, and a dump truck. PacifiCorp anticipates that Proposed Project construction activities would occur over an approximate three-month period.

**Construction**

The NCUAQMD does not have established CEQA significance criteria to determine the significance of impacts that would result from projects such as the Proposed Project. However, the NCUAQMD does have criteria pollutant significance thresholds for new or modified stationary source projects proposed within the NCUAQMD’s jurisdiction. In lieu of CEQA significance thresholds, the NCUAQMD has indicated that it is appropriate for lead agencies to compare proposed project emissions to its new or modified stationary source significance thresholds, which are 40 tons/year for ROG and NO<sub>x</sub>, 100 tons/year for CO, and 16 tons/year for PM<sub>10</sub> (NCUAQMD, 2006).

The URBEMIS 2007 (version 9.2.2) emissions modeling program was used to estimate construction emissions for the Proposed Project. Predicted unmitigated annual construction emissions are presented in Table 2.3-3 and are compared to the NCUAQMD thresholds of significance.

**TABLE 2.3-3  
CONSTRUCTION EMISSIONS ESTIMATES**

Pollutant	Significance Threshold (tons/year)	Project Construction Emissions (tons/year)	Significant?
ROG	40	0.04	No
NO <sub>x</sub>	40	0.39	No
CO	100	0.30	No
PM <sub>10</sub>	16	0.10	No
PM <sub>2.5</sub>	None available	0.03	No

Notes: The Proposed Project’s construction emissions estimates were made using URBEMIS 2007 v.9.2.2. Equipment numbers and types are based on the Applicant’s estimates (PacifiCorp, 2007) and the experience of the CPUC’s CEQA consultant. See Appendix B for the URBEMIS output sheets, which provide the estimation assumptions, including equipment inventories and hours of equipment use.

As shown in Table 2.3-3, construction would result in emissions below the NCUAQMD thresholds. In addition, construction activities would be short-term in duration and would be required to comply with all applicable NCUAQMD Rules and Regulations, including Rule 430 (Fugitive Dust Emissions). Therefore, emissions generated by Proposed Project construction activities would be less than significant.

**Operations**

Air emissions that would be created by the Proposed Project, once operational, are those that would be associated with maintenance and inspection of the substation. Normal maintenance and inspection would not involve grading, excavation, or the use of any motor-driven construction equipment, but would require the use of a pick-up truck, or other automobile type, to access the substation site once a month. Exhaust and fugitive dust emissions that would be associated with Proposed Project maintenance and inspection activities would be negligible and would be considerably less than those presented in Table 2.3-3, estimated for construction. In addition, Del Norte County has an established policy

(No. 1.F.9) that requires developers to pave all access roads and driveways associated with commercial and industrial developments. Implementation of this policy would further reduce fugitive dust emissions. Operational impacts associated with the Proposed Project would be less than significant.

- c) **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors): *Less than significant.***

The Proposed Project study area is in attainment or unclassified status for all of the NAAQS and CAAQS, with the exception of the CAAQS for PM<sub>10</sub>. Because long term operations of the Proposed Project would result in negligible emissions, operations would not be cumulatively considerable. Construction activities associated with the Proposed Project could have a temporary impact on local air quality through short-term increases in criteria pollutant exhaust emissions (i.e., NO<sub>x</sub>, ROG, CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>) and fugitive dust, which could have a cumulative effect when combined with the other projects described in Section 2.17 b. However, the Proposed Project's temporary air quality construction impacts would be less than significant because the Proposed Project's contribution to the cumulative impact would not be considerable. Temporary emissions of CO<sub>2</sub> would also be generated during construction activities; however, given the short-term nature of construction activities, these GHG emissions would not be cumulatively considerable. As a result, the Proposed Project would not have a significant cumulatively considerable air quality impact.

- d) **Expose sensitive receptors to substantial pollutant concentrations: *Less than significant.***

The closest sensitive receptors to the Proposed Project site are approximately 500 feet to the south. Construction activities would generate emissions of criteria pollutants, including suspended and inhalable particulate matter and equipment exhaust emissions. These emissions could expose sensitive receptors to pollutant concentrations. However, because impacts related to short-term construction emissions would not exceed the significance thresholds (see discussion under b, above) and because emissions would not be emitted immediately adjacent to any sensitive receptors, impacts would also be less than significant.

- e) **Create objectionable odors affecting a substantial number of people: *Less than significant.***

The operation of the Proposed Project would not create odorous emissions. Proposed Project construction activities could include odor sources, such as diesel equipment operation, which could result in the creation of objectionable odors. However, because the construction activities would be temporary and would not take place in the immediate vicinity of residences or other sensitive receptors, these activities would not affect a

substantial number of people. Because the Proposed Project would not create objectionable odors affecting a substantial number of people, impacts would be less than significant.

**f) Result in substantial long-term emissions of greenhouse gases: *Less than significant.***

At the present time, there are no rules or regulations in place from the CARB, State Clearinghouse, NCUAQMD, or other resource agency applicable to the Proposed Project that define a “significant” source or amount of GHG emissions, and there are no applicable specific GHG emission limits or caps. And, as of the time of this writing, no air districts within California have established emission thresholds for determining the significance of GHGs from development projects.

Also, while the goal of AB 32 is to reduce in-State GHG emissions to 1990 levels by the year 2020, there is no clear metric that would determine if a single project advances toward or away from this goal. Because global warming is a global issue, a pound of GHGs emitted in California would presumably have the same effect, individually and cumulatively, as a pound of GHGs emitted anywhere else in the world. Whether a single project may or may not result in new GHG emissions would need to consider any collateral change in GHG emissions that may occur elsewhere as a result of the project.

Long term GHG emissions that would be associated with the Proposed Project would be limited to the use of a pick-up truck or other small vehicle type to access the Morrison Creek Substation site once a month. This activity would not be substantially different than what is taking place now for the existing Simonson Substation. There would be no emissions of SF<sub>6</sub> from the Proposed Project, as the new Morrison Creek Substation would not use SF<sub>6</sub> gas.

With regard to construction activities, the Proposed Project’s GHG emissions in the form of CO<sub>2</sub> have been estimated to be approximately 41 metric tons (see Appendix B for estimation assumptions). Under CEQA, one of the main objectives is to identify the significant environmental effects of a project (if any), and to indicate the manner in which those significant effects can be mitigated or avoided (Public Resources Code § 21002.1(a)). “Significant effect” is defined under CEQA as “a substantial or potentially substantial, adverse change in the environment” (Public Resources Code § 21068.). The State of California has not provided guidance as to significance thresholds for assessing the impact of GHG emissions on climate change and global warming concerns. Nothing in the CEQA guidelines has yet addressed this issue.

Given the global GHG emissions rates and inherent climate variability, the CPUC is not aware of any scientifically credible methodologies for assessing project-specific climate impacts of GHG emissions. Nonetheless, the GHG emissions that would be generated by the construction of the Proposed Project would be short-term, occurring over a period of approximately three months. Because the Proposed Project would not result in any long

term considerable amounts of GHG emissions, impacts are determined to be less than significant.

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## References – Air Quality

- CARB (California Air Resources Board). 2007a. *Aerometric Data Analysis and Management* website (<http://www.arb.ca.gov/adam/welcome.html>) accessed August 23, 2007.
- CARB. 2007b. *Ambient Air Quality Standards*. Obtained online (<http://www.arb.ca.gov/aqs/aaqs2.pdf>) August 24, 2007.
- CARB. 2007c. Climate Change website (<http://www.arb.ca.gov/cc/120106workshop/intropres12106.pdf>) accessed October, 2007.
- California Energy Commission (CEC), 2006. *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*. December 2006.
- Del Norte County. 2003. *Del Norte County General Plan, Section 1: Natural Resources/Conservation, Air Resources*. January 28, 2003.
- Department of Conservation (DOC), Division of Mines and Geology. 2000. *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos*. August, 2000.
- Intergovernmental Panel on Climate Change (IPCC) 2001. Climate Change 2001: Working Group I: The Scientific Basis, Section F.5, Table 4; <http://www.grida.no/climate/ipcc%5Ftar/wg1/032.htm#f5>, accessed October, 2007.
- North Coast Unified Air Quality Management District (NCUAQMD). 1995. *Particulate Matter Attainment Plan*, Draft Report, May 11, 1995.
- NCUAQMD. 2007. NCUAQMD website (<http://www.ncuaqmd.org/>) accessed October 24, 2007.
- NCUAQMD. 2006. Personal communication with Trish Weir, Assistant to the Air Pollution Control Officer, June 5, 2006.
- PacifiCorp. 2007. Responses to Energy Division Data Requests 1-27. August 28, 2007.
- SCAQMD (South Coast Air Quality Management District). 1993. *CEQA Air Quality Handbook*.
- Western Regional Climate Center (WRCC). 2007. *Period of Record Monthly Climate Summary for Fort Dick, California*. Obtained online (<http://www.wrcc.dri.edu/summary/Climsmnca.html>) on August 23, 2007.

## 2.4 Biological Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>4. BIOLOGICAL RESOURCES— Would the project:</b>				
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 checked="" type="checkbox"/>	<input 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, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>
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"/>

### Setting

The Proposed Project site is located in Smith River, Del Norte County, California, approximately three and one half miles east of the Pacific Ocean and approximately five miles south of the Oregon border. The site was previously used for a logging mill. Currently the site is a mosaic of pavement, gravel, and grassland interspersed by weedy scrub habitat and trees. The topography is flat and the elevation averages 55 to 75 feet above sea level. U.S. Highway 101 (U.S. 101) borders the western edge of the site. Land west of U.S. 101 is dominated by agriculture with some residential and commercial activity. North and east of the site is Rowdy Creek, which is bordered by a band of riparian vegetation. Mixed hardwood forest is located south and east of the site.

Vegetation types and wildlife habitats were identified using both records and field observations. Environmental Science Associates (ESA) conducted reconnaissance-level field surveys of the Proposed Project site on September 12, 2007, to gather information and verify existing data on vegetation communities, wildlife habitats, and habitat use on and surrounding the site. Habitat types were classified using the California Wildlife Habitat Relationships computer program (CDFG, 2005).

## **Local Setting**

### **Ruderal**

Vegetation surrounding the existing Simonson Substation is best classified as ruderal. Ruderal vegetation is typically comprised of non-native, hardy species. The area in the immediate vicinity of the existing substation does not provide good habitat for any special-status species beyond foraging or for transient individuals. Specific vegetation types surrounding the existing Simonson Substation consists of weedy scrub, dominated by Himalayan blackberry (*Rubus discolor*), pampas grass (*Cortaderia selloana*), and horsetail (*Equisetum arvense*). Red alder (*Alnus rubra*), velvet willow (*Salix sessilifolia*), and fir trees are also present immediately adjacent to the existing substation. No vegetation is present within the fenced area of the existing substation.

### **Annual grassland**

Annual grassland habitats are open grasslands composed primarily of annual plant species. Dramatic differences in physiognomy, both between seasons and between years, are characteristic of this habitat. Introduced annual grasses are the dominant plant species in this habitat. The area east of the Simonson Substation is dominated by annual grasses including ryegrass (*Lolium multiflorum*) and rattlesnake grass (*Briza maxima*). An herb, plantain (*Plantago* sp.), is also co-dominant in this area.

The proposed site for the Morrison Creek Substation is dominated by several non-native grass species including common velvet grass (*Holcus lanatus*), rattlesnake grass, and pampas grass, as well as the native grass, Idaho bentgrass (*Agrostis idahoensis*). Prevalent non-native herbs include bird's foot trefoil (*Lotus corniculatus*), curly dock (*Rumex crispus*), Himalayan blackberry, Queen Anne's lace (*Daucus carota*), and flat sedge (*Cyperus eragrostis*). Planted redwood (*Sequoia sempervirens*) seedlings are scattered throughout the site and several patches of Douglas fir (*Pseudotsuga menziesii*) saplings are also present.

### **Montane hardwood-conifer**

South and east of the former mill site is montane hardwood-conifer habitat. Montane hardwood-conifer contains both conifers and hardwoods, often as a closed forest. At least one third of the trees are typically conifers. The habitat is usually largely devoid of an understory, except following a disturbance event such as a fire or logging. The hill bordering the southeastern edge of the proposed Morrison Creek Substation site contains scattered redwoods and spruce, with a dense understory of big-leaf maple (*Acer macrophyllum*) and alder. The number of conifers on the hill has been reduced due to historical logging.

### **Valley foothill riparian**

Within valley foothill riparian habitat, most trees are winter deciduous. There is typically a subcanopy tree layer as well as an understory shrub layer. Generally, the understory is impenetrable to direct sunlight. Trees are typically cottonwood and willow species. Riparian vegetation adjacent to Rowdy Creek is dominated by red alders with velvet willows and black cottonwoods (*Populus trichocarpa*) sub-dominant. Himalayan blackberry dominates the understory.

## Special-Status Species

A number of species with the potential to occur in the project vicinity are protected pursuant to federal and/or State endangered species laws, or have been designated Species of Special Concern by the California Department of Fish and Game (CDFG). In addition, Section 15380(b) of the *California Environmental Quality Act (CEQA) Guidelines* provides a definition of rare, endangered, or threatened species that are not included in any listing.<sup>1</sup> Species recognized under these terms are collectively referred to as “special-status species.” For the purposes of this IS/MND, special-status species include:

- Plant and wildlife species listed as rare, threatened or endangered under the federal or State endangered species acts;
- Species that are candidates for listing under either federal or State law;
- Species formerly designated by the U.S. Fish and Wildlife Service (USFWS) as Species of Concern or by CDFG as Species of Special Concern;
- Species protected by the federal Migratory Bird Treaty Act (16 U.S.C. 703-711);
- Species such as candidate species that may be considered rare or endangered pursuant to Section 15380(b) of the *CEQA Guidelines*.

Appendix C provides a comprehensive list of the special status species that have been documented, or have potential to occur, in suitable habitat within the general study area. This list was derived using the California Natural Diversity Database (CDFG, 2007b), California Native Plant Society Electronic Inventory (CNPS) (CNPS, 2007), and the USFWS (USFWS, 2007). Based on ESA’s review of the biological literature of the region, previous environmental analyses and surveys in the Proposed Project vicinity, and an evaluation of the habitat conditions of the existing and proposed substation sites, many of these species were eliminated from further evaluation because: (1) the Proposed Project site or the immediate area does not provide suitable habitat, or (2) the known range for a particular species is outside of the Proposed Project site and/or the immediate area.

The special status species list presented in Appendix C includes species that occur in the general habitat types that are within or in the vicinity of the Proposed Project site. Species determined to have low potential to occur within the Proposed Project site are listed in Appendix C with the reasoning behind the determination, and are not expected to occur within the Proposed Project site. Species observed or with a moderate to high potential to occur within the Proposed Project site are discussed in detail below.

### ***Special-Status Plants and Animals***

Of the special-status plants and animals presented in Appendix C, only four species were determined to have a moderate to high potential to occur within the Proposed Project site.

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<sup>1</sup> For example, vascular plants listed as rare or endangered or as List 1 or 2 by the CNPS are considered to meet Section 15380(b).

These special status species include northern harrier (*Circus cyaneus*), loggerhead shrike (*Lanius ludovicianus*), northern red-legged frog (*Rana aurora aurora*), and Pacific gilia (*Gilia capitata* ssp. *pacifica*).

**Northern harrier** is listed as a California species of concern. This species nests in open areas, on the ground, in thick grass, shrubbery, or other vegetation. Most often nesting occurs in emergent vegetation, wet meadows, or near rivers and lakes. It may also nest in grasslands away from water. The presence of Rowdy Creek less than one quarter of a mile from the Proposed Project site, as well as grassland habitat within the Proposed Project site, provides potential nesting habitat for the northern harrier.

**Loggerhead shrike** is listed as both a federal and California species of concern. This species prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Nesting occurs in dense brush or trees. Scattered trees and dense brush around the existing Simonson Substation and at the southern edge of the proposed Morrison Creek Substation site provide nesting habitat. Utility lines, scattered trees, and the existing substation provide sites on which to perch.

**Northern red-legged frog** is listed as a California species of special concern. It is found in humid forests, woodlands, grasslands, and streamsides with plant cover. The species is most common in lowlands or foothills and is frequently found in woods adjacent to streams. Northern red-legged frogs breed in permanent water sources, including lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Although typically found in or near water, this species can be highly terrestrial and sometimes found in damp places far from water. Potential breeding habitat is present in Rowdy Creek. The Proposed Project site's close proximity to Rowdy Creek provides the potential for northern red-legged frogs to disperse into grassland habitat within the site.

**Pacific gilia** is listed by CNPS as 1B.2 (i.e., fairly endangered in California). Its range stretches from Mendocino County, north into Oregon. The species is found in coastal bluff scrub, chaparral, coastal prairie, and valley and foothill grassland and blooms between April and August. The species is threatened by development and recreational activities. The presence of valley and foothill grassland within the Proposed Project site provides potential habitat for this species. However, the relatively small size of the grassland patch as well as the prevalence of non-native herbs throughout the site limits the potential for occurrence.

## Regulatory Context

This section briefly describes federal, State and local regulations, permits, and policies pertaining to biological resources and wetlands as they may apply to the Proposed Project.

## Federal

### ***U.S. Army Corps of Engineers and U.S. Environmental Protection Agency Regulation of Waters of the United States, Including Wetlands***

The U.S. Army Corps of Engineers (USACE) and the U.S. Environmental Protection Agency (USEPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Sections 404 and 401 of the Clean Water Act. Projects that would result in the placement of dredged or fill material into waters of the United States require a Section 404 permit from the USACE.<sup>2</sup> Some classes of fill activities may be authorized under General or Nationwide permits if specific conditions are met. Nationwide permits do not authorize activities that are likely to jeopardize the existence of a Threatened or Endangered species (listed or proposed for listing under the federal Endangered Species Act). In addition to conditions outlined under each Nationwide Permit, project-specific conditions may be required by the USACE as part of the Section 404 permitting process. When a project's activities do not meet the conditions for a Nationwide Permit, an Individual Permit may be issued.

Section 401 of the Clean Water Act requires an applicant for a USACE permit to obtain state certification that the activity associated with the permit will comply with applicable state effluent limitations and water quality standards. In California, water quality certification, or a waiver, must be obtained from the Regional Water Quality Control Board, for both Individual and Nationwide Permits.

The USACE also regulates activities in navigable waters under Section 10 of the Rivers and Harbors Act. The construction of structures, such as tidegates, bridges, or piers, or work that could interfere with navigation, including dredging or stream channelization, may require a Section 10 permit, in addition to a Section 404 permit if the activity involves the discharge of fill.

Finally, the federal government also supports a policy of minimizing "the destruction, loss, or degradation of wetlands." Executive Order 11990 (May 24, 1977) requires that each federal agency take action to minimize the destruction, loss, or degradation of wetlands and to preserve and enhance the natural and beneficial values of wetlands.

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<sup>2</sup> Based on the Supreme Court ruling (SWANCC) concerning the Clean Water Act jurisdiction over isolated waters (January 9, 2001), non-navigable, isolated, intrastate waters based solely on the use of such waters by migratory birds are no longer defined as waters of the United States. Jurisdiction of non-navigable, isolated, intrastate waters may be possible if their use, degradation, or destruction could affect other waters of the United States, or interstate or foreign commerce. Jurisdiction over such other waters are analyzed on a case-by-case basis. Impoundments of waters, tributaries of waters, and wetlands adjacent to waters should be analyzed on a case-by-case basis. A more recent Supreme Court case, *Rapanos v. United States* (2006), also questioned the definition of "waters of the United States" and the scope of federal regulatory jurisdiction over such waters, but left open the question as to whether the Clean Water Act extends to those waters and wetlands that have a 'significant nexus' to navigable waters of the United States, or whether it is limited to waters with a continuous connection. According to the *Rapanos* decision, the Clean Water Act will: 1) Continue to regulate "traditionally navigable waters," including all rivers and other waters that are large enough to be used by boats that transport commerce and any wetlands adjacent to such waters; 2) Continue to regulate "non-navigable tributaries that are relatively permanent and wetlands that are physically connected to these tributaries"; and 3) Continue to regulate based on case-by-case determinations for other tributaries and adjacent wetlands that have certain characteristics that significantly affect traditionally navigable waters (USEPA, 2007).

The term “waters of the United States,” as defined in the Code of Federal Regulations (33 C.F.R. § 328.3[a]; 40 C.F.R. § 230.3[s]), refers to:

1. All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce including any such waters:
  - which are or could be used by interstate or foreign travelers for recreational or other purposes; or
  - from which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
  - which are used or could be used for industrial purposes by industries in interstate commerce.
4. All impoundments of waters otherwise defined as waters of the United States under the definition;
5. Tributaries of waters identified in paragraphs (1) through (4);
6. Territorial seas; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (1) through (6).
8. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area’s status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with USEPA (33 CFR 328.3[a][8]).

Wetlands are ecologically productive habitats that support a rich variety of both plant and animal life. The importance of wetlands has increased due to their value as recharge areas and filters for water supplies and to their widespread filling and destruction to enable urban and agricultural development. In a jurisdictional sense, there are two commonly used definitions of a wetland, one definition adopted by the USACE and a separate definition, originally developed by USFWS, which has been adopted by the agencies in the State of California that have regulatory authority over wetlands. Both definitions are presented below.

### **Federal Wetland Definition**

Wetlands are a subset of “waters of the United States” and receive protection under Section 404 of the Clean Water Act. Wetlands are defined as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal

circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetland determination under the federal wetland definition adopted by the USACE requires the presence of three factors: (1) wetland hydrology, as defined above under point 2, (2) plants adapted to wet conditions, and (3) soils that are routinely wet or flooded [33 C.F.R. § 328.3(b)].

### ***Federal Endangered Species Act***

The USFWS, which has jurisdiction over plants, wildlife, and resident fish, and the National Marine Fisheries Service (NMFS), which has jurisdiction over anadromous fish and marine fish and mammals, oversee the federal Endangered Species Act. Section 7 of the Act mandates that all federal agencies consult with the USFWS and NMFS to ensure that federal agencies actions do not jeopardize the continued existence of a listed species or destroy or adversely modify critical habitat for listed species. Federal agencies are required to consult with the USFWS and NMFS if they determine a “may effect” situation will occur in association with a project. The federal Endangered Species Act prohibits the “take” of any fish or wildlife species listed as Threatened or Endangered, including the destruction of habitat that could hinder species recovery.<sup>3</sup>

Under Section 9 of the federal Endangered Species Act, the take prohibition applies only to wildlife and fish species. However, Section 9 does prohibit the removal, possession, damage or destruction of any Endangered plant from federal land. Section 9 also prohibits acts to remove, cut, dig up, damage, or destroy an Endangered plant species in nonfederal areas in knowing violation of any state law or in the course of criminal trespass. Candidate species and species that are proposed or under petition for listing receive no protection under Section 9 of the federal Endangered Species Act.

Section 10 of the federal Endangered Species Act requires the issuance of an “incidental take” permit before any public or private action may be taken that would potentially harm, harass, injure, kill, capture, collect, or otherwise hurt any individual of an Endangered or Threatened species. The permit requires preparation and implementation of a habitat conservation plan that would offset the take of individuals that may occur, incidental to implementation of the project by providing for the overall preservation of the affected species through specific mitigation measures.

### ***Federal Migratory Bird Treaty Act***

The Migratory Bird Treaty Act states that without a permit issued by the U.S. Department of the Interior, it is unlawful to pursue, hunt, take, capture, or kill any migratory bird.

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<sup>3</sup> Take is defined as harassing, harming, pursuing, hunting, shooting, wounding, killing, trapping, capturing, collecting, or attempting to engage in any such conduct.

## State

### ***California Environmental Quality Act***

The intent of CEQA, under which this IS/MND has been prepared, is to maintain “high-quality ecological systems and the general welfare of the people of the State.” It is the policy of the State to “prevent the elimination of fish or wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities and examples of the major periods of California history.” CEQA forbids public agencies to approve projects that will harm the environment until and unless the agency has adopted all feasible mitigation for that harm. (Public Res. Code section 21002, 21081, subdivision a.).<sup>4</sup>

CEQA requires consultation with CDFG on any project an agency initiates that is not statutorily or categorically exempt from CEQA. The *CEQA Guidelines* (Section 15065a) indicate that impacts to State- and federally listed rare, threatened, or endangered plants or animals are significant. Under Section 15380 of the *CEQA Guidelines*, impacts to other species that meet certain criteria (i.e., it can be shown that the species’ survival in the wild is in jeopardy or it is at risk of becoming endangered in the near future), but are not officially listed may also be considered significant by the lead agency, depending on the applicability of other laws (e.g., Migratory Bird Treaty Act) and the discretion of the agency. For example, CDFG interprets Lists 1A, 1B, and 2 of the California Native Plant Society’s *Inventory of Rare and Endangered Vascular Plants of California* to consist of plants that, in a majority of cases, would qualify for listing as rare, threatened, or endangered. However, the determination of whether an impact is significant is a function of the lead agency, absent the protection of other laws. Projects subject to CEQA review must specifically address potential impacts to listed species and provide mitigation measures if the impact is significant.

### ***California Endangered Species Act***

California implemented its own Endangered Species Act in 1984. The State act prohibits the take of Endangered and Threatened species; however, habitat destruction is not included in the State’s definition of take. Section 2090 of California Endangered Species Act requires State agencies to comply with endangered species protection and recovery and to promote conservation of these species. The CDFG administers the act and authorizes take through Section 2081 agreements (except for designated “fully protected species”).

Regarding rare plant species, the California Endangered Species Act defers to the California Native Plant Protection Act of 1977, which prohibits importing of rare and endangered plants into California, taking of rare and endangered plants, and selling of rare and endangered plants. State-listed plants are protected mainly in cases where State agencies are involved in projects under

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<sup>4</sup> CEQA also provides that a project might be approved in spite of residual, unmitigated significant impacts, by adoption of a statement of overriding social and economic considerations in situations where mitigations or alternatives are deemed infeasible.

CEQA. In this case, plants listed as rare under the California Native Plant Protection Act are not protected under the California Endangered Species Act but can be protected under CEQA.

### ***CEQA Guidelines Section 15380***

Although threatened and endangered species are protected by specific federal and State statutes, *CEQA Guidelines* section 15380(b) provides that a species not listed on the federal or State list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in the federal Endangered Species Act and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in the *CEQA Guidelines* primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a "candidate species" that has not yet been listed by either the USFWS or CDFG. Thus, CEQA provides an agency with the ability to protect a species from a project's potential impacts until the respective government agencies have an opportunity to designate the species as protected, if warranted.

### ***California Native Plant Protection Act***

State listing of plant species began in 1977 with the passage of the California Native Plant Protection Act (NPPA), which directed CDFG to carry out the legislature's intent to "preserve, protect, and enhance endangered plants in this State." The NPPA gave the California Fish and Game Commission the power to designate native plants as endangered or rare and to require permits for collecting, transporting, or selling such plants. The California Endangered Species Act expanded upon the original NPPA and enhanced legal protection for plants. The California Endangered Species Act established threatened and endangered species categories, and grandfathered all rare animals—but not rare plants—into the act as threatened species. Thus, there are three listing categories for plants in California: rare, threatened, and endangered.

### ***California Fish and Game Code***

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.3 of the California Fish and Game Code prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs.

Fish and Game Code Sections 3511 birds, 4700 mammals, 5050 reptiles and amphibians, and 5515 fish allow the designation of a species as Fully Protected. This is a greater level of protection than is afforded by the California Endangered Species Act, since such a designation means the listed species cannot be taken at any time.

### ***Special-Status Natural Communities***

Special-status natural communities are identified as such by CDFG's Natural Heritage Division and include those that are naturally rare and those whose extent has been greatly diminished

through changes in land use. The California Natural Diversity Database (CNDDDB) tracks 135 such natural communities in the same way that it tracks occurrences of special-status species: information is maintained on each site in terms of its location, extent, habitat quality, level of disturbance, and current protection measures. CDFG is mandated to seek the long-term perpetuation of the areas in which these communities occur. While there is no statewide law that requires protection of all special-status natural communities, CEQA requires consideration of the potential impacts of a project to biological resources of statewide or regional significance.

### ***State Policies and Regulations Regarding Waters of the U.S. and Wetlands***

State regulation of activities in waters and wetlands resides primarily with the CDFG and the State Water Resources Control Board (SWRCB). In addition, the California Coastal Commission has review authority for wetland permits within its planning jurisdiction. CDFG provides comment on USACE permit actions under the Fish and Wildlife Coordination Act. CDFG is also authorized under the California Fish and Game Code, Sections 1600-1616, to enter into a Streambed Alteration Agreement with applicants and develop mitigation measures when a proposed project would obstruct the flow or alter the bed, channel, or bank of a river or stream in which there is a fish or wildlife resource, including intermittent and ephemeral streams. The SWRCB, acting through the nine Regional Water Quality Control Boards, must certify that a USACE permit action meets State water quality objectives (Section 401, Clean Water Act).

CDFG has adopted the USFWS definition of wetlands (Cowardin et al., 1979). The federal definition of wetlands requires three wetland identification parameters to be met, whereas the USFWS definition can be satisfied under some circumstances with the presence of only one parameter. Thus, identification of wetlands by CDFG consists of the union of all areas that are periodically inundated or saturated, or in which at least seasonal dominance by hydrophytes may be documented, or in which hydric soils are present. The CDFG does not normally assert jurisdiction over wetlands unless they are subject to Streambed Alteration Agreements (California Fish and Game Code Sections 1600-1616) or they support State-listed endangered species.

## **Local**

### ***Del Norte County General Plan***

Certain aspects of the *Del Norte County General Plan* are relevant to the biological analysis portion of this IS/MND. As stated within the General Plan, the County seeks to maintain, and where feasible, enhance the existing quality of all water resources in order to ensure public health and safety and the biological productivity of waters (1.B.1). The County also seeks to protect and maintain existing levels of anadromous fisheries habitat and minimize impact to riparian corridors (1.C). The County has identified “Riparian Vegetation” as an environmentally-sensitive habitat (1.E.12) and will continue to require best management practices to protect streams from the adverse effects resulting from construction activities (1.E.33). Relating to special status species, the County will continue consulting with the CDFG, U.S. Forest Service, and the State and National Park Service to identify and protect rare, threatened, and endangered species as well as any relevant critical habitat (1.E.8-1.E.11) (Del Norte County, 2003).

## Biological Resources Impacts and Mitigation Measures

- a) **Affect, 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: *Less than significant with mitigation.***

### Construction

The northern red-legged frog is found in humid forests, woodlands, grasslands, and streambanks with plant cover. Although typically found in or near water, this species can disperse and occur far from water. The existence of Rowdy Creek near the Proposed Project site provides the potential for northern red-legged frog to occur at the site.

**Impact 2.4-1: Construction activities associated with the Proposed Project could result in impacts to the northern red-legged frog, which is a California species of special concern. This impact would be reduced to less than significant with implementation of Mitigation Measure 2.4-1.**

**Mitigation Measure 2.4-1:** To minimize or avoid impacts to the northern red-legged frog, preconstruction surveys for the species should occur throughout the Proposed Project site two weeks or less before removing vegetation or carrying out ground-disturbing activities. Pre-construction surveys shall be carried out by a qualified biologist familiar with northern red-legged frog identification and ecology. These are not intended to be protocol-level surveys but designed to clear an area so that individual northern red-legged frogs are not present within the Proposed Project site prior to the initiation of construction. Once the site is cleared it shall be fenced in such a way as to exclude northern red-legged frog for the duration of proposed construction activities. Methods for pre-construction surveys and site fencing shall be developed prior to the start of construction.

**Significance after Mitigation:** Less than significant.

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All raptors, their nests, and eggs are protected under CDFG Code 3503.5. Migratory birds, their nests, and eggs are protected under the Migratory Bird Treaty Act. In addition, CDFG Code 3503 protects the needless destruction of nests or eggs of most bird species. Increased noise and activity resulting from construction activities could cause nest abandonment and death of young or loss of reproductive potential at active nests located within the Proposed Project area. In addition, grading and removal of trees and shrub vegetation could result in direct losses of nests, eggs, or nestlings. Based on the presence of suitable habitat for nesting at, and adjacent to, the Proposed Project sites, a number of special status bird species of concern should be considered as potentially present and possibly using the area for nesting purposes. The loss of active nests of special-status bird species would be considered a significant impact.

**Impact 2.4-2: Construction activities associated with the Proposed Project could result in the direct loss of bird nests, death of young, or loss of reproductive potential at active nests of special status bird species located in the vicinity of the Proposed Project site. This would be a less than significant impact with the implementation of Mitigation Measure 2.4-2.**

**Mitigation Measure 2.4-2:** Direct disturbance, including tree and shrub removal or nest destruction by any other means, or indirect disturbance (e.g., noise, increased human activity in area, etc.) of active nests of raptors and other special-status bird species within or in the vicinity of the proposed Morrison Creek Substation site or in the vicinity of the existing Simonson Substation site shall be avoided in accordance with the following procedures for Pre-Construction Special-Status Avian Surveys and Subsequent Actions. No more than two weeks in advance of any tree or shrub removal or ground-disturbing activity that will commence during the breeding season (i.e., February 1 through July 31), a qualified wildlife biologist shall conduct pre-construction surveys of all potential special-status bird nesting habitat in the vicinity of the planned activity. Pre-construction surveys are not required for construction activities scheduled to occur during the non-breeding season (i.e., August 1 through January 31). Depending on the survey findings, the following actions shall be taken to avoid potential adverse effects on nesting special-status nesting birds:

- If pre-construction surveys indicate that no nests of special-status birds are present or that nests are inactive or potential habitat is unoccupied, no further mitigation shall be required.
- If active nests of special-status birds are found during the surveys, the results of the surveys shall be forwarded to CDFG (as appropriate) and avoidance procedures shall be adopted, as determined necessary by CDFG, on a case-by-case basis. These can include construction buffer areas up to several hundred feet in the case of raptors, relocation of birds, or seasonal avoidance. If buffers are created, a no disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them shall be determined through consultation with the CDFG taking into account factors such as the following:
  - a. Noise and human disturbance levels at the Proposed Project site and the nesting site at the time of the survey and the noise and disturbance expected during the construction activity;
  - b. Distance and amount of vegetation or other screening between the Proposed Project site and the nest; and
  - c. Sensitivity of individual nesting species and behaviors of the nesting birds.
- Construction activities commencing during the non-breeding season and continuing into the breeding season do not require surveys because it is assumed that any breeding birds taking up nests would be acclimated to

Proposed Project-related activities already under way. However, if trees and shrubs are to be removed during the breeding season, the trees and shrubs shall be surveyed for nests prior to their removal, according to the survey and protective action guidelines described in a through c, in the bullet above.

- Nests initiated during construction activities would be presumed to be unaffected by the construction activity, and a buffer zone around such nests would not be necessary.
- Destruction of active nests of special-status birds and overt interference with nesting activities of special-status birds shall be prohibited.

**Significance after Mitigation:** Less than significant.

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Construction of the proposed Morrison Creek Substation would result in the temporary and permanent removal of existing vegetation. The major vegetation types occurring within the Proposed Project site include annual grassland, shrub habitat, and mixed hardwood forest. None of these three vegetation types are listed as sensitive by CDFG or USFWS. No trees are planned for removal associated with the demolition of the Simonson Substation. Construction of the Morrison Creek Substation would result in the loss of multiple redwood seedlings, several red alders, and up to 16 Douglas fir saplings. The permanent loss of this vegetation could locally affect both common and special status wildlife species.

**Impact 2.4-3: Activities associated with the construction of the proposed Morrison Creek Substation could detrimentally affect special status species utilizing the site, through the temporary and permanent removal of existing vegetation. This would be a less than significant impact with the implementation of Mitigation Measure 2.4-3.**

**Mitigation Measure 2.4-3:** Areas outside the fenced area of Morrison Creek Substation that will be disturbed by Proposed Project construction activities shall be re-vegetated with native shrubs, trees, and/or grasses. Removal of native trees and shrubs shall be minimized.

**Significance after Mitigation:** Less than significant.

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## ***Operations***

Power line and substation structures can benefit raptors and other avian species by providing perching and/or nesting structures. However, these same structures can pose a threat to raptors and other birds through electrocutions or collisions. Electrocution can occur when a bird completes an electric circuit by simultaneously touching two energized

parts or an energized part and a grounded part of the electrical equipment. “Avian-safe” structures are those that provide adequate clearances to accommodate a large bird between energized and/or grounded parts (APLIC and USFWS, 2005). At particular risk are birds with large wingspans, such as golden eagles, red-tailed hawks, osprey, and great horned owls. Other birds such as crows, ravens, magpies, small flocking birds, and wading birds can also be electrocuted. Closely-spaced exposed equipment, such as jumper wires on transformers, can pose an electrocution risk to small birds such as magpies or jays. Tall wading birds, such as herons, egrets, ibis, and storks may also require increased vertical spacing between lines, as they may exceed 40 inches in height.

**Impact 2.4-4: The proposed tap line and substation may result in the inadvertent electrocution and collision of raptors and other special status bird species. This impact would be reduced to less than significant with implementation of Mitigation Measure 2.4-4.**

**Mitigation Measure 2.4-4:** The Morrison Creek substation as well as any associated transmission and distribution line configurations should be designed as recommended in the PacifiCorp Bird Management Program Guidelines (PacifiCorp, 2006), or along recommendations provided by the Avian Power Line Interaction Committee. This shall minimize the chance for electrocution of protected raptors and other protected bird species and provide for a reporting system of any incidental bird mortalities resulting from the Morrison Creek Substation and its associated structures.

**Significance after Mitigation:** Less than significant.

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- b) **Effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service: *No impact.***

Rowdy Creek runs north and east of the Proposed Project site. The creek contains an intact riparian corridor dominated by red alders and Himalayan blackberry with velvet willows and black cottonwoods subdominant. The existing Simonson Substation is approximately 450 feet from Rowdy Creek. The proposed Morrison Creek Substation would be more than 1,000 feet from Rowdy Creek. Construction associated with the Proposed Project is not expected to occur within or impact the riparian habitat or any other sensitive habitat.

- c) **Effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means: *Less than significant.***

No potential jurisdictional wetlands are present at the Proposed Project site; however, Rowdy Creek is located approximately 450 feet from the existing Simonson Substation

and approximately 1,000 feet from the proposed Morrison Creek substation site. Rowdy Creek flows southwest from the project area into Smith River, which flows northwest and empties into the Pacific Ocean. Potential adverse impacts to Rowdy Creek include permanent or temporary fill and/or accidental discharges of fill materials or other deleterious substances during construction. However, PacifiCorp would implement specific erosion control and surface water protection methods for each construction activity conducted as part of the Proposed Project. These control and protection measures, or Best Management Practices (BMPs), are standard in the construction industry and are commonly used to minimize water quality degradation. As discussed in the Regulatory Context discussion of Section 2.8, *Hydrology and Water Quality*, the Proposed Project would be required to comply with the National Pollution Discharge and Elimination (NPDES) Permit and therefore, be required to employ specific BMPs for the protection of surface water. PacifiCorp would be required to provide details as to the design and monitoring of the BMPs in the Storm Water Pollution Prevention Plan (SWPPP), which they would prepare under the NPDES permit requirements. Impacts to federally protected wetlands would be less than significant.

**d) Interference 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: *Less than significant.***

A variety of special status salmonids including coastal cutthroat trout (*Oncorhynchus clarki clarki*), steelhead trout (*Oncorhynchus mykiss irredius*), coho (*Oncorhynchus kisutch*) and chinook salmon (*Oncorhynchus tshawytscha*) all occur in Rowdy Creek. No work within the riparian habitat or in the creek is planned, therefore no direct impacts to fisheries is expected. For potential indirect impacts to the water quality of Rowdy Creek, see discussion d), above. Impacts would be less than significant.

**e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance: *Less than significant.***

Del Norte County does not have a tree preservation policy. The *Del Norte General Plan* seeks to protect riparian habitat and anadromous fish habitat. No direct impact to riparian habitat or Rowdy Creek is expected as a result of the Proposed Project. Impacts would be less than significant.

**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: *No impact.***

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or any other approved local, regional, or State habitat conservation plans that apply to the Proposed Project site. No impacts would occur.

## References – Biological Resources

- California Department of Fish and Game (CDFG). 2007a. California Mammalia. Biogeographic Data Branch. Sacramento, California. Available Online:  
<http://sibr.com/mammals/mammalSpeciesSort.html>.
- CDFG. 2007b. Wildlife Habitat and Data Analysis Branch, *California Natural Diversity Database*, data request for the Smith River, Hiouchi, Crescent City and High Divide 7.5-minute USGS topographic quadrangles.
- CDFG. 2005. California Interagency Wildlife Task Group. 2005. CWHR version 8.1 personal computer program. Sacramento, CA.
- CaliforniaHerps.com. 2007. California Reptiles and Amphibians. Available Online:  
<http://www.californiaherps.com/index.html>.
- California Native Plant Society (CNPS). 2007. Inventory of Rare and Endangered Plants (online edition, v7-07c). California Native Plant Society. Sacramento, CA. Available Online:  
<http://www.cnps.org/inventory>.
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service, Office of Biological Services, Washington, D.C. Publ. No. FWS/OBS-79/31.
- Del Norte County. 2003. Del Norte County General Plan. Prepared by Del Norte County Community Development Department.
- Avian Power Line Interaction Committee (APLIC) and the U.S. Fish and Wildlife Service. 2005. Avian Protection Plan (APP) Guidelines. Available Online:  
<http://www.fws.gov/migratorybirds/issues/APP/AVIAN%20PROTECTION%20PLAN%20FINAL%204%2019%2005.pdf>.
- Galea, F. 2007. Biological Assessment for Proposed Morrison Creek Substation Replacement, PacifiCorp, Smith River, Del Norte County. Galea Wildlife Consulting. Crescent City, California.
- PacifiCorp. 2006. Bird Management Program Guidelines. Portland, Oregon.
- University of Michigan School of Zoology. 2006. Animal Diversity Web. The Regents of University of Michigan. Available Online:  
<http://animaldiversity.ummz.umich.edu/site/index.html>.
- U.S. Fish and Wildlife Service (USFWS). 2007. Species List Search Page. Data request for the Smith River, Hiouchi, Crescent City and High Divide 7.5-minute USGS topographic quadrangles. Arcata Fish and Wildlife Office. Arcata, California. Available Online:  
<http://www.fws.gov/arcata/specieslist/search.asp>.
- U.S. Environmental Protection Agency (USEPA). 2007. EPA, Army Corps Issue Joint Guidance to Sustain Wetlands Protection under Supreme Court Decision. Press Release. Available Online:  
<http://yosemite.epa.gov/opa/admpress.nsf/e87e8bc7fd0c11f1852572a000650c05/e7240f5d30236d2b852572f1005e1809!OpenDocument>.

## 2.5 Cultural Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>5. CULTURAL RESOURCES— Would the project:</b>				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of a unique archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Setting

#### ***Prehistoric Context***

Researchers have outlined four basic patterns for the region defined by a configuration of basic archaeological traits representing a basic adaptation generally shared by a number of separate cultures over an appreciable period of time within an appreciable space for the region. These include the Post Period (before 8,000 before the Christian Era (BC), Borax Lake Pattern (8,000 BC to 2,500 BC), Mendocino Pattern (2,500 BC to 500 after the Christian Era (AD)) and the Gunther Pattern (500 AD to 1,800 AD) (PacifiCorp, 2007).

The earliest systematic archaeological investigations performed at a site in the area were conducted in 1964 near Point Saint George. The investigations surmised that two distinct occupations occurred at the site, an earlier occupation referred to as the Point Saint George I that had radiocarbon dates dating back to approximately 310 BC, which coincides with the end of the Mendocino Pattern, and a later occupation, Point Saint George II, which dated from approximately 1,300 to 1,800 AD. This latter occupation is a representation of the Gunther Pattern. Recent archaeological excavations near the confluence of the South and Middle Forks of the Smith River have failed to extend the archaeological occupation sequence of the immediate region beyond 500 BC. These excavations were intended to research questions related to the origins of the intensive Salmon-Acorn economy of the northern river valleys. Early results from these investigations suggest that this economy may predate 500 BC, and may lead to a new understanding of the transition to a sedentary fishing based economy (PacifiCorp, 2007).

#### ***Ethnographic Context***

The Proposed Project study area is entirely within the ethnographic territory of the Tolowa, one of five northern California groups representing the southernmost expression of the Athapaskan-speaking Northwest Coast Culture area. Several researchers have written about the culture of these people (Drucker 1937; Du Bois 1932; Gould 1966, 1978; Hildebrandt 2007; Kroeber 1925;

Powers 1976; Thornton 1984; Waterman 1925). The following paragraphs are based those research papers.

Historically, the Tolowa occupied a territory of approximately 640 square miles in present-day California and Oregon including the northern two-thirds of Del Norte County in California, and extended north to the Winchuck River in Oregon. Many villages were small, composed of only one extended family; and larger villages had a headman. Some ownership of land and resource exploitation areas was practiced and applied to village territories, salmon-fishing areas, and acorn groves. Permanent villages were located along the Smith River and tributaries, Lake Earl, Point Saint George, and Crescent City. The Tolowa resided primarily in the permanent villages, and only left in the late summer for the sandy beaches to harvest smelt.

The Tolowa were hunters and gatherers who practiced an annual subsistence round based on a series of seasonal moves designed to ensure their arrival at specific areas during the peak period of productivity for certain resources. Food was plentiful, with major protein sources including seal lion, whale, deer, anadromous fish, resident fish, small mammals, birds, turtles, and invertebrates such as mussels, grasshoppers, and crickets. Men hunted by tracking, driving, and smoking out; and they fished with hook and line, spear, and harpoon. Women concentrated on procuring plant foods, especially acorns.

Tolowa technology used a wide variety of materials including stone, bone, wood, shell, and plants obtained both locally and in trade with other groups. The Tolowa constructed elaborate semi-subterranean family houses using two pitched plank roofs with a square interior pit. A single pitch plank roofed sweathouse was also located in each village which housed bachelor men. Elaborate dugout canoes were also constructed by the Tolowa, capable of sea voyages and carrying up to 24 rowers.

### ***Historical Context***

The first euro-Americans to enter the vicinity of the Smith River were early Spanish explorers who arrived by ship in the early 17<sup>th</sup> and 18<sup>th</sup> centuries, followed by the Hudson's Bay trappers and traders who traveled through the area beginning circa 1826 through the mid-1840s. In 1828 Jedediah Smith traded with Native Americans at Lake Earl (about four miles to the southwest from the Proposed Project site); then various wagon roads developed through the area bringing miners and homesteaders (Del Norte County, 2003). The first roads in the Proposed Project vicinity were the Kelsey Trail from Crescent City to Yreka in 1855, and the Crescent City & Yreka Plank & Turnpike Company's road between Crescent City and Waldo, Oregon. The first well established transportation link to Smith River was a narrow-gauge railroad lining Smith River to Crescent City in 1890 (Del Norte County, 2003).

The County was originally inhabited by two Native American tribes; the Yurok tribe on the Klamath River, and the Tolowa tribe on the Smith River. Gold was first found at Myrtle Creek in 1853 and quickly attracted many settlers to the area (DNCVB, 2007). Copper mining also begin in 1960. The largest town in the County, Camp Crescent City, was founded in 1856 during the

Red Cap War which resulted in the removal of the Yuroks and seven other tribes to the Hoopa Valley Indian Reservation (PacifiCorp, 2007).

During the first quarter of the 20<sup>th</sup> Century, logging grew as the economic mainstay of the County, along with dairy ranching and agriculture. Sufficient roads and bridges into the rugged mountain border country were vital to the growth of the local economy, yet pleas for funding were ignored by California State government. Because of discontent, various attempts were made beginning in 1852 by several northern California and southern Oregon counties who were trying to secede from their respective states to form a new state called Jefferson. The most recent attempt was in 1941, but the outbreak of World War II interrupted those efforts (Rock, 1985).

Crescent City became a destination for ships from San Francisco in search of products related to the lumber, agriculture, and fishing industries once the gold rush began to die down (DNCVB, 2007). The first lumber mill was established in Crescent City in 1853 and oxen were used for transportation. In the 1870's the railroad replaced the oxen to move logs, and in the 1920's the Caterpillar tractor replaced the railroad. Hobbs, Wall and Company was the main logging company in the local area from 1872 to 1939 (DNCVB, 2007). In 1968, the Redwood National Park was established to protect the remaining old growth coast redwoods, and now includes 112,598 acres of land (Hillclimb Media, 2007). The park became a World Heritage Site in 1980 and an International Biosphere Reserve in 1983 (Hillclimb Media, 2007).

The Smith River is the largest river system in California that is not dammed (Wikimedia, 2007). It runs freely for 20 miles from the Siskiyou into the Pacific Ocean (Wikimedia, 2007). The community of Smith River was established in 1853 as the first farming community of the County and is now known as the Easter Lily Capital of the World (Del Norte County, 2003; DNCVB, 2007). Important economic activities in Smith River included dairy, fish canneries, and the gravel industry. Both the town and the river are named after the Californian explorer Jedediah Smith who traveled through the area in 1828 (Bright, 1998).

## **Regulatory Context**

### ***Federal***

Section 106 (36 CFR Part 800) of the National Historic Preservation Act (NHPA) does not apply to the Proposed Project, as there is no federal agency involved, nor is there federal funding or a federal permit required.

### ***State***

#### **California Environmental Quality Act**

The California Environmental Quality Act (CEQA) requires that public or private projects financed or approved by public agencies must assess the effects of the project on historical resources. CEQA also applies to effects on archaeological sites, which may be included among "historical resources" as defined by Guidelines Section 15064.5, subdivision (a), or, in the alternative, may be subject to the provisions of Public Resources Code Section 21083.2, which

governs review of “unique archaeological resources.” Historical resources may generally include buildings, sites, structures, objects or districts, each of which may have historical, architectural, archaeological, cultural, or scientific significance.

Under CEQA, “historical resources” include the following:

- (1) A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (Pub. Res. Code, §5024.1.)
- (2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, shall be presumed to be historically or culturally significant. Public agencies must treat any such resources as significant, unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
- (3) Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided the lead agency’s determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be “historically significant” if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code, §5024.1) if it:
  - (A) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage;
  - (B) Is associated with the lives of persons important in our past;
  - (C) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
  - (D) Has yielded, or may be likely to yield, information important in prehistory or history.
- (4) The fact that a resource is not listed in or determined to be eligible for listing in the California Register of Historical Resources, is not included in a local register of historical resources (pursuant to Section 5020.1(k) of the Public Resources Code), or is not identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the Public Resources Code) does not preclude a lead agency from determining that the resource may be an historical resource as defined in Public Resources Code Section 5020.1(j) or 5024.1.

Archaeological resources that are not “historical resources” according to the above definitions may be “unique archaeological resources” as defined in Public Resources Code Section 21083.2, which also generally provides that “non-unique archaeological resources” do not receive any

protection under CEQA.<sup>1</sup> If an archaeological resource is neither a “unique archaeological” nor an “historical resource,” the effects of a project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the environmental review document, but they need not be considered further in the CEQA process.

In summary, CEQA requires that if a project results in an effect that may cause a substantial adverse change in the significance of an historical resource, or would cause significant effects on a unique archaeological resource, then alternative plans or mitigation measures must be considered.

### **Local**

The community of Smith River is not an incorporated city government and its land use is regulated by the *Del Norte County General Plan*.

### **Del Norte County General Plan**

The General Plan contains sixteen policies relating to paleontological and cultural resources (Del Norte County, 2003). Policies 5.H.1 through 5.H.16 require cultural resource surveys for environmental assessment in accordance with CEQA for development projects. Projects must identify and protect archaeological, paleontological, and cultural sites from damage. The County encourages private individuals and citizens to preserve cultural resources and increase public knowledge of cultural heritage. The General Plan requires the solicitation of the views of the local Native American community whenever development may disturb a Native American historical or cultural site. The County keeps archaeological site locations confidential to prevent vandalism. The Del Norte Historical Advisory Committee identifies cultural resources and register them as landmarks.

## **Methods and Findings**

### **Native American Consultation**

Contact by Condor Country Consulting to the California Native American Heritage Commission (NAHC) was made by fax on October 4, 2007. The NAHC responded via facsimile on October 15, 2007, stating that there was no specific site information in the sacred lands file for the Proposed Project area. Environmental Science Associates (ESA) also initiated contact with the closest Native American community, the Smith River Rancheria on September 12, 2007. ESA spoke directly with Ms. Suntayea Steinruch, the Smith River Rancheria Tribal Historic Preservation Officer. Ms. Steinruch reported no concerns associated with the Proposed Project. Condor Country Consulting followed up with Ms. Suntayea Steinruch via letter and telephone on

<sup>1</sup> As used in this section, "unique archaeological resource" means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria: (1) Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information; (2) Has a special and particular quality such as being the oldest of its type or the best available example of its type or (3) Is directly associated with a scientifically recognized important prehistoric or historic event or person.

October 2, 2007. In addition to the letter sent to Ms. Steinruck, Condor Country Consulting also sent information request letters to the following individuals on October 17, 2007:

- Chairperson Dale Miller, Elk Valley Rancheria of Smith River Tolowa
- Tribal Administrator Glen Gary, Elk Valley Rancheria of Smith River Tolowa
- Mr. John Green, Elk Valley Rancheria of Smith River Tolowa
- Ms. Shannon Tushingham, THPO, Elk Valley Rancheria of Smith River Tolowa
- Chairperson Kara Brundin-Miller, Smith River Rancheria of California
- Tribal Administrator Russ Crabtree, Smith River Rancheria of California
- Melochundum Band of Tolowa Indians

No response has been received from Ms. Suntayea Steinruck or other Native American contacts as of the publication date of this IS/MND.

### ***CHRIS Records Review***

An archaeological literature search was conducted on May 3, 2007, at the North Coast Information Center of the California Historical Resources Information System (CHRIS) in Klamath, California, by Environmental Planning Group (PacifiCorp, 2007). Results of this literature search resulted in no known archaeological resources or cultural resource surveys within the Proposed Project site, and only one recorded archaeological resource, CA-DNO-047, within a one-mile radius of the site. One previous archaeological survey had been conducted immediately adjacent to the Proposed Project sites along U.S. Highway 101, and another nine surveys had been conducted within the 1-mile record search radius between 1982 and 1998 (PacifiCorp, 2007).

### ***Pedestrian Survey***

A pedestrian archaeological survey of the Proposed Project study area was conducted on May 2, 2007, by an Environmental Planning Group archaeologist (PacifiCorp, 2007). The pedestrian survey was conducted by using transects spaced no greater than three meters (10 feet) apart. The survey covered existing access roads used for the existing substation, as well as the areas proposed for new access roads, staging areas, and other work sites designated as part of the Proposed Project. A 100-foot buffer around the Proposed Project site was also included in the archeological pedestrian survey.

As reported by Environmental Planning Group, at the time of the survey, much of the study area was covered with ankle- to midcalf-high grasses, blackberry bushes, and recently excavated divots containing redwood seedlings. The remaining area had limited soil visibility given the constraints of remnant roadway asphalt, inundated drainages, and thick understory. No attempt was reported to improve the surface visibility in these locations (PacifiCorp, 2007). Despite the constraints, the archaeological survey is considered to have been thorough enough to have located any surface archaeological sites that may be present within the study area.

The ground was examined for artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, baked clay items, fire-affected rock), soil discoloration that might indicate the presence of a

cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as ground divots for redwood seedlings were visually inspected. During the surveys, a handheld global positioning system (GPS) unit was available for recording locational data, and photographs of the study area, any potential features, and items of interest were taken with a digital camera.

### **Findings**

Remnants of a gravel works operation, with associated remnant roads, equipment parking areas, and probable modular office/home lay down area were identified. The outlines of the former structures associated with the gravel works are identifiable on the 1966 USGS topographic map, but are not identifiable on the ground. Environmental Planning Group noted wire nails, lumber fragments, and asbestos roofing shingle fragments, but did not note the definitive location of any former structures within the study area. No “historical resources” or “unique archaeological resources” have been identified within the Proposed Project study area.

### **Cultural Resources Impacts and Mitigation Measures**

Impacts on cultural resources could result from ground-disturbing activities and/or damage, destruction, or alteration of historic structures. Ground-disturbing activities include Proposed Project-related excavation, grading, trenching, or other sub-surface disturbance that could damage or destroy buried archaeological resources including prehistoric and historic remains or human burials. Mechanisms that would cause damage, destruction, or alteration of historic structures includes Proposed Project-related demolition, damage, or alteration of historic structures or their immediate surroundings that could impair the significance of an historic resource or adversely alter those physical characteristics of an historical resource that convey its historical significance.

**a) Change in the significance of a historical resource as defined in §15064.5: *Less than significant.***

The Proposed Project would not cause a substantial adverse change to the significance of any known historical resource. No historical resources have been identified within the Proposed Project study area. Impacts would be less than significant.

**b) Change in the significance of a unique archaeological resource pursuant to §15064.5: *Less than significant with mitigation.***

No “unique archaeological resources” have been identified within the Proposed Project study area, but the nonexistence of subsurface cultural resources cannot be adequately demonstrated, and unidentified, buried archaeological remains could be present within the footprint of the Proposed Project site. Buried archaeological remains such as prehistoric midden deposits, flaked and ground stone artifacts, bone, shell, historic artifacts and features, or other cultural resources could be damaged during grading, trenching, and other construction related activities.

**Impact 2.5-1: If construction activities associated with the Proposed Project encounter currently unknown cultural resources, either prehistoric or historic, pursuant to CEQA Guidelines Section 15064.5 or CEQA Section 21083.2(g), this could cause substantial adverse changes to the significance of the resource. This would be a less than significant impact with implementation of Mitigation Measure 2.5-1.**

**Mitigation Measure 2.5-1:** In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and PacifiCorp and/or the CPUC shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of PacifiCorp and/or the CPUC and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, as necessary, and a report prepared by a Specialist according to current professional standards.

In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the CPUC shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, Proposed Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the Proposed Project site while mitigation for historical resources or unique archaeological resources is carried out.

If the CPUC, in consultation with the qualified archaeologist, determines that a significant archeological resource is present and that the resource could be adversely affected by the Proposed Project, the CPUC shall require PacifiCorp to:

- Re-design the Proposed Project to avoid any adverse effect on the significant archeological resource; or
- Implement an archeological data recovery program (ADRP) unless the qualified archaeologist determines that the archeological resource is of greater interpretive use than research significance, and that interpretive use of the resource is feasible. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the Proposed Project. Destructive data recovery methods shall not

be applied to portions of the archeological resources if nondestructive methods are practical.

**Significance after Mitigation:** Less than significant.

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c) **Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature: *Less than significant with mitigation.***

Paleontologic resources are the fossilized evidence of past life found in the geologic record. Despite the tremendous volume of sedimentary rock deposits preserved worldwide, and the enormous number of organisms that have lived through time, preservation of plant or animal remains as fossils is an extremely rare occurrence. Because of the infrequency of fossil preservation, fossils (particularly vertebrate fossils) are considered to be nonrenewable resources. Because of their rarity, and the scientific information they can provide, fossils are highly significant records of ancient life.

The likelihood of encountering a significant paleontological discovery during Proposed Project construction activities is considered very unlikely; but significant fossil discoveries can be made even in areas of supposed low sensitivity, and proposed excavation activities could have a deleterious effect on such resources. In the event a paleontologic resource is encountered, Mitigation Measure 2.5-2 would be required.

**Impact 2.5-2: The Proposed Project could adversely affect unidentified paleontologic resources at the proposed pole site or the substation locations. This would be a less than significant impact with implementation of Mitigation Measure 2.5-2.**

**Mitigation Measure 2.5-2:** In the event of an unanticipated paleontological discovery during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist per up to date Society of Vertebrate Paleontology standards. The discovery shall be documented as needed, the potential resource evaluated, and the significance of the find shall be assessed under the criteria set forth in Section 15064.5 of the CEQA Guidelines. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the CPUC determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the Proposed Project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the CPUC for review and approval.

**Significance after Mitigation:** Less than significant.

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**d) Disturb any human remains, including those interred outside of formal cemeteries  
*Less than significant with mitigation.***

There is no indication that any area in the vicinity of the Proposed Project site has been used for burial purposes in the recent or distant past. Thus, it is unlikely that human remains would be encountered during Proposed Project construction. However, in the event of the discovery of any human remains during proposed construction activities, including those interred outside of formal cemeteries, Mitigation Measure 2.5-3 would be required.

**Impact 2.5-3: Proposed Project construction could result in damage to previously unidentified human remains. This would be a less than significant impact with the implementation of Mitigation Measure 2.5-3.**

**Mitigation Measure 2.5-3:** In the event that human skeletal remains are uncovered during Proposed Project construction or demolition activities, PacifiCorp shall immediately halt all work, contact the Del Norte County Coroner to evaluate the remains, and follow the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, PacifiCorp shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease until appropriate arrangements are made. The Native American Heritage Commission shall assign a Most Likely Descendant, who shall have the right to access the find and provide a recommendation for treatment of the remains to the property owner, PacifiCorp, and the CPUC.

**Significance after Mitigation:** Less than significant.

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## References – Cultural Resources

- Bright, William. 1998. 1500 California Place Names, Their Origin and Meaning. University of California Press, Berkeley and Los Angeles. 1998.
- Del Norte County Visitors Bureau (DNCVB). 2007. Del Norte County - The Real Northern California. Electronic document accessed October 4, 2007 online at: <http://www.exploredelnorte.com>
- Del Norte County. 2003. Del Norte County General Plan. Prepared with the assistance of Mintier & Associates, Jones & Stokes Associates, and Steve Lowers, P.E. page I-11
- Drucker, Phillip. 1937. The Tolowa and their Southwest Oregon Kin. University of California Press Publications in American Archaeology and Ethnology 36(4):221-300, Berkeley, CA.
- DuBois, Cora A. 1932. Tolowa Notes. American Anthropologist 34(2):248-262.

- Gould, Richard A. 1966. Archaeology of the Point St. George Site and Tolowa Prehistory. University of California Publications in Anthropology, Vol. 4. Berkeley.
- Gould, Richard A. 1978. Tolowa. In Handbook of North American Indians. Volume 8, California. Robert F. Heizer, Ed., pp. 128-136. Smithsonian Institution, Washington.
- Hildebrandt, William. 2007. Northwest California: Ancient Lifeways among Forested Mountains, Flowing Rivers, and Rocky Ocean Shores. Pages 83-97 In California Prehistory. Terry Jones and Kathryn Klar, Editors. Alta Mira Press, New York.
- Hillclimb Media. 2007. Redwood National Park. Electronic document accessed October 4, 2007. Online at <http://www.redwood.national-park.com/>
- Kroeber, A.L. 1925. Handbook of the Indians of California. Bureau of American Ethnology Bulletin 78. Washington, DC.
- PacifiCorp. 2007. Proponent's Environmental Assessment, Appendix B, A Cultural Resource Survey for the Proposed Morrison Creek Substation, Del Norte County, California. Prepared Environmental Planning Group for PacifiCorp to submit to the California Public Utilities Commission.
- Powers, Stephen. 1976. Tribes of California. Introduction and Annotations by Robert F. Heizer. University of California Press, Berkeley. (Reprinted from Contributions to North American Ethnology, Volume III, Department of Interior, U.S. Geographical and Geological Survey of the Rockt Mountain Region, J.W. Powell in Charge. Washington: Government Printing Office, 1877.)
- Rock, James T. 1985. The State of Jefferson: A Dream that Died, Or Did It? Siskiyou County Historical Society, Yreka.
- Thornton, Russell. 1984. "Social Organization And The Demographic Survival Of The Tolowa." Ethnohistory 31(3):187-196.
- Wikimedia Foundation, Inc. 2007. Smith River (California). Electronic document accessed October 4, 2007. Online at [http://en.wikipedia.org/wiki/Smith\\_River\\_California](http://en.wikipedia.org/wiki/Smith_River_California).
- Waterman, Thomas T. 1925. The Village Sites in Tolowa and Neighboring Areas in Northwestern California. American Anthropologist 27(4):528-543.



## 2.6 Geology, Soils, and Seismicity

<u>Issues (and Supporting Information Sources):</u>	<u>Potentially Significant Impact</u>	<u>Less Than Significant with Mitigation Incorporation</u>	<u>Less Than Significant Impact</u>	<u>No Impact</u>
<b>6. GEOLOGY, SOILS, AND SEISMICITY—</b>				
<b>Would the project:</b>				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) 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 checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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"/>
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting

The Proposed Project site is located approximately five miles south of the California/Oregon border near the community of Smith River, in Del Norte County, California. The Proposed Project site is located on private property owned by the Green Diamond Corporation. The property consists of relatively flat-lying terrain, which is bounded by U.S. Highway 101 on the west, Rowdy Creek on the north and northeast, and a steep, heavily vegetated ascending slope on the east and south. The existing Simonson Substation is located near the northwest portion of the property. Also located on the property are the remnants of a former lumber mill, including concrete footings and asphalt and gravel roads. The proposed Morrison Creek Substation is to be located near the southern portion of the property, approximately 1,000 feet south of the existing Simonson Substation, which would be removed from the property.

The Proposed Project site is situated in the northern portion of the California Coast Ranges Geomorphic Province. Geomorphic provinces are naturally defined geologic regions that display a distinct landscape or landform. Eleven provinces are distinguished in California with each

region displaying unique, defining features based on geology, faults, topographic relief, and climate.

The Coast Ranges Geomorphic Province encompasses an area that extends approximately 600 miles from the California/Oregon border on the north, to the Transverse Ranges on the south. The northern portion of the province is bounded by the Klamath Mountain Province (South Fork Mountain thrust zone) on the east and the Pacific Ocean on the west. The province is narrowest at five miles wide near Crescent City. In general, the northern portion of the province consists of rugged mountains underlain by an assemblage of rocks known as the Franciscan Complex or Assemblage on the east, and scattered younger deposits near the coast (Norris and Webb, 1990).

Review of referenced geologic maps and data indicate the subject site is underlain by alluvium and terrace deposits (Irwin, 1997), which are expected to be underlain at depth by materials of the Franciscan Assemblage consisting of greywacke, with interbeds of shale and limestone (Norris and Webb, 1990). Due to past site development and usage (lumber mill), artificial fill materials of unknown thicknesses may be present at the Proposed Project site. During a geologic site reconnaissance conducted by a Ninyo and Moore geologist on September 12, 2007, sandy gravel- and cobble-size clasts were noted in shallow excavations at the Proposed Project site. In addition, a few scattered boulders were also observed on the existing ground surface.

### ***Topography***

The Proposed Project site is situated on a relatively flat-lying coastal terrace terrain approximately three miles east of the Pacific Ocean. Elevations at the Proposed Project site range from approximately 65- to 75-feet above Mean Sea Level (MSL). To the immediate east, a heavily vegetated ridge ascends away from the site to elevations of approximately 1,100 feet above MSL. Further to the north-northeast, the peaks of the Siskiyou and Klamath Mountains are over 9,000 feet in elevation. Drainage at the site is generally to the north, to Rowdy Creek, which then empties into the Smith River west of the Proposed Project site.

### ***Seismicity***

Based on review of referenced geologic maps and information, there are no known active faults in areas underlying, or adjacent to, the Proposed Project site. The closest known active fault is the Trinidad fault zone located approximately 60 miles south of the Proposed Project site. The closest potentially active fault to the Proposed Project site is the Big Lagoon-Bald Mountain fault zone which is projected to lie offshore approximately 20 miles southwest of the Proposed Project site. The Big Lagoon-Bald Mountain fault zone is capable of generating an earthquake magnitude of 7.5 (USGS and CGS, 2003). Review of the Geologic Map of the Smith River 7.5 foot Quadrangle (CGS, 1999a), indicated that the Del Norte fault (inferred) and the Rowdy Creek fault (inferred) are the closest mapped faults to the subject site. The Del Norte fault generally strikes north-south and is mapped on the west side of U.S. Highway 101, roughly 500 hundred feet west of the Proposed Project site. The Rowdy Creek fault, generally strikes east-west, and is mapped approximately 1,500 feet north of the Proposed Project site near the Rowdy Creek drainage. The Del Norte fault and the Rowdy Creek faults are not considered active.

Based on the geologic site reconnaissance and review of referenced geologic maps, the Proposed Project site is underlain by alluvial soils. According to the Probabilistic Seismic Hazard Assessment for California, issued by the U.S. Geological Survey/California Geological Survey (2003), the horizontal peak ground acceleration having a 10 percent probability of exceedance in 50 years (or an annual probability of 1 in 475 in each year) for the subject site is 0.32g (i.e., 32 percent of the acceleration of gravity).

## **Geologic Hazards**

### **Expansive Soils**

Expansive soils possess a “shrink-swell” behavior. Shrink-swell is the cyclic change in volume (expansion and contraction) that occurs in fine-grained clay sediments from the process of wetting and drying. Structural damage may occur over a long period of time, usually the result of inadequate soil and foundation engineering or the placement of structures directly on expansive soils.

### **Soil Erosion**

Erosion is the wearing away of soil and rock by processes such as wind and precipitation runoff. Soils containing high amounts of silt or clay can be easily erodible, while sandy soils are less susceptible. Excessive soil erosion can eventually lead to damage of building foundations and roadways. Typically, soil erosion potential is reduced once the soil is graded and covered with gravel, concrete, structures, or asphalt and when drainage improvements have been installed to drain water away from structures.

### **Settlement**

Settlement is the depression of the bearing soil when a load, such as that of a structure or new fill material, is placed upon it. If not properly engineered, loose, soft, soils comprised of sand, silt, and clay have the potential to settle after a building or other load is placed on the surface. Settlement of the ground surface can be accelerated and accentuated by earthquakes. During an earthquake, settlement can occur as a result of the relatively rapid compaction and settling of subsurface materials (particularly loose, uncompacted, and variable sandy sediments) due to the rearrangement of soil particles during prolonged ground shaking. Given the geologic setting of the area and the nature of the Proposed Project, the Proposed Project is not likely to be affected by settlement.

### **Landslides**

A landslide is the sliding of a mass of loosened rock and/or soil down a hillside or slope. Based on the review of background information and the geologic field reconnaissance, some landslides have been mapped on the steep mountain slopes north-northeast of the subject site. However, there are no landslides mapped on or in the immediate vicinity of the Proposed Project site (CGS, 1999b).

### **Volcanic Eruptions**

Volcanic eruptions have occurred throughout California geologic history, particularly in the last 1.6 million years. Volcanic eruptions are associated with earthquakes and eruptions are usually preceded by earthquake swarms. The most recent eruption in California was the violent eruption at Lassen Peak in 1917. Future volcanic eruptions within California are likely; however, location and timing of future eruptions are uncertain. It is generally considered that future eruptions would likely take place in large central vent volcanoes such as Mount Shasta and Lassen Peak where more recent activity has been recorded.

### **Seismic Hazards**

#### **Surface Fault Rupture**

Seismically induced ground rupture is defined as the physical displacement of surface deposits in response to movement on a fault plane. The magnitude, sense, and nature of fault rupture can vary for different faults or even along different strands of the same fault. Ground rupture is considered more likely along active faults. As discussed, the Del Norte and Rowdy Creek faults, mapped near the Proposed Project site, are not considered active. Because there are no known active faults underlying, or adjacent to the Proposed Project site, the likelihood of surface fault rupture is low and would not be a design consideration.

#### **Ground Shaking**

Ground shaking in the Proposed Project study area could occur due to earthquakes on the regions active faults. However, ground motion attenuates with distance from the causative fault. There are no active or potentially active earthquake faults identified within Del Norte County (Del Norte County, 2003), though some (Bald Mountain – Big Lagoon) are located offshore. Accordingly, potential ground shaking at the Proposed Project site can be expected to have low to moderate intensities.

#### **Liquefaction**

Liquefaction is a phenomenon whereby unconsolidated and/or near saturated soils lose cohesion and are converted to a fluid state as a result of severe vibratory motion. The relatively rapid loss of soil shear strength during strong earthquake shaking results in the temporary fluid-like behavior of the soil. Soil liquefaction causes ground failure that can damage roads, pipelines, underground cables, and buildings with shallow foundations. Liquefaction can occur in areas characterized by water-saturated, cohesionless, granular materials at depths less than 50 feet below the ground surface.

#### **Tsunami**

Tsunamis are long wavelength seismic sea waves (long compared to the ocean depth) generated by sudden movements of the ocean bottom during submarine earthquakes, landslides, or volcanic activity. Based on the elevation and the relative inland location of the Proposed Project site, the potential for damage due to tsunami is not a design consideration.

## Regulatory Context

### **State**

#### **Alquist-Priolo Earthquake Fault Zoning Act**

The Alquist-Priolo Earthquake Fault Zoning Act (formerly the Alquist-Priolo Special Studies Zones Act), signed into law in December 1972, requires the delineation of zones along active faults in California. The main purpose of the Alquist-Priolo Act is to prevent the construction of buildings to be used for human occupancy on the surface trace of active faults. The Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards such as ground shaking and liquefaction. Cities and counties must regulate certain development projects within the zones, which includes withholding permits until geologic investigations demonstrate that development sites are not threatened by future ground surface displacement (Hart and Bryant, 1997). Although, surface fault rupture is not necessarily restricted to the area within a Fault Rupture Hazard Zone, as designated under the Alquist-Priolo Act, it is considered unlikely outside of these zones.

#### **California Building Code**

The California Building Code (CBC) is another name for the body of regulations found in the California Code of Regulations (CCR), Title 24, Part 2, which is a portion of the California Building Standards Code. Title 24 is assigned to the California Building Standards Commission, which, by law, is responsible for coordinating all building standards. Under State law, all building standards must be centralized in Title 24 or they are not enforceable. The purpose of the CBC is to provide minimum standards to safeguard life or limb, health, property and public welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. Published by the International Conference of Building Officials, the Uniform Building Code is a widely adopted model building code in the United States. The CBC incorporates by reference the Uniform Building Code (UBC) with necessary California amendments. These amendments include significant building design criteria that have been tailored for California earthquake conditions.

The Proposed Project site is located within Zone 3, one of the four seismic zones designated in the United States. Zone 4 is expected to experience the greatest effects from earthquake ground shaking and therefore has the most stringent requirements for seismic design. Zone 3 still has a relatively high level of potential seismic activity, particularly when compared to much of the rest of the country, but is somewhat less than Zone 4. The national model code standards adopted into Title 24 apply to all occupancies in California except for modifications adopted by State agencies and local governing bodies.

### **Local**

#### **Del Norte County General Plan**

The Del Norte County General Plan Land Use Element contains the following policy that could be applicable to the Proposed Project:

*Policy 2.A.3:* To the extent practicable, the County shall discourage the location of “critical facilities or uses” from being located in areas subject to natural hazards as identified in this Element. For purposes of the General Plan, “critical facilities or uses” are defined as facilities or uses that would be used to respond to the needs of the County in the event of natural or manmade hazardous event (i.e., hospitals, fire stations, utility installations, communication centers) or uses with high occupancies, such as schools.

The objective of the Seismic Hazards Element which applies to the Proposed Project is “to minimize loss of life, injury, and property damage due to seismic hazards.” Applicable policies are listed below:

*Policy 2.B.2.* The County shall utilize the most current seismic design criteria in the construction of new public buildings. Buildings meant to accommodate activities and equipment related to public safety, especially police, fire, and communications services, should be constructed to standards that, as much as technically possible, would ensure continued operational and availability of services after the maximum credible earthquake.

*Policy 2.B.7.* Since no active or potentially active earthquakes faults have been identified within Del Norte County, the provisions for the Alquist-Priolo Special Studies Zone are not applicable.

Additionally, the objective of the Geologic Hazards Element which applies to the Proposed Project is “to minimize loss of life, injury, and property damage due to geologic hazards.”

*Policy 2.C.4.* The County shall require that a geologic investigation be made by a registered geologist, engineering geologist, or Registered Civil Engineer for all proposals in landslide potential areas, coastal or river bluffs, and development on slopes greater than 10 percent including road construction. These investigations should assess the stability of the site under both normal and seismic conditions as well as recommended mitigation measures. If it is found that the hazards cannot be mitigated within acceptable risk levels appropriate with the intended land uses, the proposal should be denied.

*Policy 2.C.5.* The County shall require that any construction contemplated on filled areas be preceded by an analysis of the fill and its capabilities or limitations.

## **Geology, Soils, and Seismicity Impacts and Mitigation Measures**

- a.i) **Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving 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: *Less than significant.***

There are no known active faults underlying, or adjacent to, the Proposed Project site. The closest active fault to the Proposed Project site is more than 60 miles away. Moreover, no Alquist-Priolo Earthquake Fault Zones have been mapped in the vicinity; therefore, the potential impact of fault rupture to impact the Proposed Project would be less than significant.

**a.ii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking: *Less than significant.***

Ground shaking on the Proposed Project site could occur due to earthquakes on the regions faults. However, the closest active fault to the Proposed Project site is more than 60 miles away. Ground shaking due to seismic events is expected to have low to moderate intensities. According to the Probabilistic Assessment of California, the Proposed Project site has a 10 percent probability of exceeding a peak ground acceleration value of 0.32g in 50 years (or a 1 in 475 chance annually). Given the relatively low calculated peak ground acceleration and the use of current building code standards, the potential for seismic ground shaking to impact the Proposed Project would be less than significant.

***Proposed Morrison Creek Substation***

Substation improvements would be designed in accordance with the most current CBC and the seismic design criteria developed for Seismic Zone 3. Use of standard seismic engineering design criteria, and accepted construction methods would ensure that impacts associated with strong ground shaking at the proposed Morrison Creek Substation would be less than significant.

***Proposed Transmission Tap Line***

Strong ground shaking could cause wires to swing and contact each other causing short-circuiting. However, observations from past earthquakes have shown that overhead transmission lines can accommodate strong ground shaking. In fact, the required separation distance to reduce wires touching in strong winds is also considered sufficient to accommodate movement associated with ground shaking. Therefore, existing design criteria for wind loads are adequate to protect wire contact during ground shaking and thus, this impact is less than significant.

**a.iii) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction: *Less than significant.***

Based on background information and the geologic field reconnaissance the Proposed Project would not be expected to be adversely impacted by seismic-related ground failure, such as liquefaction. Liquefaction hazards are evaluated as a standard practice in design-level geotechnical investigations, and typically mitigated through standard geotechnical measures such as soil treatment or engineered fill replacement. Incorporation of recommended measures, if necessary, into Proposed Project design specifications would ensure that the potential impact due to seismic-related ground failure is less than significant.

**a.iv) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides: *Less than significant.***

Background data and the geologic field reconnaissance did not indicate the presence of landslides underlying, or adjacent to, the Proposed Project site. Some landslides have been mapped east of the Proposed Project site; however, these are located sufficiently far enough away from the Proposed Project site to have a potential impact. In addition, standard engineering construction practices, incorporation of recommendations made in design-level geotechnical investigations, and avoidance of potentially sensitive slopes, if present, would avoid or reduce potential impacts of landslides. Accordingly, the potential impact to the Proposed Project due to landslides and shallow soil failures would be less than significant.

**b) Soil erosion or the loss of topsoil: *Less than significant.***

Surface soil erosion and loss of topsoil could occur from soil disturbances associated with grading, preparation work and staging areas, pole installation, and the construction and use of access roads. In cases such as this (i.e., constructed-related impacts), increased runoff or entrainment of sediment in runoff is just as much a concern as soil erosion. It is *both* processes (surface runoff and disturbed soils) that must be managed, and the principle concern for the Proposed Project for this issue relates more to water quality impacts than to the effect of losing topsoil as discussed in Section 2.8, *Hydrology and Water Quality*. In general, the Best Management Practices (BMPs) that would be incorporated to protect water quality would adequately prevent soil erosion and loss of topsoil; therefore, the potential impact is less than significant.

**c) Located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse: *Less than significant.***

Destabilization of natural or constructed slopes could occur as a result of construction activities. Excavation, grading, and fill operations associated with construction of the Morrison Creek Substation, could alter existing slope profiles making them unstable as a result of over-excavation of slope material, steepening of the slope, or increased loading. However, the project area has relatively gentle slopes. In addition, standard engineering design features and construction procedures would be implemented to maintain stable slopes and excavations during construction, and therefore, impacts associated with destabilized slopes would be less than significant.

**d) Located on expansive soil, creating substantial risks to life or property: *Less than significant.***

Shrink-swell or expansive soil behavior is a condition in which soil reacts to changes in moisture content by expanding or contracting. Expansive soils can cause structural damage particularly when concrete structures are in direct contact with the soils.

Appropriate design features to address expansive soils may include excavation of potentially problematic soils during construction and replacement with engineered backfill, ground-treatment processes, direction of surface water and drainage away from foundation soils, and the use of deep foundations such as piers or piles. Implementation of any of these standard engineering methods would ensure that impacts associated with expansive soils would remain less than significant.

- e) **Soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater: *No impact.***

The Proposed Project would not include any components that would include the construction of any septic tank or other wastewater disposal system into soils. Therefore, there would be no potential impact to soils in the project area from wastewater disposal.

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## References – Geology, Soils and Seismicity

- California Geological Survey (CGS), 1999a, *Geologic Map, Smith River 7.5' Quadrangle, Open-File Report 83-19*, Scale 1:24,000, Dated January 27.
- CGS, 1999b, *Geomorphic Features Related to Landsliding, Smith River 7.5' Quadrangle*, Open-File Report 83-19, Scale 1:24,000, Dated January 14.
- Del Norte County, 2003. *General Plan*: adopted January 28, 2003.
- Hart, E.W., and Bryant, W.A., 1997. *Fault-rupture Hazard Zones in California*: California Geological Survey Special Publication 42, revised 1997 with Supplements 1 and 2 added 1999.
- Irwin, W.P., 1997, *Preliminary Map of Selected Post-Vevadan Geologic Features of the Klamath Mountains and Adjacent Areas, California and Oregon*, United States Geological Survey, Open-File Report 97-465.
- Norris, R.M. and Webb, R.W., 1990, *Geology of California*: John Wiley & Sons, Inc.
- U.S. Geological Survey (USGS)/California Geological Survey(CGS). 2003. *Probabilistic Seismic Hazard Assessment Model*: Revised April, 2003.



## 2.7 Hazards and Hazardous Materials

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>7. HAZARDS AND HAZARDOUS MATERIALS</b>				
<b>Would the project:</b>				
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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle 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 which 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 checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project 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) For a project within the vicinity of a private airstrip, would the project 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"/>
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Setting

Materials and waste may be considered hazardous if they are poisonous (toxicity), can be ignited by open flame (ignitability), corrode other materials (corrosivity), or react violently, explode or generate vapors when mixed with water (reactivity). The term “hazardous material” is defined in law as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment.<sup>1</sup> In some cases, past industrial or commercial uses on a site can result in spills or leaks of hazardous materials and petroleum to the ground; thus resulting in soil and groundwater contamination. Federal and State laws require that soils having concentrations of contaminants such as lead, gasoline, or industrial solvents that are higher than certain acceptable levels must be handled and disposed as hazardous waste during excavation, transportation, and disposal. The

<sup>1</sup> State of California, Health and Safety Code, Chapter 6.95, Section 25501(o).

California Code of Regulations (CCR), Title 22, Section 66261.20-24 contains technical descriptions of characteristics that would cause a soil to be classified as a hazardous waste. The use of hazardous materials and disposal of hazardous wastes are subject to numerous laws and regulations at all levels of government.

In addition to toxic substances, the California Public Utilities Commission (CPUC) generally provides information about electric and magnetic fields (EMF) in its environmental documents, including this Mitigated Negative Declaration, to inform the public and decision makers; however, it does not consider EMF, in the context of CEQA, as an environmental impact because there is no agreement among scientists that EMF creates a potential health risk and because CEQA does not define or adopt standards for defining any potential risk from EMF. For informational purposes, additional information about EMF generated by transmission lines and substations is provided in Appendix A.

## **Existing Environment**

### ***Existing Contamination***

The Proposed Project study area is located in rural Del Norte County in an area that is currently undeveloped and on a site that was a former lumber mill. To assess the potential for contamination to exist in the Proposed Project study area, Environmental Data Resources Inc. (EDR) was directed to conduct a regulatory database search of sites, adjacent to and in the vicinity of the existing Simonson Substation site and the proposed Morrison Substation site, that are listed on agency files for the documented use, storage, generation, or releases of hazardous materials and/or petroleum products (EDR, 2007). The database search process reviews dozens of lists generated by federal, State, county, and/or city regulatory agencies for historically contaminated properties, and for businesses that use, generate, or dispose of hazardous materials or petroleum products in their operation. In addition, the database search reviews lists of active contaminated sites that are currently undergoing monitoring and remediation.

The database search identified no contamination sites at either the existing or proposed substation locations; however, the database search mapped two sites within one mile of the target search point, which was the proposed Morrison Creek Substation site (see Table 2.7-1). The two sites are referred to as the Simonson No. 2 site and the Simpson Timber Smith River site. The EDR report identifies the Simonson No. 2 site as a Class III (non-hazardous) solid waste landfill facility that poses a minor threat to water quality. The EDR report presents limited information about the Simpson Timber Smith River site, but notes that the North Coast Regional Water Quality Control Board (NCRWQCB) should be contacted for the status of the site. The NCRWQCB was contacted by Environmental Science Associates and confirmed that the Simpson Timber site is an active NCRWQCB site (Site No. 1TDN007) with the constituents of concern being dioxins (NCRWQCB, 2007). However, the NCRWQCB indicated that the extent of contamination appears to be localized to the area where the mill use to exist, no closer than approximately 200 feet east of the existing Simonson Substation site.

**TABLE 2.7-1  
 HAZARDOUS MATERIALS RELEASE SITES MAPPED IN THE VICINITY OF THE STUDY AREA**

Site Name	Site Address	Direction from Project <sup>a</sup>	Regulatory Lists	Status
Simonson No. 2	U.S. Highway 101	Approximately 450 feet northwest of the existing Simonson Substation and 1,500 feet northwest of the proposed Morrison Creek Substation site.	Waste Management Unit Database administered by the State Water Resources Control Board.	Not Reported.
Simpson Timber, Smith River	U.S. Highway 101	Approximately 2,000 feet east-northeast of the existing Simonson Substation and 1,800 feet north-northeast of the proposed Morrison Creek Substation site.	Cortese list database administered by the California Environmental Protection Agency/Office of Emergency Information.	Ongoing Investigation.

<sup>a</sup> The EDR report included distances which were determined to be slightly inaccurate. This column provides accurate representation of actual site locations in relation to the existing Simonson Substation site and the proposed Morrison Creek Substation site.

SOURCE: EDR, 2007 and SHN, 2007a.

SHN Consulting Engineers & Geologists, Inc. (SHN) conducted Phase 1 Environmental Site Assessments for the proposed Morrison Creek Substation site (SHN, 2007a) and for the existing Simonson Substation site (SHN, 2007b). The Phase 1 reports indicate that dioxins and furans compounds associated with the former Simpson Timber site have impacted soil and groundwater approximately 900 feet from the proposed Morrison Creek Substation site and approximately 200 feet from the existing Simonson Substation site; however, based on soil and groundwater investigations, SHN has concluded that the former releases are not considered a hazardous materials threat to the subject sites (SHN, 2007a and 2007b).

The findings of the Phase I investigation for the proposed Morrison Creek Substation site revealed that the site has been vacant for several years, and that the site was previously used as a log pond, a lumber storage yard, and a lumber transfer yard. Records also indicate that motor oil was previously stored in 55-gallon drums and gasoline was stored in above ground storage tanks on the southeast portion of the site, in secondary containment areas. A site visit by SHN revealed no evidence of a hazardous materials release at this former storage area. However, partially buried building materials confined to the top six inches of the soil were observed discontinuously distributed over an area approximately 120 feet by 15 feet during the site visit. SHN does not consider the building materials to pose a threat of release of hazardous substances to the proposed substation site. SHN does not recommend any future investigative work at the proposed substation site, but recommended that the buildings materials be disposed of appropriately (SHN, 2007a).

The findings of the Phase I investigation for the existing Simonson Substation site found no evidence of storage or release of polychlorinated biphenyls (PCBs) or other chemicals at the site and a site visit conducted by SHN found no evidence of surface contamination at the site. SHN does not recommend any future investigative work at the existing substation site (SHN, 2007b).

### ***Wood Treatment Products***

The existing transmission line tap poles and Simonson Substation support poles are likely treated with chemicals that may include pentachlorophenol, creosote, and chromated copper arsenate. These chemicals are used in pressure treated wood to protect wood from rotting due to insects and microbial agents. For certain uses and quantities, these chemicals can be considered to be hazardous materials, which require specific handling procedures prescribed by State and federal regulations. These chemicals are typically applied to wood transmission line poles by the manufacturer at their facility and are let to set and dry prior to installation and/or use of the poles. When the chemicals have dried, leaching from the wood into the environment is generally considered to be negligible. Additionally, the base of the tap poles may be wrapped with copper naphthenate paper, also known as CuNap wrap.<sup>2</sup> This paper has been accepted as a wood preservative for several decades and has been employed in nonpressure treatments of wood and other products. Copper naphthenate is a common preservative and its use has increased recently in response to environmental concerns associated with other wood treatment products.

### ***Polychlorinated Biphenyls***

PCBs are a group of man-made organic chemicals that contain over 200 individual compounds with varying harmful effects. PCBs have historically been used as coolants and lubricants in transformers and other electrical substation equipment. A small amount of PCBs may dissolve in water, but most tend to bind to particles and sediments. Potential human exposure to PCBs may occur through inhalation of contaminated air and through direct contact with contaminated soils, resulting in irritation. As described above, no evidence exists that indicates that storage or release of PCBs has occurred at the existing Simonson Substation site.

### ***Airports***

The nearest airport to the Proposed Project study area is Jack McNamara Field Airport, which is located approximately 11 miles to the south-southwest of the study area. There are no private or public airstrips in the vicinity of the study area.

### ***Wildland Fire Conditions***

The Proposed Project study area currently consists of pavement, gravel, the Simonson Substation, and grassland interspersed by weedy scrub habitat and trees. Mixed hardwood forest is located south and east of the study area. The California Department of Forestry and Fire Protection (Cal-Fire) has identified Fire Hazard Severity Zones in State Responsibility Areas located in Del Norte County. Fire Hazard Severity Zones are identified based on a combination of fuel availability, weather, and topographic characteristics that affect fire severity and behavior. On a scale from moderate to very high, Cal-Fire has designated the entire study area as a very high Fire Hazard Severity Zone (Cal-Fire, 2007).

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<sup>2</sup> CuNap wrap is a self contained delivery system for copper naphthenate, the internationally recognized wood preservative that fights the damaging effects of moisture, decay and insect attack.

## Regulatory Context

Table 2.7-2 provides a brief overview of federal and State laws and regulations with a more detailed discussion to follow.

**TABLE 2.7-2  
 FEDERAL AND STATE LAWS AND REGULATIONS REGARDING HAZARDOUS MATERIALS**

Hazardous Materials Management	State and federal laws require detailed planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and in the event that such materials are accidentally released, to prevent or to mitigate injury to health or the environment. These laws require hazardous materials users to prepare written plans, such as Hazard Communication Plans, Hazardous Materials Business Plans, and Chemical Hygiene Plans. Laws and regulations require hazardous materials users to store these materials appropriately and to train employees to manage them safely. A number of agencies participate in enforcing hazardous materials management requirements.
Hazardous Waste Handling	The California Department of Toxic Substances Control (DTSC) regulates the generation, transportation, treatment, storage, and disposal of hazardous material waste. These laws impose “cradle-to-grave” regulatory systems that require generators of hazardous materials waste to handle it in a manner that protects human health and the environment to the extent possible. The DTSC permits and oversees hazardous materials waste treatment, long-term storage, and disposal facilities.
Hazardous Materials Transportation	The U.S. Department of Transportation (U.S. DOT) regulates the transportation of hazardous materials between states. Within California, the State agencies with primary responsibility for enforcing federal and State regulations, and for responding to transportation emergencies, are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). Together, federal and State agencies determine driver-training requirements, load labeling procedures, and container specifications. Although special requirements apply to transporting hazardous materials, requirements for transporting hazardous waste are more stringent, and hazardous waste haulers must be licensed to transport hazardous waste on public roads.
Soil and Groundwater Contamination	The Comprehensive Environmental Response, Compensation, and Liability Act and associated Superfund Amendments provide the USEPA with the authority to identify hazardous sites, to require site remediation, and to recover the costs of site remediation from polluters. California has enacted similar laws intended to supplement the federal program. The DTSC is primarily responsible for implementing California’s Superfund Law.
Emergency Response	California has developed an emergency response plan to coordinate emergency services provided by federal, State, and local government and private agencies. Responding to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES), which coordinates the responses of other agencies, including Cal EPA, CHP, the Department of Fish and Game (CDFG), the RWQCB, and the local fire department.

## State

### **Soil Contamination**

Soils having concentrations of contaminants higher than certain acceptable levels must be handled and disposed as hazardous waste when excavated. The California Code of Regulations, Title 22, Section 66261.20-24 contains technical descriptions of characteristics that would classify a soil as a hazardous waste.

### **Hazardous Materials Management**

The California Hazardous Materials Release Response Plans and Inventory Law of 1985 (Business Plan Act) requires that businesses handling hazardous materials prepare a business plan. In January 1996, Cal EPA adopted regulations implementing a Unified Hazardous Waste

and Hazardous Materials Management Regulatory Program (Unified Program). The program has six elements: hazardous waste generators and hazardous waste on-site treatment; underground storage tanks; above ground storage tanks; hazardous materials release response plans and inventories; risk management and prevention programs; and Unified Fire Code hazardous materials management plans and inventories. The plan is implemented at the local level, and the agency responsible for the implementation of the Unified Program is called the Certified Unified Program Agency (CUPA).

### ***Hazardous Waste Management and Handling***

Under the Resource Conservation and Recovery Act (RCRA), individual states may implement their own hazardous waste programs in lieu of RCRA as long as the state program is at least as stringent as federal RCRA requirements. The U.S. Environmental Protection Agency (USEPA) must approve state programs intended to implement federal regulations. In California, California Environmental Protection Agency (Cal EPA) and DTSC, a department within Cal EPA, regulate the generation, transportation, treatment, storage, and disposal of hazardous waste. The USEPA approved California's RCRA program, called the Hazardous Waste Control Law (HWCL), in 1992. DTSC has primary hazardous material regulatory responsibility, but can delegate enforcement responsibilities to local jurisdictions that enter into agreements with DTSC for the generation, transport, and disposal of hazardous materials under the authority of the HWCL.

The hazardous waste regulations establish criteria for identifying, packaging, and labeling hazardous wastes; prescribe the management of hazardous wastes; establish permit requirements for hazardous waste treatment, storage, disposal, and transportation; and identify hazardous wastes that cannot be disposed of in ordinary landfills. Hazardous waste manifests must be retained by the generator for a minimum of three years. Hazardous waste manifests provide a description of the waste, its intended destination, and regulatory information about the waste. A copy of each manifest must be filed with the state. The generator must match copies of hazardous waste manifests with receipts from treatment, storage, and disposal facilities.

Contaminated soils and other hazardous materials removed from a site during construction or remediation may need to be handled as hazardous waste.

### ***Hazardous Materials Transportation***

The State of California has adopted U.S. Department of Transportation (U.S. DOT) regulations for the intrastate movement of hazardous materials; State regulations are contained in 26 California Code of Regulations (CCR). In addition, the State of California regulates the transportation of hazardous waste originating in the State and passing through the State (26 CCR). Both regulatory programs apply in California.

The two State agencies with primary responsibility for enforcing federal and State regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). The CHP enforces hazardous material and hazardous waste labeling and packing regulations to prevent leakage and spills of

material in transit and to provide detailed information to cleanup crews in the event of an accident. Vehicle and equipment inspection, shipment preparation, container identification, and shipping documentation are the responsibility of the CHP, which conducts regular inspections of licensed transporters to assure regulatory compliance. Caltrans has emergency chemical spill identification teams at as many as 72 locations throughout the State that can respond quickly in the event of a spill.

Common carriers are licensed by the CHP, pursuant to California Vehicle Code Section 32000. This section requires the licensing of every motor (common) carrier who transports, for a fee, in excess of 500 pounds of hazardous materials at one time, and every carrier, if not for hire, who carries more than 1,000 pounds of hazardous material of the type requiring placards.

Every hazardous waste package type used by a hazardous materials shipper must undergo tests that imitate some of the possible rigors of travel. Every package is not put through every test. However, most packages must be able to be kept under running water for a time without leaking; dropped, fully loaded, onto a concrete floor; compressed from both sides for a period of time; subjected to low and high pressure; and frozen and heated alternately.

### ***Hazardous Materials Emergency Response***

Pursuant to the Emergency Services Act, California has developed an Emergency Response Plan to coordinate emergency services provided by federal, State, and local governmental agencies and private persons. Response to hazardous materials incidents is one part of this plan. The plan is administered by the State Office of Emergency Services (OES). The OES coordinates the responses of other agencies, including the USEPA, CHP, California Department of Fish and Game (CDFG), the Regional Water Quality Control Boards (RWQCBs), the local air pollution control districts (in this case, the North Coast Unified Air Quality Management District (NCUAQMD)), and local agencies.

Pursuant to the Business Plan Law, local agencies are required to develop “area plans” to respond to releases of hazardous materials and wastes. These emergency response plans depend to a large extent on the Business Plans submitted by people who handle hazardous materials. An area plan must include pre-emergency planning and procedures for emergency response, notification, and coordination of affected governmental agencies and responsible parties, training, and follow up.

### **Local**

The Del Norte County Health Department’s role is to protect the health and welfare of the general public through prevention and control of disease and pollutants. In the event of a hazardous materials release or spill, the Del Norte County Fire Department would be the first responders (SWMA, 2007). The closest hazardous materials response team to the Proposed Project study area is the Eureka Fire Department Regional Hazardous Material Response Team (HMRT), which is located approximately 90 miles to the south of the study area. The HMRT provides response services for emergencies involving hazardous materials. The HMRT is funded primarily through a Joint Powers Agreement between Humboldt County, Del Norte County, City of Eureka,

City of Crescent City, City of Arcata, City of Blue Lake, City of Ferndale, City of Rio Dell, and City of Trinidad (City of Eureka, 2007).

### ***Del Norte County General Plan***

The *Del Norte County General Plan* includes several fire hazards and hazardous materials policies that may be applicable to the Proposed Project, including (Del Norte County, 2003):

#### **Fire Hazards**

*Policy 2.E.3:* The County should avoid development in areas identified as high or extreme fire hazard areas when possible. Where such development is permitted, structures located in extreme or high fire hazard areas should be construed with fire-resistant materials, utilizing fire-resistant design standards, and the surroundings should be irrigated.

*Policy 2.E.4:* Projects which encroach into areas which are determined to have a high or extreme fire hazard shall be reviewed by the appropriate fire agency to determine if special fire prevention measures are advisable.

*Policy 2.E.6:* The County shall require development within State Responsibility Areas in Del Norte County to conform to the fire safe standards adopted by the County and approved by the California Division of Forestry.

#### **Hazardous Materials**

*Policy 2.F.3:* The County shall require that new hazardous waste facilities and those commercial and industrial land uses that use or produce hazardous materials or waste are sited in an appropriate manner to maintain an acceptable level of risk.

*Policy 2.F.4:* The County shall continue to maintain a hazardous materials response capability for the control and cleanup of hazardous materials releases and accidents.

### **Hazards and Hazardous Materials Impacts and Mitigation Measures**

a) **Hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials: *Less than significant with mitigation.***

During Proposed Project construction activities, limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, etc. would be used to fuel and maintain vehicles and motorized equipment. Accidental spill of any of these substances could impact water and/or groundwater quality. Temporary bulk above-ground storage tanks may be used for fueling and maintenance purposes. As with any liquid, during handling and transfer from one container to another, the potential for an accidental release would exist. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose a hazard to construction workers and the public, as well as the environment. While the Proposed Project would not require long-term operational use, storage, treatment, disposal, or transport of significant quantities of hazardous materials, hazardous materials would be used during Proposed Project construction activities.

**Impact 2.7-1: Construction would require the use of certain materials such as fuels, oils, solvents, and other chemical products that, in large quantities, could pose a potential hazard to the public or the environment if improperly used or inadvertently released. *Less than significant with mitigation.***

**Mitigation Measure 2.7-1a:** PacifiCorp and/or its contractor(s) shall implement construction best management practices including but not limited to the following:

- Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction;
- Avoid overtopping construction equipment fuel gas tanks;
- Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel;
- During routine maintenance of construction equipment, properly contain and remove grease and oils; and
- Properly dispose of discarded containers of fuels and other chemicals.

**Mitigation Measure 2.7-1b:** PacifiCorp shall prepare a *Hazardous Substance Control and Emergency Response Plan* (Plan) and implement it during construction to ensure compliance with all applicable federal, State, and local laws and guidelines regarding the handling of hazardous materials. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.

**Mitigation Measure 2.7-1c:** PacifiCorp shall prepare and implement a *Health and Safety Plan* to ensure the health and safety of construction workers and the public during construction. The Plan shall include information on the appropriate personal protective equipment to be used during construction. In addition, the Plan shall address emergency medical services in the case of an emergency. The Plan shall list procedures and specific emergency response and evacuation measures that would be required to be followed during emergency situations. PacifiCorp shall prepare the Plan and distribute it to all construction crew members involved in the project prior to construction and operation of the Proposed Project.

**Mitigation Measure 2.7-1d:** PacifiCorp shall establish and implement a *Workers Environmental Awareness Plan* (WEAP) to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention, and shall include a review of the *Health and Safety Plan* and the *Hazardous Substance Control and Emergency Response Plan*. PacifiCorp shall submit documentation to the CPUC mitigation monitor prior to the

commencement of construction activities that each worker on the Proposed Project has undergone this training program.

**Mitigation Measure 2.7-1e:** PacifiCorp shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept at the Proposed Project staging area and adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the *Hazardous Substance Control and Emergency Response Plan* (see Mitigation Measure 2.7-1b), which shall be implemented during construction.

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- b) **Hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment: *Less than significant with mitigation.***

### **Construction**

It is not anticipated that construction or operation of the Proposed Project would create a significant hazard to the public due to project upset or accidental release of hazardous materials into the environment. Accidental release of hazardous materials routinely used during construction activities are addressed under Impact 2.7-1, above. No contamination has been identified at the proposed Morrison Creek substation or existing Simonson Substation sites, although known dioxide and furan contamination exists approximately 900 feet from the proposed Morrison Creek Substation site and approximately 200 feet from the existing Simonson Substation site. Given the geotechnical studies conducted by SHN at the Proposed Project study area, SHN has concluded that it would be unlikely that contamination associated with these sites would be encountered during Proposed Project construction activities. Therefore, the potential release and mobilization of previously identified and unidentified hazardous materials would be relatively low.

In addition, PacifiCorp would identify and determine the extent of any existing PCB-contaminated soil at the Simonson Substation site in accordance with the USEPA grid sampling method developed for releases of oil potentially containing PCBs. If necessary, a remediation plan would be developed and executed based on the analytical sampling results (see Project Description Section 1.5.3, *Construction*).

Moreover, pursuant to Mitigation Measure 2.7-1c (above), PacifiCorp would implement appropriate safety measures to ensure the safety of construction workers. In addition, implementation of Mitigation Measure 2.7-2 (below) would ensure that potential impacts associated with releasing previously unidentified hazardous materials into the environment would be less than significant.

**Impact 2.7-2: Construction activities could release previously unidentified hazardous materials into the environment. *Less than significant with mitigation.***

**Mitigation Measure 2.7-2:** PacifiCorp's *Hazardous Substance Control and Emergency Response Plan* shall include provisions that would be implemented if any subsurface hazardous materials are encountered during construction. Provisions outlined in the plan shall include immediately stopping work in the contaminated area and contacting appropriate resource agencies, including the CPUC designated monitor, upon discovery of subsurface hazardous materials. The plan shall include the phone numbers of local, regional, and State agencies and primary, secondary, and final cleanup procedures. The *Hazardous Substance Control and Emergency Response Plan* shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.

**Significance after Mitigation:** Less than significant.

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***Removal and Disposal of Hazards Materials***

Treated wood poles associated with the existing tap poles and substation support poles to be removed under the Proposed Project would be characterized for contamination potential and disposed of at an appropriate solid waste facility in accordance with State and federal solid and hazardous waste regulations. Therefore, impacts related to the removal and disposal of treated wood would be less than significant.

Equipment and material that would be removed from the Simonson Substation would be removed using standard utility practices, while adhering to all federal, State, and local laws in regards to hazardous materials containment, control, and transport. The equipment and materials would be hauled to PacifiCorp's Service Center in Medford, Oregon for storage. Impacts related to the removal, disposal, and/or recycling of existing substation and other transmission equipment would be less than significant.

**Operations**

During operations of the Proposed Project, a potential would exist that the transformer could fail, resulting in a spill of mineral oil at the Morrison Creek Substation. However, the substation would meet federal Spill Prevention, Control, and Countermeasures (SPCC) requirements, as outlined in Title 40 of the Code of Federal Regulations, Part 112. The proposed substation would be installed with an oil containment system that would consist of an approximately 50-foot by 40-foot concrete slab. The oil containment system would be constructed at grade and would surround the transformer and the regulators. All spilled oil would be properly characterized and collected and transported to an approved disposal site in accordance with applicable requirements. Pursuant to USEPA requirements, PacifiCorp would inspect the equipment and any required spill containment facilities on a monthly basis. Implementation of the SPCC requirements

described above would ensure that potential impacts related to a transformer malfunction oil spill would be less than significant.

- c) Result in hazardous emissions or handling of hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school: *No Impact.***

No existing or proposed schools have been identified within one-quarter mile of the proposed Morrison Creek Substation or existing Simonson Substation sites. In addition, construction and operation of the Proposed Project would not be expected to result in releases of hazardous emissions, substances, or waste. Implementation of the Proposed Project would result in no impacts to nearby schools.

- d) Located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, create a significant hazard to the public or the environment: *Less than significant.***

The Proposed Project would not be located on a site with known hazardous materials contamination. If contaminated materials are encountered during project construction activities, implementation of Mitigation Measure 2.7-2 would reduce potential impacts associated with release of previously unknown hazardous materials to less than significant levels.

- e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in safety hazards for people residing or working in the project area: *No Impact.***

The Proposed Project study area is not located within an airport land use plan, nor is there a general aviation airport located within two miles of the Proposed Project study area; therefore, the Proposed Project would not result in aviation safety hazards to people residing or working within the study area and no impacts would occur.

- f) For a project within the vicinity of a private airstrip, safety hazard for people residing or working in the project area: *No impact.***

There are no known private airstrips located within two miles of the Proposed Project study area. Accordingly, there would be no private airstrip safety hazards associated with implementation of the Proposed Project.

- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan: *No Impact.***

No roadways that could be used by people evacuating the area during an emergency would be closed or otherwise blocked at any time by proposed construction activities or

operations of the Proposed Project. Therefore, the Proposed Project would not physically interfere with emergency response or evacuations and no impacts would occur.

**h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires: *Less than significant with mitigation.***

The Proposed Project would be constructed in an area that is very susceptible to wildland fires. Heat or sparks from construction vehicles or equipment have the potential to ignite dry vegetation and cause a fire. Because proposed construction activities would be conducted in the summer months, there would likely be a high fire hazard. However, implementation of Mitigation Measure 2.7-3 would reduce the potentially significant wildland fire impact associated with the construction of the Proposed Project to less than significant.

**Impact 2.7-3: Proposed Project construction activities could ignite dry vegetation and start a fire. This would be a less than significant impact with implementation of Mitigation Measure 2.7-3.**

**Mitigation Measure 2.7-3:** Water storage containers or water trucks shall be sited/constantly on-site in the Proposed Project area and be available for fire protection. All construction vehicles and work areas shall have fire suppression equipment and construction personnel shall be required to park vehicles away from dry vegetation. PacifiCorp shall contact and coordinate with the Smith River Fire Protection District (SRFPD) and the California Department of Forestry and Fire Protection (Cal-Fire) to determine the minimum amounts of fire equipment to be located at the construction site and appropriate locations for the water tanks. PacifiCorp shall submit verification of its consultation with SRFPD and Cal-Fire to the CPUC.

**Significance after Mitigation:** Less than significant.

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## Operations

During operations, the Proposed Project could increase the risk of wildland fires in the area because induced current at the new substation site could result in sparks that could reach trees and/or vegetation and result in fire. To minimize the risk of accidental ignition of a wildland fire from the proposed substation, PacifiCorp would follow State vegetation and tree clearing requirements, including CPUC General Order 95, Public Resources Code Section 4293. Therefore, operations of the Proposed Project would not result in a significant risk of loss, injury, or death involving wildland fires and operational impacts would be less than significant.

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## References – Hazards and Hazardous Materials

California Department of Forestry and Fire Protection (Cal-Fire). 2007. Proposed Fire Hazard Severity Zones in State Responsibility Areas – Del Norte County Map. Revised August, 2007. Accessed online ([http://www.fire.ca.gov/wildland\\_zones\\_maps.php](http://www.fire.ca.gov/wildland_zones_maps.php)) on October 25, 2007.

City of Eureka, 2007. City of Eureka Regional Hazardous Materials Response Team website (<http://www.ci.eureka.ca.gov/depts/fire/operations/hmrt.asp>) accessed October 25, 2007.

Del Norte County. 2003. Del Norte County General Plan. Prepared by Del Norte County Community Development Department.

Del Norte County Solid Waste Management Authority (SWMA). 2007. Personal communication with Ted Ward of the Del Norte County Solid Waste Management Authority, October 25, 2007.

Environmental Data Resources, Inc. (EDR), 2007. EDR Radius Report, May 1, 2007.

North Coast Regional Water Quality Control Board (NCRWQCB). 2007. Personal communication with Cody Walker, Engineering Geologist with the NCRWQCB, on October 24, 2007.

SHN Consulting Engineers and Geologists (SHN). 2007a. Phase 1 Environmental Site Assessment for the Morrison Creek Substation. June 2007.

SHN 2007b. Phase 1 Environmental Site Assessment for the Simonson Substation. August 2007.

## 2.8 Hydrology and Water Quality

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>8. HYDROLOGY AND WATER QUALITY— Would the project:</b>				
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 such that there would be 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 which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 of siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which 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"/>
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 authoritative 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 flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Setting

Setting information in this section was compiled from: field reconnaissance of the Proposed Project site, review of the Proponent's Environmental Assessment (PacifiCorp, 2007), peer-reviewed scientific literature, and resource agency websites and databases.

#### ***Hydrologic Setting – Climate and Drainage Features***

The Proposed Project study area is located within the Smith River Hydrologic Unit, which includes surface waters from Smith River and its tributaries Rowdy Creek, Dominic Creek,

Morrison Creek, and others. Rowdy Creek drains the upper terrain that is northeast of the Proposed Project site and is joined by Dominie Creek just west of the study area before emptying into the Smith River. Smith River originates in the Siskiyou Mountains and flows through very steep terrain until hitting the wide coastal plain south of the study area. After flowing approximately eight miles through the coastal plain, Smith River empties into the Pacific Ocean, approximately three miles from the Proposed Project site. The Proposed Project site is at the northeastern edge of this coastal plain.

The study area is considered to have a Mediterranean climate characterized by warm, dry summers and cold, wet winters. Annual precipitation averages approximately 78 inches with monthly averages for the period of November through February that exceed 10 inches per month (WRCC, 2007). However, the wet season is generally characterized as lasting from October to April. In general, the amount of precipitation at any place and the proportion of precipitation that falls as snow are related directly to elevation. Due to the relatively low elevation of the study area, precipitation generally does not occur as snowfall.

The Smith River watershed produces the highest runoff per area for all of California. Average annual runoff for the entire basin is about 2.9 million acre feet (IRE, 1997). The Smith River undergoes extreme variation in stream flow throughout the year with low flows during the summer and early fall and high flows during winter and spring. During the summer, base flows are low and fluctuations in flow are infrequent. Although annual variability is high, during a typical rainy season base flows are higher and there are occasional peak flows. Peak flows generally last for a few days, then gradually decline. During the rainy season, daily and weekly fluctuations in stream flow are huge.

### ***Morphology of the Siskiyou/Klamath Mountains and Coastal Plain***

Geologic structure has a dominant influence on surface water characteristics. The upper reaches of the watershed were originally created from the tectonic uplift or mountain building associated with the subduction zone offshore known as the Cascadia subduction zone. The Smith River system consists primarily of steep narrow bedrock-controlled channels that formed as runoff cut channels through relatively resistant bedrock in the Siskiyou and Klamath Mountains. There are also areas of less resistant rock where the terrain is relatively less steep and streams develop broader channels with gentler gradients.

The lower Smith River subbasin extends as alluvial channels on the coastal plain, created from a raised marine terrace. The mouth of the South Fork to the ocean meanders across the coastal plain in a much less restricted environment than in the bedrock mountain region. The Smith River flood plain is about a half mile wide near Fort Dick and widens as it flows west across the coastal plain to approximately four miles wide. Mill Creek and Rowdy Creek are the two largest tributaries below the South Fork. Moderate slopes are found on the lower reaches of these two tributaries.

## ***Flooding***

The Federal Emergency Management Agency (FEMA) is responsible for mapping areas subject to flooding during a 100-year flood event (i.e., one percent chance of occurring in a given year). According to FEMA, the Proposed Project site is located outside of the 100-year floodplain (FEMA, 1983). However, a 100-year floodplain is mapped just north of the study area associated with Rowdy Creek.

## ***Groundwater Characteristics***

The study area is located in the Smith River Plain Groundwater Basin. The irregularly shaped basin is bounded by the inferred Del Norte fault to the north and east where the mountainous region begins. The plain narrows to the north at the mouth of the Smith River down to approximately one mile wide as it continues into Oregon. The west boundary is the Pacific Ocean. The alluvial and floodplain deposits associated with Smith River form most of the water bearing units of the basin. Smith River provides the bulk of recharge to the groundwater basin through direct infiltration in addition to Lake Earl and Talawa, which are shallow brackish lakes in the west central part of the plain that act as collection basins for runoff from minor streams. Depth to groundwater in the study area has recently been measured to be approximately 12 to 20 feet below the ground surface (SHN, 2007). Generally, groundwater levels have shown fluctuations of approximately 5 to 15 feet for normal and dry years, but have not otherwise shown any increasing or decreasing trends over the long term (DWR, 2004).

## **Regulatory Context**

### ***Federal and State Water Quality Policies***

The legislation governing the water quality aspects of the Proposed Project are the Federal Clean Water Act (CWA) and the Porter-Cologne Water Quality Control Act (Division 7 of the California Water Code); these acts provide the basis for water quality regulation. The California legislature has assigned the primary responsibility to administer regulations for the protection and enhancement of water quality to the California State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCB). The SWRCB provides State-level coordination of the water quality control program by establishing statewide policies and plans for the implementation of State and federal regulations. Nine RWQCBs throughout California adopt and implement water quality control plans (basin plans) that recognize the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, and water quality problems.

### ***Beneficial Use and Section 303(d)***

Section 303 of the Clean Water Act (CWA) requires states to establish water quality standards consisting of designated beneficial uses of water bodies and water quality standards to protect those uses for all waters of the United States. Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of impaired waters. Impaired waters are those that do not meet water quality standards, even after point sources of pollution have the required levels of pollution control technology.

The basin plan prepared by the North Coast RWQCB lists beneficial uses for both Smith River and Rowdy Creek (RWQCB, 2007). Both surface waters are considered to have the following beneficial uses: municipal supply, agricultural supply, industrial supply, fresh water habitat, navigational waters, recreation, commercial, cold water habitat, wildlife habitat, rare species habitat, migration of aquatic organisms, and spawning habitat. In addition, Smith River has two additional beneficial uses: estuarine and marine habitat. The 2002 Section 303 (d) list of impaired water bodies, approved by the U.S. Environmental Protection Agency (USEPA) in 2003, does not include either Smith River or Rowdy Creek (RWQCB, 2003).

### **NPDES Program**

The CWA was amended in 1972 to provide that the discharge of pollutants to waters of the United States from any point source is unlawful unless the discharge is in compliance with the National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. In November 1990, the USEPA published final regulations that establish storm water permit application requirements for discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance. Regulations (Phase II Rule) that became final on December 8, 1999 expanded the existing NPDES Program to address storm water discharges from construction sites that disturb land equal to or greater than one acre and less than five acres (small construction activity).

While federal regulations allow two permitting options for storm water discharges (individual permits and General Permits), the SWRCB has elected to adopt only one statewide General Permit that would apply to all storm water discharges associated with construction activities of the Proposed Project.<sup>1</sup> This General Permit requires all dischargers where construction activity disturbs one acre or more, to:

- Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that would prevent all construction pollutants from contacting storm water and with the intent of keeping all products of erosion from moving off site into receiving waters.
- Eliminate or reduce non-storm water discharges to storm sewer systems and other waters of the nation.
- Perform inspections of all BMPs.

This General Permit is implemented and enforced by the nine RWQCBs. The North Coast RWQCB administers the stormwater permitting program in the Proposed Project study area. Dischargers are required to submit a Notice of Intent (NOI) to obtain coverage under this General Permit and annual reports identifying deficiencies of the BMPs and how the deficiencies were corrected. Dischargers are responsible for notifying the relevant RWQCB of violations or incidents of non-compliance.

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<sup>1</sup> State Water Resources Control Board (SWRCB) Order No. 99-08-DWQ National Pollutant Discharge Elimination System General Permit No. CAS000002.

On August 19, 1999, the SWRCB reissued the General Construction Storm Water Permit (Water Quality Order 99-08-DWQ referred to as “General Permit”). In September 2000, a court decision directed the SWRCB to modify the provisions of the General Permit to require permittees to implement specific sampling and analytical procedures to determine whether BMPs implemented on a construction site are: (1) preventing further impairment by sediment in storm waters discharged directly into waters listed as impaired for sediment or silt and (2) preventing other pollutants, that are known or should be known by permittees to occur on construction sites and that are not visually detectable in storm water discharges, from causing or contributing to exceedances of water quality objectives. The monitoring provisions in the General Permit have been modified pursuant to the court order.

### ***Del Norte County General Plan***

The *Del Norte County General Plan* Land Use Element contains the following policy that could be applicable to the Proposed Project (Del Norte County, 2003):

*Policy 1.B.1:* The County shall seek to maintain, and where feasible, enhance the existing quality of all water resources in order to ensure public health and safety and the biological productivity of waters.

## **Hydrology and Water Quality Impacts and Mitigation Measures**

### **a) Violate any water quality standards or waste discharge requirements: *Less than significant.***

Water pollutants, including sediment, petroleum based fuels, and/or lubricants, may be discharged during the construction phase of the Proposed Project. Construction activities have the potential to temporarily increase the sediment load of stormwater runoff from construction areas (e.g., disturbing soil at work areas, the staging area, access roads, etc.). Excess sediment in surface drainage pathways can alter and degrade the aquatic habitat in creeks and rivers. In addition, if construction equipment or workers inadvertently release pollutants such as hydraulic fluid or petroleum to the surface water, these materials could be entrained by stormwater and discharged into surface water features causing water quality degradation.

PacifiCorp would implement specific erosion control and surface water protection methods for each construction activity conducted as part of the Proposed Project. These control and protection measures, or BMPs, are standard in the construction industry and are commonly used to minimize water quality degradation. As discussed in the Regulatory Context section above, the Proposed Project would be required to comply with the NPDES Permit and therefore, be required to employ specific BMPs for the protection of surface water. PacifiCorp would be required to provide details as to the design and monitoring of the BMPs in the SWPPP, which they would prepare under the NPDES permit requirements.

**b) Depletion of groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level: *Less than significant.***

The Proposed Project would not require extraction of groundwater supplies for either construction or operational purposes. The only potential effect on groundwater supplies would be whether the Proposed Project would result in a significant net increase in impervious surfaces. An increase in impervious surfaces could potentially result in the loss of natural groundwater recharge capabilities. The proposed site for the new substation currently contains some areas of impervious surfaces although the majority of the surface at site is not impervious. The Proposed Project would result in the entire ground surface being covered with gravel except for a concrete slab oil containment system (approximately 50 feet by 40 feet). In addition, the demolition of the existing substation would help offset any potential increases in impervious surfaces that would be associated with the proposed substation. The net result of the Proposed Project would not significantly increase impervious surfaces; therefore, impacts would be less than significant.

**c) Alter existing drainage pattern of the site or area in a manner that would result in substantial erosion or siltation on- or off-site: *Less than significant.***

The Proposed Project would not significantly alter the existing drainage pattern of the site or area. Although some grading activities would be required to level the Proposed Project area, this would only be necessary for a small portion of the site. As discussed above in a), PacifiCorp would be required to employ specific BMPs for the protection of erosion and siltation on- or off-site during construction as detailed in the SWPPP. Impacts associated with alteration of drainage area and potential erosion or siltation would be less than significant.

**d) Alter the existing drainage pattern of the site or area or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site: *Less than significant.***

Construction or operation of the Proposed Project would not alter drainage patterns such that they would cause flooding on- or off-site. Some vegetation removal and soil disturbance would occur during clearing of the proposed substation site and installation of the proposed new tap pole, resulting in the potential for increased stormwater runoff. However, implementation of the BMPs associated with the SWPPP would minimize the potential for surface runoff and reduce the potential for on- or off-site flooding. Impacts associated with alteration of drainage patterns and potential flooding would be less than significant.

**e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff: *Less than significant.***

The Proposed Project is not likely to increase or create runoff beyond existing levels. No additional potential sources of polluted runoff, aside from those discussed in a), above, are expected as a result of construction activities related to the Proposed Project. Therefore, this potential impact is considered less than significant.

**f) Otherwise degrade water quality: *No impact.***

The Proposed Project would not result in potential surface water pollution beyond the issues discussed in a), above. Therefore, implementation of the Proposed Project would not otherwise degrade water quality beyond the issues previously addressed.

**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 authoritative flood hazard delineation map: *No impact.***

The Proposed Project does not include the placement of housing. Therefore, it would not result in any impacts related to the placement of 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.

**h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows: *No impact.***

No structures associated with the Proposed Project would be placed in a 100-year floodplain as determined by the Flood Insurance Rate Map that identifies 100-year flood zones within the study area. The Proposed Project site is located outside of the flood zone boundaries according to digital maps available from FEMA (1983). There would be no impact related to flood flows.

**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: *No impact.***

The Proposed Project site is not located within an inundation area for either a failed levee or dam; therefore, there would be no impact from flooding as a result of dam or levee failure.

**j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow: *Less than significant.***

There are no enclosed bodies of water located in the immediate vicinity of the Proposed Project site that would put the Proposed Project at risk due to a seiche. The Proposed Project site is also located at an elevation (approximately 80 feet above mean sea level) and sufficiently inland (approximately three miles) that would preclude it from risk of a tsunami. The potential risk of injury or damage involving a mudflow (or debris avalanche) is not considered likely based on the distance (more than 50 miles) to any

possible volcanic activity. Thus, the potential impacts associated with mudflows or debris avalanches would be less than significant.

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## References – Hydrology and Water Quality

Del Norte County. 2003. Del Norte County General Plan.

Department of Water Resources (DWR). 2004. *North Coast Hydrologic Region, Smith River Plain Groundwater Basin*, California's Groundwater Bulletin 118, last update February 27, 2004.

Federal Emergency Management Agency (FEMA). 1983. *Flood Insurance Rate Map, Del Norte County, Panel No. 065025 0025B*, January 24, 1983.

Institute for River Ecosystems (IRE). 1997. Humboldt State University, *Smith River Fisheries and Ecosystem*, 1997.

PacifiCorp. 2007. Proponent's Environmental Assessment for the Morrison Creek 69 kV Substation Project. May 29, 2007.

Regional Water Quality Control Board (RWQCB). 2007. *North Coast Region Basin Plan*, <http://www.waterboards.ca.gov/northcoast/programs/basinplan/bpdocs.html>, updated 2007.

RWQCB. 2003. *CWA 303(d) List of Water Quality Segment*, <http://www.waterboards.ca.gov/tmdl/docs/2002reg1303dlist.pdf>, approved by USEPA 2003.

SHN Consulting Engineers and Geologist, Inc. (SHN). 2007. Phase I Environmental Site Assessment for the Morrison Creek Substation. June 2007.

Western Regional Climate Center (WRCC). 2007. *Period of Record Monthly Climate Summary for Fort Dick, California*. Obtained online (<http://www.wrcc.dri.edu/summary/Climsmnca.html>) on November 25, 2007.

## 2.9 Land Use, Planning, and Policies

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>9. LAND USE AND LAND USE PLANNING— Would the project:</b>				
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 the 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 checked="" type="checkbox"/>	<input 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"/>

### Setting

#### *Regional*

Del Norte County is the northernmost county on the California coast. The County, which covers approximately 1,070 square miles, is bounded on the north by Curry and Josephine Counties in Oregon, on the east by Siskiyou County, on the south by Humboldt County, and the Pacific Ocean is to the west. Crescent City is the County's only incorporated city (Del Norte County, 2003).

The extent of public land is a major factor in the County's land use pattern. There are several land use/land ownerships that cover a significant amount of the County's total land area, including the Smith River National Recreational Area and Redwood National and State Parks. Resource based land uses, including agriculture and timberlands continue to be significant in terms of the extent of such uses and the continuity of their function in the County's economy (Del Norte County, 2003).

#### *Local*

The Proposed Project site is located in northwest Del Norte County approximately one-quarter mile southeast of the community of Smith River, California, and approximately five miles south of the Oregon/California border (see Figure 1-1). The Proposed Project site is south of Rowdy Creek and adjacent to the eastern side of U.S. Highway 101 (U.S. 101) and an existing 69 kV transmission line with 12.5 kV distribution underbuild.

The existing Simonson Substation site is an approximately one-quarter-acre site, while the proposed Morrison Creek Substation site, located approximately 1,000 feet southeast of the existing Simonson Substation, is an approximately 1.74-acre site. The proposed Morrison Creek Substation site is currently vacant and was previously used by a lumber mill operation with mill foundations and paved areas still present.

Land uses in the vicinity of the Proposed Project site are generally rural in nature. Large portions of agricultural land are located west and southwest of the Proposed Project site, on the west side of U.S. 101, with timber lands to the east of the site. Other land uses in the vicinity (within one-half mile of both the proposed and existing substation locations) include:

- *Residential:* Residential uses within the Proposed Project vicinity are primarily detached, single-family dwellings with a medium-density area concentrated in the community of Smith River located northwest of the study area. Other medium-density areas occur south and southwest of the proposed substation site, with low-density single-family dwellings located to the north of the study area. Two mobile home parks are also located in the study area: one located approximately one-half mile south of the proposed Morrison Creek Substation site and the other located approximately one-quarter mile west of the existing Simonson Substation.
- *Commercial:* Commercial/retail services in the vicinity are concentrated approximately one-quarter mile to the northwest of the Proposed Project site in the Community of Smith River, on the west side of U.S. 101.
- *Tribal Headquarters:* The Tolowa Tribe Smith River Rancheria Headquarters is located approximately one-third mile northwest of the proposed Morrison Creek Substation site, on the north side of Rowdy Creek.
- *Retail/Service:* Retail/service uses are located to the west of the study area, directly across U.S. 101 from the existing Simonson Substation.
- *Light Industrial:* Light industrial areas in the vicinity include the parcels on which the existing and proposed substations are located, as well as both sides of U.S. 101 on the north side of Rowdy Creek, and an area located approximately one-third mile to the west of the study area.
- *Churches:* One church is located approximately one-third mile northwest of the proposed Morrison Creek Substation site.
- *Agriculture:* Agricultural land within the vicinity of the Proposed Project is located on both sides of Rowdy Creek, as well as to the south and southwest of the proposed Morrison Creek Substation site, across U.S. 101.
- *Vacant/Undeveloped:* The majority of the land in the project vicinity is vacant/undeveloped land, including large parcels located to the southeast and southwest of the proposed Morrison Creek Substation site, with smaller areas occurring to the north and northeast of the Proposed Project area.

## Regulatory Context

### **California Public Utilities Commission General Order No. 131-D**

The California Public Utilities Commission (CPUC) has sole and exclusive jurisdiction over the siting and design of the Proposed Project because it authorizes the construction and maintenance of investor-owned public utility facilities. Although such projects are exempt from local land use and zoning regulations and permitting, General Order No. 131-D, Section III.C requires “the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits” (CPUC, 1994). Non-discretionary local permits include permits that would not require approval from a local decision-making body such as a planning commission or city council.

### **Del Norte County General Plan**

The existing and proposed substation locations are on and adjacent to parcels designated by the General Plan for *Light Industrial* (LI), *General Industrial* (GI), and *Riparian Corridor* (RC) uses. Specifically, both the existing Simonson Substation site and proposed Morrison Creek Substation site are designated as *General Industrial* (Hooper, 2007). The *Light Industrial* designation is intended to “provide for both rural and urban areas of mixed commercial, heavy commercial and light non-nuisance industrial uses which may not require prime retail sales and industrial manufacturing locations.” The *General Industrial* designation is intended to “provide areas suitable for normal operations of heavy commercial, industrial and manufacturing industrials in both rural and urban area.” And, the *Riparian Corridor* designation is applied to “areas containing riparian vegetation immediately adjacent and contiguous to a natural water course” (Del Norte County, 2003).

### **Del Norte County Zoning Ordinance**

The parcels on which the existing Simonson Substation and the proposed Morrison Creek Substation site are located, as well as all parcels adjacent to the substations, are currently zoned *Manufacturing and Industrial* (M) (Hooper, 2007). The *Manufacturing and Industrial* zoning district is intended to “apply to areas suited to normal operations of industries, subject only to such regulations as are needed to control congestion and protect surrounding areas” (Del Norte County, 1967).

## Land Use and Planning Impacts and Mitigation Measures

### **a) Physical division of an established community: *No impact.***

Because the Proposed Project involves the removal of Simonson Substation and the construction of Morrison Creek Substation on vacant, private land, and because the proposed substation would not restrict access to or within the community of Smith River, the Proposed Project would not result in the physical division of an established community.

- b) **Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect: *Less than significant.***

While local regulation of public utility facilities, including substations, is preempted under CPUC General Order 131-D, the CPUC seeks to cooperate with local government agencies. As discussed above, the proposed Morrison Creek Substation site would be located entirely on private property that is zoned as *Manufacturing and Industrial (M)*, with the County land use designation of *General Industrial (GI)*. Public utility facilities in Del Norte County are permitted within *Manufacturing and Industrial* districts and *General Industrial* land use designations with the issuance of a Conditional Use Permit (CUP). Construction of the Proposed Project would be consistent with the Del Norte County General Plan and Zoning Code. It should be noted that the CUP is a discretionary land use permit; however, PacifiCorp would not be required to obtain the CUP from Del Norte County prior to Proposed Project approval by the CPUC. Impacts related to consistency with applicable plans and policies would be less than significant.

- c) **Conflict with any applicable habitat conservation plan or natural community conservation plan: *No impact.***

There are no adopted habitat conservation or natural community conservation plans that are applicable to the Proposed Project site. Therefore, the Proposed Project would not result in any impacts related to conflicts with habitat conservation or natural community conservation plans.

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## References – Land Use, Planning, and Policies

California Public Utilities Commission (CPUC), 1994. General Order 131-D: *Rules Relating to the Planning and Construction of Electric Generation, Transmission/Power/Distribution Line Facilities and Substations Located in California*. Decision 94-06-014, adopted June 8, 1994, effective July 8, 1994.

Del Norte County, 1967. *Del Norte County Code: (Ord. 67-10 § 3.1300)*, 1967.

Del Norte County, 2003. *Del Norte County General Plan*, adopted January 28, 2003.

Hooper, Randy, 2007. Email communication with Randy Hooper, Planner II, Del Norte County, October 11, 2007.

## 2.10 Mineral Resources

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>10. MINERAL RESOURCES—Would the project:</b>				
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"/>

### Setting

#### ***Existing Mineral Resources***

Mineral resources in Del Norte County that are considered major producing areas include sand and gravel obtained from river, terrace, and beach deposits (Del Norte County, 2003). Numerous small aggregate production areas make up the majority of mining activities in Del Norte County but none are producing more than 0.5 million tons per year and all are located outside the Proposed Project study area (Kohler, 2002). The aggregate production areas are located primarily along the lower Smith River with some activity on the Klamath River and its tributaries (Del Norte County, 2003).

The California Geological Survey (CGS) has classified the regional significance of mineral resources in accordance with the California Surface Mining and Reclamation Act of 1975 (SMARA). Mineral Resource Zones (MRZs) delineated by CGS identify the presence and significance of mineral deposits within the study area. In general, areas subject to pressure of urbanization are zoned by the CGS, while those areas outside these areas are not. The CGS has not prepared any reports that designate Mineral Resource Zones to be protected in Del Norte County (Kohler, 2002).

#### ***Geothermal Resources***

There are no known or potential geothermal resources identified in Del Norte County. Industrial or geothermal category operations do not exist anywhere near the Proposed Project study area (Laney and Brizzee, 2003).

### Regulatory Context

#### ***State***

##### **Surface Mining and Reclamation Act**

The primary State law concerning conservation and development of mineral resources is SMARA, as amended to date. SMARA is found in the California Public Resources Code (PRC), Division 2, Chapter 9, Sections 2710, et seq.

Depending on the region, natural resources can include geologic deposits of valuable minerals used in manufacturing processes and the production of construction materials. SMARA was enacted in 1975 to limit new development in areas with significant mineral deposits. SMARA calls for the State geologist to classify the lands within California based on mineral resource availability. In addition, the California Health and Safety Code requires the covering, filling, or fencing of abandoned shafts, pits and excavations (California Health and Safety Code Sections 24400-03.). Furthermore, mining may also be regulated by local government, which has the authority to prohibit mining pursuant to its general plan and local zoning laws.

SMARA states that the extraction of minerals is essential to the continued economic well-being of the State and to the needs of society, and that reclamation of mined lands is necessary to prevent or minimize adverse effects on the environment and to protect the public health and safety. The reclamation of mined lands will permit the continued mining of minerals and will provide for the protection and subsequent beneficial use of the mined and reclaimed land. Surface mining takes place in diverse areas where the geologic, topographic, climatic, biological, and social conditions are significantly different, and reclamation operations and the specifications therefore may vary accordingly (California Public Resources Code Section 2711).

### ***Local***

#### **Del Norte County General Plan**

The *Del Norte County General Plan* includes a Natural Resources Element with an Extractive Resources section that provides policies to protect the mineral resources that exist within the County by providing well-defined natural areas that are protected from development. The following Goal provides the guidance for the policies developed related to mining:

*Goal 1.1.1:* To encourage commercial mining operations where environmental, aesthetic and adjacent land use compatibility impacts can be adequately mitigated to ensure that extractive resource deposits will be accessible when extraction becomes necessary.

### **Mineral Resources Impacts and Mitigation Measures**

a) **Loss of availability of a known mineral resource that would be of value to the region and the residents of the state: *No impact***

Extraction operations exist outside the Proposed Project study area. There are no known economically viable sources of rock materials in the immediate study area. In addition, there are no known unique geologic features identified within the study area. Therefore, the potential for the project to result in the loss of mineral or unique geologic features is low and there would be no impact.

**b) Loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan: *No impact***

The activities that would be associated with the Proposed Project would affect only a small area, all of which would be located on previously-disturbed private property previously used for industrial operations related to a lumber mill. The Proposed Project would not be in an area currently used to extract known mineral resources. Therefore, the Proposed Project would not result in the loss of availability of locally-important minerals.

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## **References – Mineral Resources**

Del Norte County, 2003. *Del Norte County General Plan*, January 28, 2003.

Kohler, Susan L., 2002, California Geological Survey, *Aggregate Availability in California*, July 2002.

Laney, Patrick and Julie Brizzee, 2003, Idaho National Engineering and Environmental Laboratory, *California Geothermal Resources*, November, 2003.



## 2.11 Noise

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>11. NOISE—Would the project:</b>				
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, would the project 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"/>

### Setting

#### Noise Background

Sound is mechanical energy transmitted by pressure waves through a medium such as air. Noise can be defined as unwanted sound. Sound is characterized by various parameters that include the rate of oscillation of sound waves (frequency), the speed of propagation, and the pressure level or energy content (amplitude). In particular, the sound pressure level has become the most common descriptor used to characterize the loudness of an ambient sound level. Sound pressure level is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing, and 120 to 140 dB corresponding to the threshold of pain.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude (sound power). When all the audible frequencies of a sound are measured, a sound spectrum is plotted consisting of a range of frequency spanning 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner

corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA).<sup>1</sup>

### ***Noise Exposure and Community Noise***

An individual's noise exposure is a measure of the noise experienced by the individual over a period of time. A noise level is a measure of noise at a given instant in time. However, noise levels rarely persist consistently over a long period of time. In fact, community noise varies continuously with time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. Background noise levels change throughout a typical day, but do so gradually, corresponding with the addition and subtraction of distant noise sources and atmospheric conditions. The addition of short duration single event noise sources (e.g., aircraft flyovers, motor vehicles, sirens) makes community noise constantly variable throughout a day.

These successive additions of sound to the community noise environment vary the community noise level from instant to instant requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. For the purposes of this noise analysis, the most important noise descriptor is the equivalent sound level ( $L_{eq}$ ). The  $L_{eq}$  is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The  $L_{eq}$  is the constant sound level which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).

### ***Effects of Noise on People***

The effects of noise on people can be placed into three categories:

- Subjective effects of annoyance, nuisance, dissatisfaction;
- Interference with activities such as speech, sleep, learning; and
- Physiological effects such as hearing loss or sudden startling.

Environmental noise typically produces effects in the first two categories. Workers at industrial plants often experience noise in the last category. There is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction. A wide variation exists in the individual thresholds of annoyance, and different tolerances to noise tend to develop based on an individual's past experiences with noise.

Thus, an important way of predicting a human reaction to a new noise environment is the way the new noise compares to the existing noise levels to which one has adapted: the so called "ambient noise" level. In general, the more a new noise exceeds the previously existing ambient noise

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<sup>1</sup> All noise levels reported herein reflect A-weighted decibels unless otherwise stated.

level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change is considered a just-perceivable difference when the change in noise is perceived but does not cause a human response;
- A change in noise level of at least 5 dBA is required before any noticeable change in human response would be expected; and
- A 10-dBA change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. A ruler is a *linear* scale: it has marks on it corresponding to equal quantities of distance. One way of expressing this is to say that the ratio of successive intervals is equal to one. A *logarithmic* scale is different in that the ratio of successive intervals is not equal to one. Each interval on a logarithmic scale is some common factor larger than the previous interval. A typical ratio is 10, so that the marks on the scale read: 1, 10, 100, 1,000, 10,000, etc., doubling the variable plotted on the x-axis. The human ear perceives sound in a non-linear fashion; hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

### **Noise Attenuation**

Point sources of noise, including stationary mobile sources such as idling vehicles or onsite construction equipment, attenuate (lessen) at a rate of 6 dBA to 7.5 dBA per doubling of distance from the source, depending upon environmental conditions (e.g., atmospheric conditions, noise barriers, type of ground surface, etc.). Widely distributed noises such as a large industrial facility spread over many acres or a street with moving vehicles (a “line” source) would typically attenuate at a lower rate of approximately 3 to 4.5 dBA per doubling distance from the source (also dependent upon environmental conditions) (Caltrans, 1998).

### **Sensitive Receptors**

Human response to noise varies considerably from one individual to another. Effects of noise at various levels can include interference with sleep, concentration, and communication, and can cause physiological and psychological stress and hearing loss. Given these effects, some land uses are considered more sensitive to ambient noise levels than others. In general, residences, schools, hotels, hospitals, and nursing homes are considered to be the most sensitive to noise. Places such as churches, libraries, and cemeteries, where people tend to pray, study, and/or contemplate are also sensitive to noise. Commercial and industrial uses are considered the least noise-sensitive. The closest sensitive receptors to the proposed Morrison Creek Substation site are residences along E. Denny Street, approximately 500 feet to the south, along the west side of U.S.

Highway 101 (U.S. 101). The closest sensitive receptors to the existing Simonson Substation are approximately 700 feet to the west, across U.S. 101 and just west of Rowdy Creek.

## Existing Ambient Noise Environment

The primary contributor to the noise environment in the Proposed Project study area is vehicle traffic along U.S. 101. Ambient  $L_{eq}$  noise levels were measured adjacent to the residences along E. Denny Street to characterize the noise environment in the vicinity of the closest noise sensitive receptors to the proposed Morrison Substation site. The measurement location was approximately 200 feet west of the U.S. 101 right-of-way and the measurement was recorded at approximately 2:00 p.m. The 10-minute  $L_{eq}$  was measured to be approximately 59 dBA. Based on this noise level, it is estimated that the  $L_{eq}$  at the nearest residence west of the Simonson Substation was approximately 55 dBA.

## Regulatory Context

Federal, State, and local agencies regulate different aspects of environmental noise. Federal and State agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of general plan policies and noise ordinance standards. Local general plans identify general principles intended to guide and influence development plans; local noise ordinances establish standards and procedures for addressing specific noise sources and activities.

### *Del Norte County*

The Del Norte County Code and General Plan do not contain any noise restrictions or standards that would be applicable to the construction of the Proposed Project. The Del Norte County General Plan includes the following noise policy that is applicable to the operations of the Proposed Project (Del Norte County, 2003):

*Policy 2.H.3: Stationary Noise.* Proposed projects which include potentially significant noise generation [i.e., with the potential to exceed the standards shown in Table 2.11-1] or development of new land uses adjacent to an existing or proposed stationary source of noise shall be required to submit a noise study that includes specific recommendations for mitigation. This policy does not apply to noise levels associated with agricultural and gravel extraction (but not processing) operations.

## Noise Impacts and Mitigation Measures

Equipment noise during Proposed Project construction is the primary concern in evaluating short-term noise impacts. During operation, noise from the Morrison Creek Substation equipment would be the primary concern associated with long-term noise impacts.

Temporary impacts during construction are considered significant if they would substantially interfere with affected land uses. Substantial interference could result from a combination of

**TABLE 2.11-1  
MAXIMUM NOISE EXPOSURE FOR NOISE SENSITIVE AND OTHER USES DUE TO STATIONARY  
NOISE SOURCES (HOURLY L<sub>eq</sub> IN dB)**

Duration	Day (7 a.m. to 10 p.m.)	Night (10 p.m. to 7 a.m.)
Sensitive Land Uses		
Residential	62	57
Other Sensitive Land Uses	52	47
Other Land Uses		
Commercial Uses	62	57
Industrial and Heavy Commercial uses	67	62

NOTES: L<sub>eq</sub> levels are to be determined at the property line of the receiver. When determining effectiveness of noise mitigation measures, the standards may be applied on the receptor side of noise barriers or other property-line noise mitigation measures. Sound measurements shall be made with the noise meter set to the slow response setting.

SOURCE: Del Norte County, 2003.

factors including: the generation of noise levels substantially greater than existing ambient noise levels, construction efforts lasting long periods of time, or construction activities that would affect noise-sensitive uses during the nighttime. The Proposed Project's operational impact on the ambient noise environment would be considered substantial if it would result in ambient daytime L<sub>eq</sub> noise levels above 62 dBA or nighttime L<sub>eq</sub> noise levels above 57 dBA at residential land uses.

Evaluation of potential noise impacts that would result from Proposed Project construction and operations included reviewing relevant County noise standards and policies, characterizing the existing noise environment throughout the Proposed Project study area, and projecting noise from construction and operation of Proposed Project. Impacts were assessed by comparing substation equipment specifications and published noise levels of construction equipment to the ambient noise environment and significance criteria.

- a) **Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies: *Less than significant with mitigation.* See discussion under d).**
- d) **A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project: *Less than significant with mitigation.***

Potential noise impacts associated with construction and operation of the Proposed Project include noise from construction equipment and operation of the transformer and monthly maintenance activities at the proposed Morrison Creek Substation.

### **Construction**

Construction of the Proposed Project would consist of installation of the new Morrison Creek Substation, then the removal of the existing Simonson Substation. The proposed Morrison Creek and existing Simonson substation sites are 500 feet and 700 feet, respectively, from the nearest sensitive receptors. Proposed Project total construction activities are expected to last for approximately three months, with loud construction activity estimated to last for approximately one month at each site.

Construction noise sources are typically regulated on the local level through enforcement of noise ordinances, implementation of general plan policies, and imposition of conditions of approval for permits. However, Del Norte County does not have General Plan standards or Municipal Codes that address construction noise.

Construction of the Proposed Project would require a variety of equipment types. During the construction period, noise levels would be generated that would vary depending on the particular type, number, and duration of use of various pieces of construction equipment. Typical noise levels at 50 feet from the source for some of the heavy pieces of construction equipment that would be required to construct the Proposed Project are listed in Table 2.11-2.

**TABLE 2.11-2  
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT**

<b>Construction Equipment</b>	<b>Noise Level (dBA, L<sub>eq</sub> at 50 feet)</b>
Mobile Crane	83
Truck	88
Backhoe	80
Bulldozer	85
Roller	74

SOURCE: FTA, 2006.

As shown in Table 2.11-2, intermittent and continuous use of construction equipment would generate noise levels between 74 and 88 dBA at 50 feet. It is estimated that noise levels at the construction sites would average up to 85 dBA while heavy construction equipment is operating. This equates to a noise level of approximately 65 dBA at 500 feet and 62 dBA at 700 feet, which would be approximately six to seven dBA higher than the ambient conditions at the nearest sensitive receptor locations. However, given the relatively short duration of impacts, construction noise would not be considered significant at affected residences if construction would be limited to daytime hours. Implementation of the Mitigation Measure 2.11-1 would ensure that the impact of construction noise would be less than significant.

**Impact 2.11-1: The Proposed Project could generate adverse noise levels during project construction. This would be a less than significant impact with implementation of Mitigation Measure 2.11-1.**

**Mitigation Measure 2.11-1:** Construction activity shall be limited to the least noise-sensitive daytime hours between 7:00 a.m. and 8:00 p.m., with some exceptions (as approved by the CPUC) as required for safety considerations or certain construction procedures that cannot be interrupted.

**Significance after Mitigation:** Less than significant.

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**Operation**

Operation of the Morrison Creek Substation would not result in any appreciable increase to the existing average ambient noise levels at the residences closest to the proposed substation site. The loudest piece of equipment that would operate at the substation would be the transformer. Based on the specifications of the proposed transformer (PacifiCorp, 2007), it would generate a noise level of approximately 53 dBA at 50 feet and 33 dBA at 500 feet. Transformer noise at the residences along E. Denny Street would be well below the County's specified maximum noise exposure levels due to stationary sources, and would likely be inaudible because the noise levels would be less than ambient levels. In addition, operational activities would include the monthly use of a light-duty truck or automobile to inspect the facilities of the substation. This would result in a negligible impact to long-term ambient conditions in the study area. Therefore, operational impacts associated with the Proposed Project would be less than significant.

**b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels: *Less than significant.***

The use of blasting and/or pile drivers are not included as part of the Proposed Project. The Proposed Project would involve temporary sources of groundborne vibration and groundborne noise during construction from operation of heavy equipment. During construction, operation of heavy equipment would generate localized groundborne vibration and groundborne noise that could be perceptible in the immediate vicinity of the construction site. However, since no residences or other structures occupied by people would be in the immediate vicinity of construction activities, the impact from construction-related groundborne vibration and groundborne noise would be less than significant.

**c) Permanent increase in ambient noise levels in the project vicinity above levels existing without the project: *Less than significant.***

As discussed above in d), the only permanent noise sources that would be introduced by the Proposed Project would be transformer and inspection automobile noise associated

with the new substation. However, these increases would not be considered significant; as they would result in noise levels well below the County's identified maximum noise exposure levels. Therefore, the long-term impact of the Proposed Project on ambient noise levels in the study area would be less than significant.

- e) **Expose people residing or working in the area to excessive noise levels if the project is located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels: *No impact.***

The Proposed Project would not involve the development of noise-sensitive land uses, and therefore, would not expose people to excessive noise levels.

- f) **Expose people residing or working in the project area to excessive noise levels if the project is located in the vicinity of a private airstrip, would the project expose people residing or working in the area to excessive noise levels: *No impact.***

The Proposed Project is not in the vicinity of a private airstrip; therefore, would not expose people to excessive noise levels.

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## References – Noise

California Department of Transportation (Caltrans). 1998. *Technical Noise Supplement*, 1998.

Del Norte County. 2003. *Del Norte County General Plan, Section 2: Safety and Noise*. January 28, 2003

Federal Transit Administration (FTA). 2006. *Transit Noise and Vibration Impact Assessment*, May 2006.

PacifiCorp. 2007. Responses to Energy Division Data Requests 1-27. August 28, 2007.

## 2.12 Population and Housing

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>12. POPULATION AND HOUSING— Would the project:</b>				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting

The Proposed Project site is located entirely on private property that would be acquired from Green Diamond Lumber Company. The site is located in northwest Del Norte County approximately one-quarter-mile southeast of the community of Smith River, California. PacifiCorp's Proposed Project includes construction of the new Morrison Creek Substation and removal of the existing Simonson Substation, which is located approximately 1,000 feet to the northwest of the proposed substation site.

### Population

The U.S. Census Bureau 2006 population estimate for Del Norte County is 28,893. The County's population has increased by approximately 23.2 percent over a 16-year period (1990-2006) (U.S. Census Bureau, 2007). According to the California Department of Finance, Del Norte County population is expected to steadily increase through 2050 to 56,218 (California Department of Finance, 2007). Table 2.12-1 shows projected population trends from 2000 to 2050 for Del Norte County.

**TABLE 2.12-1  
DEL NORTE COUNTY POPULATION, 2000–2050**

Area	2000	2010	% Change 2000–2010	2020	% Change 2010–2020	2030	% Change 2020–2030	2040	% Change 2030–2040	2050	% Change 2040–2050
<b>Del Norte County</b>	27,507	30,983	12.6	36,077	16.4	42,420	17.6	49,029	15.6	56,218	14.7

SOURCES: U.S. Census Bureau, 2007 and California Department of Finance, 2007.

The largest concentrated population in Del Norte County is located in Crescent City, approximately 11 miles south of the study area, at an estimated 11,452 people in 2004 (U.S. Census Bureau, 2007). The community of Smith River's core population is south of U.S. Highway 101, north of West First Street, east of Westbrook Lane, and west of North Fred Haight Drive (Del Norte County, 2003). Areas south and southwest of the Proposed Project site (excluding the community of Smith River) is primarily agricultural lands, and areas to the north and northeast of the Proposed Project site is primarily forested foothills.

### **Housing**

According to the California Department of Finance, as of 2006, Del Norte County had approximately 10,954 total housing units with approximately 12 percent of those dwelling units vacant. Within the unincorporated areas of Del Norte County, there are an estimated 9,155 housing units and about 13 percent of the units are vacant (California Department of Finance, 2007).

### **Regulatory Context**

CEQA Guidelines Section 15126.2 requires a discussion of the ways in which a proposed project could directly or indirectly foster economic development or population growth, and how that growth would, in turn, affect the surrounding environment. The following regulatory context is provided to set forth the planning framework that is anticipated under the *Del Norte County General Plan*.

#### ***Del Norte County Plans and Policies***

According to the *Del Norte County General Plan*, the County's population could potentially double in the next 20 years. Based on this estimate, the General Plan provides a potential for 7,000 to 8,000 new dwelling units, with Del Norte County aiming to have "moderate growth." To further address concerns about population growth, the Land Use and Housing Elements of the General Plan provide numerous growth management goals, objectives, and policies. One of the land use goals (3.A) is to "clearly differentiate between areas within Del Norte County appropriate for higher intensity urban services and land uses (i.e., high density residential, high density commercial and industrial) from areas where rural or resource uses should be continued." The Land Use Element also contains the following growth management policy applicable to the Proposed Project:

**Policy 3.C.5** The County shall provide for an orderly outward expansion of new urban development so that it is contiguous with existing development and district boundaries, allows for the incremental expansion of infrastructure and public services, and minimizes impacts on the environment.

Furthermore, the General Plan specifies residential development standards in terms of a *range* of dwelling units per acre. In the past, the County's standards specified only the *maximum* number of units permitted per acre. The difference is that the updated standards also specify a *minimum*

density for residential designations. The new approach responds to the County's *Housing Element* (adopted in 1992), which includes a policy and a program calling for establishment of minimum residential densities to "limit underutilization of land and maximize development potential." The specification of minimum densities also allows for more certainty with respect to the nature of future development and the overall development pattern. This certainty is critical to effective infrastructure planning and financing in urban areas (e.g., sizing of service lines and treatment facilities) (Del Norte County, 2003).

## Population and Housing Impacts and Mitigation Measures

### a) **Population growth inducement, either directly or indirectly: *Less than significant.***

Proposed Project construction is expected to last approximately three months, beginning in July 2008 and concluding in October 2008. The greatest number of construction workers on site at one time would be ten, which would likely occur only a few days during overlap of tasks. Outside contractors would complete most of the proposed construction activities. The Proposed Project construction activities would be temporary, and therefore would not result in any direct growth-inducing impacts, would not result in any significant increase in local population or housing, and would not indirectly induce growth by creating new opportunities for local industry or commerce. After construction is complete, the Morrison Creek Substation would be an unmanned facility that would operate 24 hours a day, 7 days a week, and would receive routine maintenance comparable to that of the existing Simonson Substation.

Construction of the Proposed Project is needed to ensure transmission system reliability to meet existing demands in the Del Norte County area. The Proposed Project is designed to improve infrastructure to increase reliability; it would not induce growth.

Growth in the study area is planned and regulated by applicable local planning policies and zoning ordinances. The availability of electrical capacity by itself does not normally ensure or encourage growth within a particular area. Other factors such as economic conditions, land availability, population trends, availability of water supply or sewer services, and local planning policies have a more direct effect on growth.

Therefore, the Proposed Project would not induce substantial population growth – directly or indirectly – in the study area, thus, impacts related to population growth would be less than significant.

### b) **Displacement of existing housing units, necessitating the construction of replacement housing elsewhere: *No impact.***

Construction of the Morrison Creek Substation would occur on a private property site that does not contain any housing. Therefore, the Proposed Project would not result in the displacement of any existing housing units.

c) **Displacement of people, necessitating the construction of replacement housing elsewhere: *No impact.***

The Proposed Project would result in a land use that would not directly increase population within the community and therefore, would not result in significant impacts to population levels or housing opportunities. The Morrison Creek Substation would be constructed on private property that does not contain housing or any other structures that are currently used by people; therefore, the Proposed Project would not result in the displacement of people.

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## **References – Population and Housing**

California Department of Finance, 2007. *Population Projections by Race/Ethnicity for California and Its Counties 2000–2050*, Sacramento, California, July 2007.

Del Norte County, 2003. *Del Norte County General Plan*, adopted January 28, 2003.

United States Census Bureau, 2007. *Del Norte County from the US Census Bureau*, <http://factfinder.census.gov> accessed October 10, 2007.

## 2.13 Public Services

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>13. PUBLIC SERVICES— Would the project:</b>				
a) Result in substantial adverse physical impacts associated with the provision of, or the 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:				
i) Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Setting

#### ***Fire Protection and Emergency Medical Services***

There are five Del Norte County Fire Protection Districts, including Klamath, Crescent, Fort Dick, Smith River, and Gasquet Fire Protection Districts. There are also a number of non-County agencies that provide fire service to Del Norte County, including Crescent City Volunteer Fire Department, California Department of Forestry and Fire Protection (Cal-Fire), United States Forest Service (USFS) Six Rivers National Forest, Redwood National and State Parks, and Pelican Bay State Prison. In order to ensure that these fire districts operate in an efficient and cost-effective manner, the districts have mutual aid and auto aid agreements in place.<sup>1</sup> Mutual aid agreements exist among the districts for back-up in large or multiple fire scenarios and for general emergencies. All of the County’s Fire Protection Districts have mutual aid agreements with each other (DNCFSC, 2005).

#### **Smith River Fire Protection District**

The Proposed Project site is located within the jurisdiction of the Smith River Fire Protection District (SRFPD). The SRFPD provides first response fire and medical service to approximately 5,000 residents within its 25-square-mile district. Twenty-six local residents currently volunteer with SRFPD, 15 of which are “active” firefighters. There are three paid staff members, including the Fire Chief, Assistant Chief, and Secretary. SRFPD’s main station, including offices, is located at the Smith River Fire Hall at 245 Haight Avenue in Smith River, approximately one-half mile northwest of the Proposed Project site. There are two other fire stations located in this area, one on U.S. Highway 199 in Hiouchi, and the other on Low Divide Road. As noted above, SRFPD

<sup>1</sup> Mutual aid means that a fire department can request the services of another department based upon predetermined agreements to provide such services. Auto aid means that the parties of an auto aid agreement will be dispatched to respond to incidents outside their regular district or jurisdiction to assist with suppression or other emergencies.

has mutual aid agreements with all of the Fire Protection District in Del Norte County, as well as with the Crescent City Fire Department. Equipment includes three fire engines, two water tenders, a rescue truck, a medical rescue truck, an air supply trailer, and a suburban command vehicle (DNCFSC, 2005).

### **California Department of Forestry and Fire Protection**

Cal-Fire provides wildland fire protection in Del Norte County for private, industrial, County, State, Bureau of Land Management, and municipal forest lands, unless they are within a Fire Protection District (DNCFSC, 2005). The Cal-Fire Humboldt-Del Norte Unit provides services to 1,941,991 acres of State responsibility lands and 1,963,581 acres of direct protection area. Approximately 70 percent of these lands are zoned for timber production and another 10 percent are recreation areas. The Humboldt-Del Norte Unit manages 11 fire stations, three camps, one air attack base, and one helitack base. The Humboldt-Del Norte Unit maintains 14 frontline fire engines with two fire engines in reserve, two dozers, 15 inmate crews, one helicopter, one air attack, and one air tanker for fire suppression efforts. There are approximately 100 permanent fire suppression personnel, 30 resource management personnel, and six clerical personnel to staff these efforts. Additionally the Unit hires 50 limited term personnel to supplement the permanent staff during the fire season (CDF, 2005).

The Unit as a whole responded to a total of 293 fires in 2004. That was down from the 398 in 2003. The 2004 fires consumed a total of 468 acres of the following categories: 206 grass; 54 acres brush; 107 acres woodland; and 101 acres timber (CDF, 2005).

Cal-Fire's Crescent City Battalion provides fire protection services within the vicinity of the Proposed Project study area. The Crescent City Battalion has 21 staff members, including seven Fire Captains, one Fire Prevention Captain, 12 firefighters, and one Battalion Chief. The closest fire station to the Proposed Project site is located approximately 12 miles to the south at 1025 U.S. Highway 101 (U.S. 101) in Crescent City (DNCFSC, 2005).

In terms of response times within Del Norte County, Cal-Fire has the ability to respond to approximately 20 percent of its service area within 15 minutes, approximately 10 percent in 10 minutes, approximately seven percent within five minutes, and five percent within three minutes. This means that it takes Cal-Fire at least 15 minutes to respond to fires in the majority of its Del Norte County service area (DNCFSC, 2005).

As noted above, Cal-Fire has mutual aid agreements with all County Fire Protection Districts and automatic aid agreements with Crescent City Volunteer Fire Department and Crescent Fire Protection District (DNCFSC, 2005).

### **Police Protection**

The Del Norte County Sheriff's Department provides law enforcement services for the unincorporated portions of the County, including the Proposed Project site. The Department includes a patrol division, jail division, civil office, court security, and County wide emergency communications. The Department also has special operations with boating safety and waterways

programs and Search and Rescue (Del Norte County, 2007). The Sheriff's Department provides service to an area encompassing approximately 1,000 square miles and a population of 22,933. The Sheriff's Department main office is located at 650 5<sup>th</sup> Street in Crescent City and has 56 personnel including 16 uniform deputies, four sergeants, administrative staff, and volunteers (DNCFSP, 2005).

California Highway Patrol (CHP) has a mutual aid agreement with the Sheriff Department and would provide additional equipment and personnel in cases of larger-scale emergencies in Del Norte County. CHP also provides police protection on all State and County roads in Del Norte County (CHP, 2007). CHP has 23 uniformed officers that patrol throughout the County (DNCFSP, 2005).

### **Schools**

Public school services in the study area are provided by the Del Norte County Unified School District. The District office is located at 301 West Washington Boulevard in Crescent City. The District is comprised of 11 schools, including six elementary schools, two Kindergarten through 8<sup>th</sup> grade schools, one middle school, one high school, and one continuation high school, with a total enrollment of approximately 4,000 students (DNCUSD, 2007). Specifically, the study area is served by Smith River Elementary School and Del Norte High School. Smith River Elementary School, located at 564 First Street in Smith River, is a Kindergarten through 8<sup>th</sup> grade school that had approximately 280 students during the 2006-2007 school year. Del Norte High School, located at 1301 El Dorado Street in Crescent City, had approximately 1,135 students enrolled during the 2006-2007 school year (CDE, 2007).

The Del Norte County Unified School District enrollment has gradually decreased in recent years from 5,118 students during the 1997-1998 school year, to 4,064 students during the 2006-2007 school year. This represents a decrease of approximately 21 percent in ten years (CDE, 2007).

### **Parks and Recreation**

See Section 2.14, *Recreation*, for information regarding existing recreation resources in the Proposed Project study area.

## **Regulatory Context**

### **Del Norte County General Plan**

The Del Norte County General Plan provides goals and policies to support adequate public services for the community. These goals and policies are summarized as follows (Del Norte County, 2003):

#### **Schools**

*Goal 7.E:* To provide for the educational needs of Del Norte County residents.

## **Law Enforcement**

*Goal 7.G:* To ensure the prompt and efficient provision of law enforcement facility and service needs.

*Policy 7.G.2:* The County shall, through adequate staffing and patrol arrangements, endeavor to maintain the minimum feasible response times for deputy calls.

## **Fire Protection**

*Goal 7.H:* To protect residents of and visitors to Del Norte County from injury or loss of life and to protect property from fires.

*Policy 7.H.3:* The County shall continue to provide local fire district the opportunity to review proposed projects for compliance with fire safety standards per the Uniform Fire Code and other State and local ordinances.

## ***CDF Humboldt-Del Norte Unit Fire Management Plan (2005)***

The California Department of Forestry's Humboldt-Del Norte Unit Fire Management Plan assesses the fire situation within the Unit's jurisdiction. The Plan includes stakeholders' contributions and priorities, and identifies strategy areas for pre-fire planning and fuel treatment as defined by the people who live and work within the area. The Plan identifies most of the Proposed Project study area as having a high to moderate fire potential.

## ***Del Norte Fire Safe Plan (2005)***

The Del Norte Fire Safe Plan identifies risks and mitigations to reduce risks from wildfire in Del Norte County. It also provides residents with a step-by-step guide on how to fire-safe their homes, structures, and community, and how to best deal with an impending wildfire. The Plan contains the following goals (DNCFSC, 2005):

1. To identify priority projects to reduce risks and hazards from wildfire in Del Norte County, California. This is anticipated to be achieved principally through prioritization and implementation of fuel hazard reduction, community education, and fire suppression projects and activities.
2. To use the document to provide fire safety educational information to residents of Del Norte County.
3. To provide a guidance document for future actions of the Del Norte Fire safe Council.
4. To create biomass projects within Del Norte County.

## **Public Services Impacts and Mitigation Measures**

**Result in substantial adverse physical impacts associated with the provision of, or the 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:**

**a.i) Fire Protection: *Less than significant with mitigation.***

As discussed in the Setting section, fire protection services within the Proposed Project study area are provided by the SRFPD, as well as other fire protection districts in the area that participate in mutual aid agreements, including Cal-Fire. In general, increases in demand for fire protection services are associated with substantial increases in population. The Proposed Project would include a short-term construction crew of up to 10 crew members, but would not result in a substantial population increase that would increase the demand for fire protection services (See Section 2.12, *Population and Housing*, for further discussion). Therefore, the Proposed Project would not result in a substantial increased demand for fire protection services. Construction of the Proposed Project could affect the demand for fire protection and emergency response services, as discussed below.

Proposed Project construction activities would include the installation of a new substation as well as the demolition of an existing substation. Proposed Project construction could involve emergency situations related to worker injury that would require emergency response services. Additionally, because the Proposed Project is located in an area that contains overgrown vegetation, emergency situations could result that would require fire suppression services and emergency response. However, implementation of Mitigation Measures 2.7-1c and 2.7-3, (see Section 2.7, *Hazards and Hazardous Materials*) would reduce the potentially significant fire protection services impact associated with the construction of the Proposed Project to less than significant.

**Impact 2.13-1: Proposed Project construction activities could temporarily increase the demand for fire protection services. Implementation of Mitigation Measures 2.13-1a and 1b would reduce these impacts to less than significant.**

**Mitigation Measure 2.13-1a:** Implement Mitigation Measure 2.7-1c.

**Mitigation Measure 2.13-1b:** Implement Mitigation Measure 2.7-3.

**Significance after Mitigation:** Less than significant.

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**a.ii) Police Protection: *Less than significant.***

Police protection services at the Proposed Project site would be provided by the Del Norte County Sheriff's Department. Generally, increases in the demand for police protection services are associated with substantial increases in population. The Proposed Project would include a construction crew of up to 10 members, but would not result in a substantial population increase that would increase the demand for police protection services. (See Section 2.12, *Population and Housing*, for further discussion.) Additionally, construction activities are not anticipated to increase the demand for police protection services in the area. The area that includes the proposed substation demolition

and the proposed new substation locations is private property and access to the site from U.S. 101 is restricted by an existing barbed wire fence for security, which would help reduce the demand for police protection. Further, once the proposed substation site has been graded and the ground surface prepared, a fence would be installed to provide additional security to the construction site. As with fire services, the construction and operation of the proposed substation would not result in a need for additional police facilities nor would it affect response times or other service performance. The result would be a less than significant impact with regard to police protection.

**a.iii) Schools: *Less than significant.***

The Proposed Project would not result in substantial adverse impacts to school facilities in the study area. The proposed construction crew would be up to 10 members, including PacifiCorp and contracted construction personnel. The Proposed Project would not result in a significant increase of local population or housing (see Section 2.12 *Population and Housing* for additional discussion), which is typically associated with increased demand for public school services. Therefore, the Proposed Project would not result in a substantial increase in demand for school facilities and impacts to public school services would be less than significant.

**a.iv) Parks: *Less than significant.***

The Proposed Project would not result in a significant increase in the local population or housing (see Section 2.12 *Population and Housing* for additional discussion); therefore, there would be no substantial increased demand for park facilities. Thus, impacts to parks would be less than significant. See also Section 2.14, *Recreation*, for additional discussion.

**a.v) Other Public Facilities: *Less than significant.***

The Proposed Project would not result in substantial adverse impacts to other public facilities, such as public libraries, hospitals, or other civic uses. For a discussion of potential impacts related to public roadways, see Section 2.15, *Transportation and Traffic*. No other public facilities would be adversely impacted by the construction or operation of the Proposed Project.

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## References – Public Services

California Department of Education (CDE), 2007. CDE DataQuest. Webpage available at: <http://data1.cde.ca.gov/dataquest/>, accessed August 16, 2007.

California Department of Forestry (CDF), 2005. *California Department of Forestry and Fire Protection Humboldt-Del Norte Unit Fire Management Plan, 2005.*

California Highway Patrol (CHP), 2007. Webpage available at: [www.chp.ca.gov](http://www.chp.ca.gov), accessed August 16, 2007.

Del Norte County, 2003. *Del Norte County General Plan*, adopted January 28, 2003.

Del Norte County, 2007. Webpage available at: <http://www.dnco.org>, accessed August 15, 2007.

Del Norte County Fire Safe Council (DNCFSC), 2005. *Del Norte County Fire Safe Plan*, adopted September 2005.

Del Norte County Unified School District (DNCUSD), 2007. Webpage available at: <http://www.delnorte.k12.ca.us/>, accessed August 16, 2007.



## 2.14 Recreation

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>14. RECREATION—Would the project:</b>				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting

A large portion of Del Norte County's total land area is owned by several public land ownerships providing a multitude of recreational opportunities. While there are no recreational facilities or parks in the immediate vicinity of the Proposed Project site, many parks and trails are located within the vicinity of the Proposed Project study area.

Several large national and State recreational areas/parks are located within the vicinity of the study area, including the Smith River National Recreational Area, Redwood National and State Parks, Pelican State Beach, and Smith River Public Fishing Access. The Smith River National Recreational Area, located approximately two miles east of the Proposed Project site (accessed via Rowdy Creek Road), is located within the Six Rivers National Forest and provides over 300,000 acres for hiking, rafting, camping, and hunting (USDA Forest Service, 2007). Redwood National and State Parks are located between approximately nine to 17 miles south of the Proposed Project site. In May 1994, Jedemiah Smith, Del Norte Coast, and Prairie Creek Redwoods State Parks joined with Redwood National Park in a cooperative management effort. These parks are managed cooperatively by the National Park Service and the California Department of Parks and Recreation. Currently, these parks contain a combined 131,983 acres (federal: 71,715 acres; State: 60,268 acres) and make up 45 percent of all the old-growth redwood forest remaining in California (National Park Service, 2007).

Several smaller public parks are located in the vicinity of the Proposed Project study area that provide public access points to beaches along the coastline and the Smith River. These parks attract enthusiasts of marine and river activities such as boating, fishing, and beach combing. These parks include Pelican State Beach, Clifford Kamph Memorial Park, Mouth of Smith River Park, and Smith River Fishing Access and are further described in Table 2.14-1, below (Del Norte County, 2003).

**TABLE 2.14-1  
RECREATION AREAS IN THE PROJECT VICINITY**

<b>Recreation Area Name</b>	<b>Responsible Agency</b>	<b>Details</b>	<b>Location Relative to Proposed Project Site</b>
Smith River Public Fishing Access	State of California	The Smith River public fishing access is a significant viewpoint in the area. A parking facility on a terrace above the Smith River presents river, riparian vegetation, and waterfowl scenes as well as views of distant upland forest. Provides access to the Smith River for boating, fishing, and other day use activities.	Approximately 2.5 miles south of the Proposed Project site along U.S. Highway 101.
Mouth of Smith River Park	Del Norte County	Immediately north of the mouth of the Smith River is a rocky beach with limited sandy pocket beaches and numerous tide pool areas.	Approximately 3.5 miles north of the Proposed Project site along U.S. Highway 101
Clifford Kamph Memorial Park	Del Norte County	A County park on the beach with nine tent-only campsites. Recreational opportunities include beach access, picnicking, beach combing, surf-fishing, and other day use activities.	Approximately 5.0 miles northeast of the Proposed Project site along U.S. Highway 101.
Pelican State Beach	State of California	A State beach that provides camping and day use activities.	Approximately 7.0 miles northeast of the Proposed Project site along U.S. Highway 101.

SOURCE: Del Norte County, 2003

## Regulatory Context

### ***Del Norte County General Plan***

Section 5, Recreational and Cultural Resources, of the *Del Norte County General Plan* contains the following recreation goals and policies that would be applicable to the Proposed Project (Del Norte County, 2003):

*Goal 5.A:* To encourage the development and maintenance of existing and new parks and recreational facilities to serve the needs of present and future residents, employees, and visitors.

*Goal 5.B:* To encourage the protection, the use, and the promotion of State- and Federally-owned beaches, forests, rivers, streams, wetlands, estuaries, and cultural resources for the education and enjoyment of Del Norte County residents and visitors.

*Policy 5.B.34:* The County shall continue to emphasize the importance of maintaining and retaining Highways 101 and 199 as primary routes which cross through the parks to serve the County and its communities.

*Policy 5.B.35:* The County shall encourage Redwood National and State Parks to manage the parks and encourage protection, use, and promotion of the parks for visitor education and enjoyment, pursuant to its adopted Management Plan (1999).

*Goal 5.C:* To develop a system of interconnected hiking, riding, and bicycling trails and paths suitable for active recreation and transportation and circulation.

*Policy 5.C.1:* The County shall support development of a countywide trail system designed to achieve the following objectives:

- a. Provide safe, pleasant, and convenient travel by foot, horse, or bicycle;
- b. Link residential areas, schools, community buildings, parks, and other community facilities. Whenever possible, trails should connect to a countywide trail system and regional trails;
- c. Provide access to recreation areas, major waterways, and vista points; and
- d. Provide for multiple uses (i.e., pedestrian, equestrian, bicycle).

## Recreation Impacts and Mitigation Measures

- a) **Increased use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated: *Less than significant.***

Increases in demand for recreational facilities are typically associated with substantial increases in population. As further described in Section 2.12, *Population and Housing*, the Proposed Project would require up to 10 total crew members on the site at one time, including PacifiCorp and contracted construction personnel. The Proposed Project construction activities would be temporary, lasting approximately three months, and therefore would not result in a substantial increased demand for recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. Impacts would be less than significant.

- b) **Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment: *No impact.***

The Proposed Project does not include any plans for the addition of any recreational facilities nor would it require the construction or expansion of recreational facilities. Therefore, the Proposed Project would not result in any adverse physical effects on the environment from construction or expansion of additional recreational facilities.

## References – Recreation

Del Norte County, 2003. *Del Norte County General Plan*, January 28, 2003.

National Park Service, 2007. <http://www.nps.gov/redw/faqs.htm>. Accessed October 2, 2007.

USDA Forest Service, 2007. <http://www.fs.fed.us/r5/sixrivers/recreation/smith-river>. Accessed on October 2, 2007.

## 2.15 Transportation and Traffic

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>15. TRANSPORTATION AND TRAFFIC— Would the project:</b>				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that would result in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards due to 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 type="checkbox"/>	<input checked="" type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., conflict with policies promoting bus turnouts, bicycle racks, etc.)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Setting

Del Norte County is primarily a rural, low-density county with its major trip attractors dispersed throughout the County. Therefore, the dominant mode of transportation is the private automobile. The roadway network that would be affected by the Proposed Project is located in north-western Del Norte County near the community of Smith River. The transportation system in the area of the Proposed Project is composed of an interconnected network of State and County roads. However, based on the layout and location of the Proposed Project, the only roadway in the study area that would be affected by the Proposed Project is U.S. Highway 101 (U.S. 101).

### U.S. Highway 101

Regional and local access to the Proposed Project site is provided by U.S. 101, also known as the Pacific Coast Highway (See Figure 1-1). U.S. 101 originates in Los Angeles County, California, and generally runs north to Thurston County, Washington. In the study area, U.S. 101 is a two-lane northwest-southeast freeway that is under the jurisdiction of the California Department of Transportation (Caltrans) District 1, based in Eureka (Del Norte County, 2003). Direct access to the existing and proposed substation sites, as well as the proposed staging area, can be achieved by two existing driveways off the east side of U.S. 101. The driveways are south of Rowdy Creek Road and are separated by approximately 850 feet. Traffic volumes along U.S. 101 in the study area are moderate with an annual average daily traffic (ADT) level of 7,100 vehicle trips per day (Caltrans, 2007).

## **Public Transit**

The Redwood Coast Transit (RCT) provides fixed-route bus service to most of the communities along the U.S. 101 corridor in the Proposed Project study area. Route 20 provides Monday through Saturday transit service between Smith River and Arcata in Humboldt County (RCT, 2007).

## **Bicycle and Pedestrian Transportation**

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths are paved trails that are separated from the roadways. Bike lanes are lanes on roadways that are typically designated for use by bicycles by striping, pavement legends, and signs. Bike routes are roadways that are typically designated for bicycle use with signs, but do not have additional width for bicycle lanes. In Del Norte County, segments of U.S. 101 have bicycle lanes and are designated as the California Pacific Bike Route. In the study area, the California Pacific Bike Route is along S. Fred D. Haight Drive, west of U.S. 101 and Rowdy Creek (CCT, 2007).

Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals. Within the vicinity of the study area, there are no designated pedestrian facilities that would be affected by construction activities or operations of the Proposed Project.

## **Airports**

The nearest airport in the vicinity of the study area is Jack McNamara Field Airport, which is located approximately 11 miles to the south-southwest. There are no private or public airstrips in the vicinity of the study area.

## **Regulatory Context**

The regulation of transportation facilities in the Proposed Project study area is under the jurisdiction of the State and Del Norte County. State jurisdiction includes permitting and regulation of the use of State roads, while County jurisdiction includes implementation of policies, and regulations, as well as management and regulation of County roads. Applicable State and County rules and regulations related to traffic and transportation issues are discussed below.

### ***California Department of Transportation***

The California Department of Transportation (Caltrans) manages interregional transportation, including management of construction activities within or above State Roadways. Caltrans is also responsible for permitting and regulating the use of State roadways. The roadway (i.e., U.S. 101) that would be used for regional and local access to the Proposed Project site is under Caltrans' jurisdiction. Caltrans requires that permits be obtained by project proponents for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbances. Caltrans regulations would apply to the transportation of oversized loads on U.S. 101 associated with the construction of the Proposed Project.

### ***Del Norte County General Plan***

The Proposed Project would not affect any local roads, including those under the jurisdiction of Del Norte County. County policies and regulations regarding the design or use of roadways are detailed in the Transportation and Circulation sections of the *Del Norte County General Plan* (Del Norte, 2003). However, because the plan focuses on the design and implementation of circulation system improvements, policies in these elements do not directly relate to the Proposed Project.

### **Transportation and Traffic Impacts and Mitigation Measures**

According to the *CEQA Guidelines*, a project would normally result in an impact to transportation and traffic if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. Post-construction maintenance and inspection activities involving one or two vehicle trips per month on U.S. 101 would be the only long-term effect of the Proposed Project. Therefore, these operational impacts would be less than significant.

The duration of impacts related to short-term construction trips would be limited to the proposed three-month construction period. With the exception of equipment and material hauling, no portion of the Proposed Project construction activities would occur within or above a public road right-of-way. Long-term impacts would be less than significant.

- a) **Increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system: *Less than significant*. See discussion under b.**
- b) **Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways: *Less than significant*.**

The Proposed Project would not introduce any new uses to the study area that would generate long-term changes in traffic; therefore, potential traffic and transportation effects would be confined to construction of the Proposed Project.

Three months of construction activities are anticipated to be required to implement the Proposed Project. Daily vehicle trips would be generated associated with the arrival and departure of construction workers. Heavy truck trips would be required for hauling equipment and materials to and from the construction site. It is estimated that up to 10 workers would be required to construct the Proposed Project. Construction activities would include hauling of oversize loads, including poles, conductor spools, substation hardware, various types of equipment, etc.

Construction of the Proposed Project would generate both construction worker and truck delivery trips. Assuming a trip generation rate of 1.5 trips per day per worker, the up to 10 employees would not be anticipated to generate more than 15 auto round trips per workday. Accounting for the delivery of construction components and material

excavation, the total number of off-site construction truck trips would be up to 20 round trips (40 one-way trips) per work day over a three-month period.

Construction-generated traffic would be temporary and therefore would not result in any long-term degradation in operating conditions or level of service on any of the roadways in the vicinity of the Proposed Project. The primary impacts from the movement of construction trucks would include short-term and intermittent lessening of roadway capacities due to slower movements and larger turning radii of the trucks compared to passenger vehicles. This short-term increase in vehicle trips would not significantly affect level of service and traffic flow on U.S. 101; therefore, impacts would be less than significant.

- c) **Change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks: *No impact.***

The Proposed Project would not change air traffic patterns nor would it require the use of helicopters or other aircraft; therefore, no impacts are anticipated.

- d) **Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment): *No impact.***

The Proposed Project would not change the configuration (alignment) of area roadways, would not result in construction activities within a public road right-of-way, and would not introduce types of vehicles that are not already traveling on area roads; therefore, no impacts are anticipated.

- e) **Result in inadequate emergency access: *No impact.***

No public or private roadways that could be used for emergency access would be closed or otherwise blocked at any time by construction activities or operations of the Proposed Project. Therefore, the Proposed Project would not result in inadequate emergency access and no impacts are anticipated.

- f) **Result in inadequate parking capacity: *Less than significant.***

Operations of the proposed Morrison Creek Substation would not require staff to be located at the substation site. Once a month, one or two vehicles would park at the site during routine inspections and maintenance activities; therefore, there would be no long-term effect on parking capacity at the site. During construction, vehicles associated with the Proposed Project would be parked at the proposed staging area, existing Simonson Substation, or the proposed Morrison Creek Substation locations, which are located on private property. In addition, Proposed Project construction activities would not generate a substantial number of parked vehicles at the Proposed Project site. Therefore, impacts would be less than significant.

**g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks): *No Impact.***

The Proposed Project would have no short-term or long-term impacts on demand for alternative transportation or on alternative transportation facilities; therefore, no impacts are anticipated.

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## **References – Transportation and Traffic**

Caltrans (California Department of Transportation). 2007. 2006 Traffic Volumes on California State Highways. Accessed the Traffic and Vehicle Data Systems Unit website (<http://www.dot.ca.gov/hq/traffops//saferesr/trafdata/index.htm>) on October 17, 2007.

California Coastal Trail (CCT). 2007. Accessed California Coast Trail.info website ([http://www.californiacoastaltrail.info/cms/archives/cte\\_2003.php?aid=25](http://www.californiacoastaltrail.info/cms/archives/cte_2003.php?aid=25)) on November 29, 2007.

Del Norte County, 2003. Del Norte County General Plan, Section 8, Transportation and Circulation. January 28, 2003.

Redwood Coast Transit. (RCT). 2007. Accessed Del Norte County Public Transit – Redwood Coast Transit website (<http://www.redwoodcoasttransit.org/index.html>) on October 24, 2007.



## 2.16 Utilities and Service Systems

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>16. UTILITIES AND SERVICE SYSTEMS—Would the project:</b>				
a) Conflict with 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 storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Require new or expanded water supply resources or entitlements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that would 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 checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Contact and/or disturb underground utility lines and/or facilities during construction activities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### 2.16.1 Setting

The Proposed Project study area is served by numerous public utility and service systems, including water, sewer, electric, and telecommunication lines. Various entities operate these systems and provide services to residents and businesses in the vicinity of the study area.

#### Water

Water service in the study area is supplied by the Smith River Community Services District (SRCSD) (Del Norte County, 2003). SRCSD's water supply is provided by wells located near Rowdy Creek. In total, SRCSD delivers potable water to approximately 635 households (SRCSD, 2007). Agricultural and rural residential areas to the south of the Smith River area utilize individual wells. SRCSD plans to eventually expand water services to these southern areas (Del Norte County, 2003).

#### Sanitary Sewer

The study area is not located within any established wastewater service area; therefore, sewage disposal within the study area is provided by individual on-site septic systems under permits

issued by the Del Norte County Health Department (Del Norte County, 2003). The Health Department follows a set of sewage disposal codes that apply to all on-site sewage disposal systems (see *Regulatory Context, Del Norte County Ordinance*, below).

## **Electricity and Natural Gas**

Electrical service in the study area is provided by PacifiCorp. Del Norte County does not have access to natural gas; however, several local gas company providers, such as Blue Star Energy and Suburban Gas, provide underground propane tank service as an alternative to natural gas (Del Norte County, 2007).

## **Cable and Telephone**

Charter Communications provides communication services to the study area, including telephone, high-speed internet, and video.

## **Solid Waste and Recycling Service**

Solid waste collection services for collection and disposal of waste from residential areas and nonresidential areas in the study area are provided by Del Norte Solid Waste Management Authority. The Del Norte County Transfer Station, located approximately 12.5 miles to the south of the proposed substation site off Elk Valley Road at 1700 State Street, Crescent City, accepts solid waste from the town of Smith River. The facility accepts common construction waste; however, special accommodations for hazardous materials must be arranged with the Solid Waste Management Authority of Del Norte County (CIWMB, 2007b).

## **Regulatory Context**

### ***State***

Assembly Bill 939 (AB 939), enacted in 1989 and known as the Integrated Waste Management Act, required each city and/or county's Source Reduction and Recycling Element to reduce the amount of waste being disposed to landfills, with diversion goals of 50 percent by the year 2000. Del Norte County had a diversion rate of 46 percent in 2004 (CIWMB, 2007a).

### ***Local***

#### **Del Norte County General Plan**

The *Del Norte County General Plan* Public Utilities Element includes policies that assure adequate water supply, storm and surface drainage, and sewage disposal for the community. The following goals and policies may be applicable to the Proposed Project (Del Norte County, 2003):

#### **General Public Facilities**

*Goal 7.A:* To ensure the effective and efficient provision of public facilities and services for existing and new development.

*Policy 7.A.1:* The County shall ensure through the development review process that adequate public facilities and services are available to serve new development when

required. The County shall not approve new development where existing facilities are inadequate unless the applicant can demonstrate that all necessary facilities will be installed or adequately financed and maintained (through fees or other means).

### **Water Supply and Delivery**

*Goal 7.B:* To ensure the availability of an adequate and safe water supply and the maintenance of high quality water for residents of and visitors to Del Norte County.

### **Wastewater Treatment, Collection, and Disposal**

*Goal 7.C:* To ensure adequate wastewater collection, treatment, and disposal.

*Policy 7.C.2:* The County shall promote efficient water and reduced wastewater system use.

### **Solid Waste**

*Goal 7.D:* To ensure the safe and efficient disposal or recycling of solid waste generated in Del Norte County.

*Policy 7.D.1:* The County shall direct the solid waste management agency in ensuring that solid waste facilities do not violate state standards for contamination of surface or ground water.

*Policy 7.D.4:* The County shall promote in conjunction with the solid waste management agency, maximum use of solid waste source reduction, recycling, composing, and environmentally safe transformation of wastes.

*Policy 7.D.5:* The solid waste management agency in conjunction with the County of Del Norte shall require that all new development complies with applicable provisions of the Del Norte Integrated Waste Management Plan.

### **Storm and Surface Drainage**

*Goal 7.J :* To ensure effective and efficient provision of storm and surface drainage systems for existing and new development.

*Policy 7.J.1:* The County shall continue to require and coordinate storm and surface drainage plans for developed areas and new development areas.

*Policy 7.J.3:* The County shall require development to be located outside of 100 year storm drainage flow and retention areas, except road crossings which shall be designed to avoid impediment of event flows.

### **Del Norte County Code**

Section 14.12.050 of the Del Norte County Code contains the following applicable code sections (Del Norte County, 1988):

- A. No alternative on-site sewage disposal system shall be constructed, enlarged, altered, repaired, relocated, removed, or demolished unless a permit has first been obtained from the health officer.

- B. No standard on-site sewage disposal system shall be constructed, enlarged, altered, repaired, relocated, removed, or demolished unless a permit has first been obtained from the building department.

## Utilities and Service Systems Impacts and Mitigation Measures

- a) **Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board: *No impact.* See discussion under e.**
- 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: *No impact.***

As described in e) below, water use that would be generated by the Proposed Project would be minimal and wastewater disposal would not be affected. Therefore, the Proposed Project would not require or result in the construction of new or expanded water or wastewater treatment plant facilities and no impact are anticipated.

- c) **Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects: *Less than significant.***

The Proposed Project would include the installation of the Morrison Creek Substation and the removal of the existing Simonson Substation. Upon removal of the Simonson Substation, the entire site would be re-graded generally following the natural contour of the site. While the size of the proposed Morrison Creek Substation would be approximately 1.5 acres larger than the existing Simonson Substation, it would not result in a considerable net increase in impervious surfaces. The entire ground surface of the proposed substation would be covered in permeable gravel except for the new concrete footings for all substation equipment (i.e., transformer, regulator, and recloser) and an oil containment system that would consist of a concrete slab with an area of approximately 50 feet by 40 feet (approximately 0.05 acre) (see Section 1, *Project Description*, for more information about the proposed oil containment system). PacifiCorp would prepare and implement a Storm Water Pollution Prevention Plan (SWPPP) consistent with National Pollution Discharge Elimination System (NPDES) requirements. Because PacifiCorp would prepare and implement a SWPPP with best management practices, and because the design of the Proposed Project would eliminate the need for additional storm water drainage facilities or expansions of existing facilities, impacts would be less than significant.

- d) **Require new or expanded water supply resources or entitlements: *Less than significant.***

Operation of the Proposed Project would not require the use of water. The proposed substation would be cooled by the use of non-toxic mineral oil and would not require

potable or non-potable water during its operations. Any water that would be required for construction of the substation (e.g., for dust and fire control) would be trucked in from off-site. Water used during the construction period would be available from existing municipal water sources and would not require local water providers to obtain additional water entitlements. The amount of water required for construction of the Proposed Project would be minimal. Impacts would be less than significant.

- e) **Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments: *No impact.***

No sources of wastewater would result from the construction activities or operations that would be associated with the Proposed Project. The Proposed Project would not require the services of an existing or proposed wastewater treatment facility. Therefore, no impacts are anticipated.

- f) **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs: *Less than significant.***

Proposed Project construction activities would result in the generation of a small amount of construction waste material. However, the majority of material associated with the Proposed Project would be reused, recycled, or disposed of in accordance with applicable federal, State, and local laws. The Proposed Project would require the removal of the existing Simonson Substation and two existing wood poles. The transformer and other oil-filled equipment would be hauled from the Simonson Substation site to PacifiCorp's Service Center in Medford, Oregon for storage. The two existing wood poles that tap the 69 kV transmission line and the 12.5 kV distribution circuit to the Simonson Substation would be removed, including all subsurface portions of the poles. The removed poles would be characterized for contamination potential and disposed of in accordance with State and federal solid and hazardous waste regulations.

Other miscellaneous non-hazardous construction materials that could not be recycled or reused would likely be acceptable for disposal at the Del Norte County Transfer Station. Any other hazardous material would be recycled, treated, and/or disposed of in accordance with applicable federal, State, and local laws.

The Del Norte County Transfer Station currently accepts a maximum of 300 tons of solid waste per day (CIWMB, 2007b). Because most of the hardware from the Simonson Substation would be hauled to Medford, Oregon, any waste that could potentially be disposed of at the Del Norte County Transfer Station would be minimal and therefore, would not adversely impact the capacity of the Del Norte County Transfer Station. Impacts related to the disposal of solid waste during construction would be less than significant (see Section 2.7, *Hazards and Hazardous Materials* for additional information).

**g) Comply with federal, state, and local statutes and regulations related to solid waste: *Less than significant.***

The Proposed Project would generate a limited amount of construction waste, including the one-time disposal of two wood poles, transmission line conductor, and hardware associated with the segment of 69 kV line to be removed, and other miscellaneous materials from the Simonson Substation that could not be reused. Operation of the Proposed Project would not produce any solid waste. The construction waste generated would be minimal and PacifiCorp would recycle, reuse, or dispose of the waste in an appropriate landfill with sufficient capacity to accept the waste.

The Del Norte Solid Waste Management Authority (DNSWMA) adopted the Del Norte Zero Waste Plan on February 15, 2000, that establishes goals and methodologies for compliance with the California Assembly Bill 939, which establishes 50 percent diversion of solid waste from landfills. Del Norte County's diversion rate in 2004 was 46 percent, which did not meet the requirement of AB 939 (CIWMB, 2007a). To further aid in waste reduction, Del Norte County recently received a \$300,000 grant from the California Integrated Waste Management Board to fund permanent Household Hazardous Waste (HHW) and Universal Waste (u-waste) facilities and programs (CIWMB, 2007c).

PacifiCorp would reduce its construction material and treated wood pole waste through various measures to act in accordance with Del Norte County's recycling and reduction policies. As previously described, PacifiCorp would haul the transformer and other oil filled equipment from the Simonson Substation site to PacifiCorp's Service Center in Medford, Oregon for storage and potential reuse.

Proposed Project construction and operation would not conflict with statutes and regulations relating to solid waste; therefore, impacts would be less than significant.

**h) Contact and/or disturb underground utility lines and/or facilities during construction activities: *Less than significant with mitigation.***

Construction activities could inadvertently contact underground utility facilities during excavation for the proposed steel pole and substation equipment foundations, trenching for the distribution circuit, and/or grading of work areas for the Proposed Project, possibly leading to short-term utility service interruptions. This would be a less than significant impact with implementation of Mitigation Measure 2.16-1.

**Impact 2.16-1: Proposed Project construction activities could inadvertently contact underground utility lines and/or facilities during excavation and other ground disturbance, possibly leading to short-term utility service interruptions.**

**Mitigation Measure 2.16-1:** PacifiCorp shall ensure that Underground Service Alert is notified at least two working days prior to initiation of construction activities that require subsurface ground disturbance so that Underground Service Alert can verify the location of all existing underground facilities and alert the other utilities to mark their facilities in the area of anticipated construction activities.

**Significance after Mitigation:** Less than significant.

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## References

- California Integrated Waste Management Board (CIWMB), 2007a. *Jurisdiction Profile for Del Norte County*. [www.ciwmb.ca.gov](http://www.ciwmb.ca.gov), accessed August 20, 2007.
- CIWMB, 2007b. *Jurisdiction Profile for Del Norte County Transfer Station*. [www.ciwmb.ca.gov](http://www.ciwmb.ca.gov), accessed October 11, 2007.
- CIWMB, 2007c. *Del Norte County Receives Integrated Waste Management Funds For Future Waste Stream Planning*, available online at [www.ciwmb.ca.gov](http://www.ciwmb.ca.gov), accessed October 10, 2007.
- Del Norte County, 1988. *Del Norte County Code*, 1988.
- Del Norte County, 2003. *Del Norte County General Plan*, January 28, 2003.
- Del Norte County, 2007. <http://www.co.del-norte.ca.us/>, accessed August 21, 2007.
- Smith River Community Service District (SRCSD), 2007. Phone communication with Venus Myers, employee at SRCSD, October 5, 2007.



## 2.17 Mandatory Findings of Significance

<i>Issues (and Supporting Information Sources):</i>	<i>Potentially Significant Impact</i>	<i>Less Than Significant with Mitigation Incorporation</i>	<i>Less Than Significant Impact</i>	<i>No Impact</i>
<b>17. MANDATORY FINDINGS OF SIGNIFICANCE</b>				
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, 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Mandatory Findings of Significance Discussion

**a) Potential to degrade the quality of the environment: *Less than significant with mitigation.***

The Proposed Project would result in less than significant or no impacts to *Agriculture Resources; Air Quality; Geology, Soils, and Seismicity; Hydrology and Water Quality; Land Use, Plans, and Policies; Mineral Resources; Population and Housing; Recreation; Transportation; and Utilities and Services*, and so would not have the potential to degrade the quality of the environment related to those resources. As discussed in the *Aesthetics, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, and Public Services* sections of this Initial Study/Mitigated Negative Declaration, the Proposed Project would result in potentially significant temporary construction and/or operational impacts that would have the potential to degrade the quality of the environment. However, adoption and implementation of mitigation measures described in this Initial Study/Mitigated Negative Declaration would reduce these individual impacts to less than significant levels.

As described in Section 2.4, *Biological Resources*, the Proposed Project would have the potential to: result in the take or harassment of the northern red-legged frog, which is listed as a California species of concern; result in the direct loss of bird nests, death of young, or loss of reproductive potential at active nests of special status bird species; detrimentally affect special status species utilizing the proposed site, through the

temporary and permanent removal of existing vegetation; and result in the inadvertent electrocution of raptors and other special status bird species. Implementation of Mitigation Measures 2.4-1 through 2.4-4 identified in Section 2.4 would reduce these impacts to less than significant levels.

Section 2.5, *Cultural Resources*, concludes that the Proposed Project would have the potential to change the significance of currently unknown cultural resources, adversely affect unidentified paleontologic resources, and could result in damage to previously unidentified human remains. However, implementation of Mitigation Measures 2.5-1 through 2.5-3 would reduce such impacts to less than significant levels. Additionally, there would be no direct impacts to known cultural resources during construction of the Proposed Project. There are no known areas of cultural significance located within the Proposed Project study area.

**b) Impacts that are individually limited, but cumulatively considerable: *Less than significant with mitigation.***

CEQA Guidelines Section 15130 requires a discussion of the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of past, current, and probable future projects. The cumulative impacts discussion does not need to provide as much detail as is provided in the analysis of project-specific impacts and should be guided by the standards of practicality and reasonableness.

CEQA Guidelines Section 15130(b) identifies the following three elements that are necessary for an adequate cumulative analysis:

- A list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the Lead Agency; or a summary of projections contained in an adopted General Plan or related planning document designed to evaluate regional or area-wide conditions. This information is provided in Table 2.17-1.
- A summary of expected environmental effects to be produced by those projects. The summary shall include specific reference to additional information stating where that information is available.
- A reasonable analysis of the cumulative impacts of the relevant projects, and an examination of reasonable options for mitigating or avoiding any significant cumulative effects of a proposed project.

**TABLE 2.17-1  
CUMULATIVE PROJECTS WITHIN THE VICINITY OF THE PROPOSED MORRISON CREEK SUBSTATION PROJECT**

<b>APN or Project Name</b>	<b>Description</b>	<b>Address / Location</b>	<b>Agency / Organization</b>	<b>Details / Status</b>	<b>Distance from Proposed Project</b>
Beckstead Meadows – Major Subdivision	Subdivision that will include 78 single-family residential parcels and other parcels.	North side of U.S. Highway 101 at Beckstead Avenue.	Del Norte County	Planning Commission approved the project in May 2005. Developer is currently working to get approval from the California Department of Transportation (Caltrans). A construction schedule is not available.	Approximately one half mile to the northwest of the Proposed Project site.
Mendes – Minor Subdivision	Minor subdivision of two parcels to four parcels.	West side of U.S. Highway 101 at Wilson Lane.	Del Norte County	Planning Commission approved the project in 2007. Applicant is working with Caltrans to obtain encroachments. Project should be complete by Fall of 2008.	Approximately one mile south-southeast of the Proposed Project site.
Smith River Left-Turn Channelization Safety Project	Construction of left-turn lanes and shoulder widening along 2.3 miles of U.S. Highway 101.	U.S. Highway 101 north of Smith River, between Indian Road and approximately one half mile north of Ocean View Drive.	California Department of Transportation	Project is currently under construction. Construction is estimated to be complete by November 2008.	The closest portion of the project is approximately four miles to the northwest of the Proposed Project site.

SOURCES: Caltrans, 2007; Del Norte County, 2007; and OPR, 2007.

Del Norte County and the California Department of Transportation (Caltrans) were contacted for information on projects within their jurisdiction. Two subdivision projects and a highway improvement project that could combine with the Proposed Project to result in a cumulative impact are shown in Table 2.17-1. These projects are in the general geographic area of the Proposed Project. The projects listed in Table 2.17-1 are considered reasonably likely to be constructed and/or operated during a similar timeframe as the Proposed Project. The projects are examined in light of their potential to contribute to short-term, construction-related effects as well as long-term operational effects in conjunction with the Proposed Project. It is anticipated that construction of the Proposed Project would last approximately three months. Projects within the vicinity of the Proposed Project study area were evaluated in this analysis of cumulative impacts. No past projects were identified that would not already be included in the baseline conditions considered in the evaluation of the Proposed Project.

### **Short-Term Construction-Related Effects**

In conjunction with the Proposed Project, several short-term construction-related cumulative impacts may occur. These potential impacts include cumulative impacts to air quality, cultural resources, hydrology and water quality, noise, and traffic.

#### ***Air Quality***

The Proposed Project study area is in attainment or unclassified status for all of the NAAQS and CAAQS, with the exception of the CAAQS for PM<sub>10</sub>. As described in Section 2.3, *Air Quality*, long-term operations of the Proposed Project would result in negligible emissions, which would not be cumulatively considerable. Construction activities associated with the Proposed Project could have a temporary impact on local air quality through short-term increases in criteria pollutant exhaust emissions (e.g., NO<sub>x</sub>, ROG, CO, SO<sub>2</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>) and fugitive dust, which could have a cumulative effect when combined with the other projects described in Table 2.17-1. However, the Proposed Project's temporary air quality construction impacts would be less than significant because the Proposed Project's contribution to the cumulative impact would not be considerable. Temporary emissions of CO<sub>2</sub>, which is a greenhouse gas emission, would also be generated during construction activities; however, given the short-term nature of construction activities, these emissions would not be cumulatively considerable. As a result, the Proposed Project would not have a significant cumulative air quality impact.

#### ***Cultural Resources***

Section 2.5, *Cultural Resources*, concludes that the Proposed Project would have the potential to impact previously unknown archeological and paleontological resources and damage previously unidentified human remains. This impact could be cumulatively considerable when combined with impacts of the cumulative projects identified in Table 2.17-1. However, implementation of Mitigation Measures 2.5-1 through 2.5-3 would reduce such impacts to less than significant levels. Additionally, there would be no direct

impacts to known cultural resources during construction of the Proposed Project. There are no known areas of cultural significance located within the Proposed Project study area. Therefore, construction of the Proposed Project would not result in a cumulatively considerable impact to cultural or historical resources.

### ***Hydrology and Water Quality***

Construction activities associated with the Proposed Project, as described in Section 2.8, *Hydrology and Water Quality*, would have a less than significant impact to water quality because the Proposed Project would be required to implement specific Best Management Practices (BMPs) to control soil erosion and entrainment of sediment in stormwater runoff associated with disturbance of soil at work areas. Implementation of these water quality protection measures as part of the Proposed Project would ensure that the Proposed Project's contribution to water quality degradation would not be cumulatively considerable when combined with impacts of the cumulative projects identified in Table 2.17-1. Similarly, the Proposed Project would have a less than significant impact to groundwater quality and no impact regarding flooding, and these issues would also not be cumulatively considerable in combination with the other cumulative projects. Therefore, the Proposed Project would not have a significant cumulative hydrology or water quality impact.

### ***Noise***

Equipment used during construction activities would temporarily increase short-term noise levels in the Proposed Project study area. However, it is unlikely that the Proposed Project, in conjunction with the other projects listed in Table 2.17-1, would have the potential to contribute to a cumulative noise impact because construction of the cumulative projects would not likely occur close enough to the Proposed Project such that the construction noise would overlap. Therefore, since construction noise associated with the various projects would not likely overlap geographically; no cumulative noise impact would occur. In addition, implementation of Mitigation Measure 2.11-1 identified in Section 2.11, *Noise*, would ensure that the Proposed Project's construction-related noise impacts would be less than cumulatively considerable (i.e., because the Proposed Project would mitigate its contribution to the cumulative impact). As a result, the Proposed Project would not have a significant cumulative noise impact.

### ***Transportation/Traffic***

Proposed Project construction activities, as described in Section 2.15, *Transportation and Traffic*, could have a temporary construction-related impact on local traffic flow in the Proposed Project study area. In conjunction with other construction projects identified in Table 2.17-1, especially the Smith River Left-Turn Channelization Safety Project, potential cumulative impacts could occur. However, the cumulative projects would occur from one-half to four miles away from the Proposed Project, so the Proposed Project's

contribution to transportation and traffic-related cumulative impacts would not be considerable and cumulative impacts would be less than significant.

## Long-Term Operational Effects

As documented in the foregoing sections of this Initial Study/Mitigated Negative Declaration, the operation of the Proposed Project would not result in the potential for any individually significant impacts with the exception of aesthetics and biological resources, which are discussed below.

For *Aesthetics*, the operations of the Proposed Project would impact scenic resources along U.S. Highway 101, an eligible State scenic highway and a County designated scenic corridor, and the proposed substation could cause glare reflected from the new substation equipment. However, implementation of Mitigation Measures 2.1-1 and 2.1-2 would reduce these impacts to less than significant levels. The cumulative projects listed in Table 2.17-1 are one-half to four miles distant from the Proposed Project site and so would not result in cumulative changes to the study area. Therefore, the impact of the Proposed Project to aesthetic resources would not be cumulatively considerable.

For *Biological Resources*, the operational impact of the Proposed Project would be limited to the potential for the new tap line and substation to result in the inadvertent electrocution and collision of raptors and other special status bird species. The cumulative projects listed in Table 2.17-1 would be unlikely to result in any increased risk of electrocution and collisions because they would not include construction of electric transmission facilities, so the impact of the Proposed Project would not be cumulatively considerable.

**c) Environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly: *Less than significant with mitigation.***

Project impacts include the potential for an accidental release of hazardous materials stored at the staging area and used during the construction of the Proposed Project that could enter nearby waterways, adjacent lands, or public roadways. In addition, construction activities could ignite dry vegetation and start a fire. With implementation of Mitigation Measures 2.7-1a through 2.7-1e, 2.7-2, and 2.7-3 provided in Section 2.7, *Hazards and Hazardous Materials*, the Proposed Project would not result in environmental effects that could cause adverse effects on human beings, either directly or indirectly. Temporary and long-term impacts to human beings through degradation of local air quality and noise could occur during project construction and operations. However, Proposed Project impacts would result in less than significant adverse effects on human beings. Therefore, impacts would not be cumulatively considerable and cumulative impacts would be less than significant.

## References – Mandatory Findings of Significance

California Department of Transportation (Caltrans). 2007. Personal communication with Carl Brown, Caltrans District 1 Construction Manager, October 26, 2007.

Governor's Office of Planning and Research (OPR). 2007. *Query the CEQAnet Database* website (<http://www.ceqanet.ca.gov/QueryForm.asp?>) on October 29, 2007.

Del Norte County. 2007. Personal communication with Heidi Kunstal, Planner, Del Norte County Planning Department, October 22, 2007.



## SECTION 3

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# Environmental Determination

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

  
\_\_\_\_\_  
Signature

November 19, 2007  
\_\_\_\_\_  
Date

Ken Lewis  
\_\_\_\_\_  
Printed Name



# SECTION 4

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## **SECTION 5**

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# Mitigation Monitoring, Reporting, and Compliance Program

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## PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE  
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# MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM

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## PACIFICORP MORRISON CREEK SUBSTATION PROJECT (APPLICATION NO. A.07-07-018)

### INTRODUCTION

This document describes the mitigation monitoring, reporting, and compliance program (MMRCP) for ensuring the effective implementation of the mitigation measures required for the California Public Utilities Commission's (CPUC, or Commission) approval of PacifiCorp's application to construct and operate the proposed Morrison Creek Substation and remove the existing Simonson Substation (Proposed Project). All mitigations are presented in Table 5-1 provided at the end of this MMRCP.

If the Proposed Project is approved, this MMRCP would serve as a self-contained general reference for the Mitigation Monitoring Program adopted by the Commission for the Proposed Project. If and when the Proposed Project has been approved by the Commission, the CPUC will compile the Final Plan from the Mitigation Monitoring Program in the Final MND, as adopted.

### California Public Utilities Commission – MMRCP Authority

The California Public Utilities Code in numerous places confers authority upon the CPUC to regulate the terms of service and the safety, practices, and equipment of utilities subject to its jurisdiction. It is the standard CPUC practice, pursuant to its statutory responsibility to protect the environment, to require that mitigation measures stipulated as conditions of approval be implemented properly, monitored, and reported on. In 1989, this requirement was codified statewide as Public Resources Code Section 21081.6, which requires public agencies to adopt an MMRCP when it approves a project that is subject to preparation of a Mitigated Negative Declaration (MND) and where that MND identifies potentially significant environmental effects. CEQA Guidelines Section 15097 was added in 1999 to further clarify agency requirements for mitigation monitoring and reporting.

The purpose of a MMRCP is to ensure that measures adopted to mitigate or avoid significant environmental impacts of a project are implemented. The CPUC views the MMRCP as a working guide to facilitate the implementation of mitigation measures by the project applicant. The CPUC also

uses the MMRCRP as its (and of any monitors it may designate) record of monitoring, compliance, and reporting of project activities.

The Commission will address its responsibility under Public Resources Code Section 21081.6 when it takes action on PacifiCorp's Application. If the Commission approves the Application, it will also adopt a Mitigation Monitoring, Compliance, and Reporting Program that includes the mitigation measures ultimately made as conditions of approval by the Commission.

## **Project Description**

PacifiCorp, which provides electric service to approximately 46,500 customers in the extreme northern portion of California, requests to construct and operate the proposed Morrison Creek Substation and remove the existing Simonson Substation. Under GO 131-D, approval of this project must comply with the California Environmental Quality Act (CEQA).

Because the CPUC must decide whether or not to approve the PacifiCorp application and because the application may cause either direct or reasonably foreseeable indirect effects on the environment, CEQA requires the CPUC to consider the potential environmental impacts that could occur as the result of its decisions and to consider mitigation for any identified significant environmental impacts.

If the CPUC approves PacifiCorp's application for authority to construct and operate the Proposed Project, PacifiCorp would be responsible for implementation of any mitigation measures governing both construction and future operation of the Proposed Project. Though other State and local agencies would have permit and approval authority over construction of the power line, the CPUC would continue to act as the lead agency for monitoring compliance with all mitigation measures required by this Mitigated Negative Declaration (MND). All approvals and permits obtained by PacifiCorp would be submitted to the CPUC for mitigation compliance prior to commencing the activity for which the permits and approvals were obtained.

In accordance with CEQA, the CPUC reviewed the impacts that would result from approval of the application. The activities considered include the construction and future operation of the new substation. The CPUC review concluded that all potential environmental impacts could be mitigated to less than significant levels. PacifiCorp has agreed to incorporate all the proposed mitigation measures into its Proposed Project. The CPUC has included the stipulated mitigation measures as conditions of approval of the application and has circulated a Draft MND.

The MND presents and analyzes potential environmental impacts that would result from construction and operation of the Proposed Project, and proposes mitigation measures, as appropriate. Based on the MND, approval of the Application would have no impact or less than significant impacts in the following areas:

- Agriculture Resources
- Air Quality
- Geology, Soils, and Seismicity
- Hydrology and Water Quality
- Land Use, Plans, and Policies
- Mineral Resources
- Population and Housing
- Recreation
- Transportation.

The MND indicates that approval of the Application would result in potentially significant impacts in the areas of:

- Aesthetics
- Biological Resources
- Cultural Resources
- Hazards and Hazardous Materials
- Noise
- Public Services
- Utilities and Service Systems.

## **Roles and Responsibilities**

As the lead agency under CEQA, the CPUC is required to monitor this project to ensure that the required mitigation measures are implemented. The CPUC will be responsible for ensuring full compliance with the provisions of this MMRCP and has primary responsibility for implementation of the monitoring program. The purpose of the monitoring program is to document that the mitigation measures required by the CPUC are implemented and that mitigated environmental impacts are reduced to the level identified in the Program. The CPUC has the authority to halt any activity associated with the Proposed Project if the activity is determined to be a deviation from the approved project or the adopted mitigation measures.

The CPUC may delegate duties and responsibilities for monitoring to other mitigation monitors or consultants as deemed necessary. The CPUC will ensure that the person(s) delegated any duties or responsibilities are qualified to monitor compliance.

The CPUC, along with its mitigation monitor, will ensure that any variance process, which will be designed specifically for the Proposed Project, or deviation from the procedures identified under the monitoring program is consistent with CEQA requirements; no project variance will be approved by the CPUC if it creates new significant environmental impacts. As defined in this MMRCP, a variance should be strictly limited to minor project changes that will not trigger other permit requirements, that does not increase the severity of an impact or create a new impact, and that clearly and strictly complies with the intent of the mitigation measure. A Proposed Project change that has the potential for creating significant environmental effects will be evaluated to determine whether supplemental CEQA review is required. Any proposed deviation from the approved project and adopted mitigation measures, including correction of such deviation, shall be reported immediately to the CPUC, and the mitigation monitor assigned to the construction, for their review and approval. In some cases, a variance may also require approval by a CEQA responsible agency.

## **Enforcement and Responsibility**

The CPUC is responsible for enforcing the procedures for monitoring through the environmental monitor. The environmental monitor shall note problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CPUC. The CPUC has the authority to halt any construction, operation, or maintenance activity associated with the Proposed Project if the activity is determined to be a deviation from the approved project or adopted mitigation measures. The CPUC may assign its authority to its environmental monitor.

## **Mitigation Compliance Responsibility**

PacifiCorp is responsible for successfully implementing all the adopted mitigation measures in this MMRCP. The MMRCP contains criteria that define whether mitigation is successful. Standards for successful mitigation also are implicit in many mitigation measures that include such requirements as obtaining permits or avoiding a specific impact entirely. Additional mitigation success thresholds will be established by applicable agencies with jurisdiction through the permit process and through the review and approval of specific plans for the implementation of mitigation measures.

PacifiCorp shall inform the CPUC and its mitigation monitor in writing of any mitigation measures that are not or cannot be successfully implemented. The CPUC in coordination with its mitigation monitor will assess whether alternative mitigation is appropriate and inform PacifiCorp of any subsequent actions required.

## ***Dispute Resolution Process***

This MMRCP is expected to reduce or eliminate many of the potential disputes concerning the implementation of the adopted measures. However, in the event that a dispute occurs, the following procedure will be observed:

- **Step 1.** Disputes and complaints (including those of the public) should be directed first to the CPUC's designated Project Manager for resolution. The Project Manager will attempt to resolve the dispute.
- **Step 2.** Should this informal process fail, the CPUC Project Manager may initiate enforcement or compliance action to address deviations from the Proposed Project or adopted Mitigation Monitoring Program.
- **Step 3.** If a dispute or complaint regarding the implementation or evaluation of the MMRCP or the mitigation measures cannot be resolved informally or through enforcement or compliance action by the CPUC, any affected participant in the dispute or complaint may file a written "notice of dispute" with the CPUC's Executive Director. This notice should be filed in order to resolve the dispute in a timely manner, with copies concurrently served on other affected participants. Within 10 days of receipt, the Executive Director or designee(s) shall meet or confer with the filer and other affected participants for purposes of resolving the dispute. The Executive Director shall issue an Executive Resolution describing his/her decision, and serve it on the filer and other affected participants.
- **Step 4.** If one or more of the affected parties is not satisfied with the decision as described in the Resolution, such party(ies) may appeal it to the Commission via a procedure to be specified by the Commission.

Parties may also seek review by the Commission through existing procedures specified in the Commission's Rules of Practice and Procedure, which can be viewed online at [http://www.cpuc.ca.gov/PUBLISHED/RULES\\_PRAC\\_PROC/70731.htm](http://www.cpuc.ca.gov/PUBLISHED/RULES_PRAC_PROC/70731.htm).

## **General Monitoring Procedures**

### ***Mitigation Monitor***

Many of the monitoring procedures will be conducted during the construction phase of the project. The CPUC and the mitigation monitor are responsible for integrating the mitigation monitoring procedures into the construction process in coordination with PacifiCorp. To oversee the monitoring procedures and to ensure success, the mitigation monitor assigned to the construction must be on site during that portion of construction that has the potential to create a significant environmental impact or other impact for which mitigation is required. The mitigation monitor is responsible for ensuring that all procedures specified in the monitoring program are followed.

### ***Construction Personnel***

A key feature contributing to the success of mitigation monitoring is the full cooperation of construction personnel and supervisors. Many of the mitigation measures require action on the part of the construction supervisors or crews for successful implementation. To ensure success, the following actions, detailed in specific mitigation measures included in the MMRCP, will be taken:

- Procedures to be followed by construction companies hired to do the construction work will be written into contracts between PacifiCorp and any of its construction contractors. Procedures to be followed by construction crews will be written into a separate agreement which all construction personnel will be asked to sign, denoting agreement.
- One or more pre-construction meetings will be held to inform and train all construction personnel about the requirements of the MMRCP.
- A written summary of mitigation monitoring procedures will be provided to construction supervisors for all mitigation measures that require their attention.

### ***General Reporting Procedures***

Site visits and specified monitoring procedures performed by other individuals will be reported to the mitigation monitor assigned to the construction. A monitoring record form will be submitted to the mitigation monitor by the individual conducting the visit or procedure so that details of the visit can be recorded and progress tracked by the mitigation monitor. A checklist will be developed and maintained by the mitigation monitor to track all procedures required for each mitigation measure and to ensure that the timing specified for the procedures is adhered to. The mitigation monitor will note any problems that may occur and take appropriate action to rectify the problems. PacifiCorp shall provide the CPUC with written quarterly reports of the project, which shall include progress of construction, resulting impacts, mitigation implemented, and all other noteworthy elements of the project. Quarterly reports shall be required as long as mitigation measures are applicable.

### ***Public Access to Records***

The public is allowed access to records and reports used to track the monitoring program. Monitoring records and reports will be made available for public inspection by the CPUC on request. The CPUC and PacifiCorp will develop a filing and tracking system.

### ***Condition Effectiveness Review***

To fulfill its statutory mandates to mitigate or avoid significant effects on the environment and to design an MMRCPP to ensure compliance during project implementation (CEQA 21081.6):

- The CPUC may conduct a comprehensive review of conditions which are not effectively mitigating impacts at any time it deems appropriate, including as a result of the Dispute Resolution procedure outlined above; and
- If in either review, the CPUC determines that any conditions are not adequately mitigating significant environmental impacts caused by the project, or that recent proven technological advances could provide more effective mitigation, then the CPUC may impose additional reasonable conditions to effectively mitigate these impacts.

These reviews will be conducted in a manner consistent with CPUC rules and practices.

### **Mitigation Monitoring, Reporting and Compliance Program**

The table attached to this program presents a compilation of the mitigation measures in the Mitigated Negative Declaration. The purpose of the table is to provide a single comprehensive list of impacts, mitigation measures, monitoring and reporting requirements, and timing.

**TABLE 5-1  
MITIGATION MONITORING, REPORTING AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Implementing Actions	Monitoring/Reporting Requirements	Timing
<b>Aesthetics</b>				
<b>2.1-1:</b> The Proposed Project would affect views from U.S. 101, an eligible State scenic highway.	<b>2.1-1:</b> Landscaping shall be installed outside the perimeter fence at the Morrison Creek Substation to partially screen views from Highway 101 and to integrate the Morrison Creek Substation's appearance with the surrounding landscape.	PacifiCorp and its contractors shall implement measure as defined.	PacifiCorp shall submit Landscape Plan to the CPUC.	At least one month prior to start of construction.
	Plant material shall be appropriate to the local/natural landscape setting and shall be consistent with Public Resources Code Section 4292 for vegetation located in proximity to transmission facilities. A landscape plan prepared by a licensed landscape architect or certified arborist shall be submitted to the CPUC. The landscape plan shall show the location, suggested species and size at planting for all proposed plant material. The plan shall also show proposed landscaping in relation to the final placement of the tap pole and substation perimeter fence. The plan shall be submitted to, reviewed and approved by the CPUC prior to commencement of construction.		CPUC mitigation monitor to inspect compliance.	During construction at the Morrison Creek Substation.
<b>2.1-2:</b> The Proposed Project could create a new source of substantial glare.	<b>2.1-2:</b> A non-reflective or weathered finish shall be applied to all new structures and equipment installed at the Morrison Creek Substation to reduce potential glare effects.	PacifiCorp and its contractors shall implement measure as defined.	CPUC mitigation monitor to inspect compliance.	During construction at the Morrison Creek Substation.
<b>Agricultural Resources</b>				
No impacts identified.				
<b>Air Quality</b>				
No impacts identified.				

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

<b>Environmental Impact</b>	<b>Mitigation Measures Proposed in this MND</b>	<b>Implementing Actions</b>	<b>Monitoring/Reporting Requirements</b>	<b>Timing</b>
<b>Biological Resources</b>				
<b>2.4-1:</b> Construction activities associated with the Proposed Project could result in impacts to the northern red-legged frog, which is a California species of special concern.	<b>2.4-1:</b> To minimize or avoid impacts to the northern red-legged frog, preconstruction surveys for the species should occur throughout the Proposed Project site two weeks or less before removing vegetation or carrying out ground-disturbing activities. Pre-construction surveys shall be carried out by a qualified biologist familiar with northern red-legged frog identification and ecology. These are not intended to be protocol-level surveys but designed to clear an area so that individual northern red-legged frogs are not present within the Proposed Project site prior to the initiation of construction. Once the site is cleared it shall be fenced in such a way as to exclude northern red-legged frog for the duration of proposed construction activities. Methods for pre-construction surveys and site fencing shall be developed prior to the start of construction.	PacifiCorp shall implement measure as defined.	PacifiCorp shall submit survey reports to the CPUC.	Survey reports shall be submitted to the CPUC prior to construction.
<b>2.4-2:</b> Construction activities associated with the Proposed Project could result in the direct loss of bird nests, death of young, or loss of reproductive potential at active nests of special status bird species located in the vicinity of the Proposed Project site.	<b>2.4-2:</b> Direct disturbance, including tree and shrub removal or nest destruction by any other means, or indirect disturbance (e.g., noise, increased human activity in area, etc.) of active nests of raptors and other special-status bird species within or in the vicinity of the proposed Morrison Creek Substation site or in the vicinity of the existing Simonson Substation site shall be avoided in accordance with the following procedures for Pre-Construction Special-Status Avian Surveys and Subsequent Actions. No more than two weeks in advance of any tree or shrub removal or ground-disturbing activity that will commence during the breeding season (i.e., February 1 through July 31), a qualified wildlife biologist shall conduct pre-construction surveys of all potential special-status bird nesting habitat in the vicinity of the planned activity. Pre-construction surveys are not required for construction activities scheduled to occur during the non-breeding season (i.e., August 1 through January 31). Depending on the survey findings, the following actions shall be taken to avoid potential adverse effects on nesting special-status nesting birds:	PacifiCorp and its contractors shall implement measure as defined.	PacifiCorp shall submit survey reports to the CPUC.  CPUC mitigation monitor to inspect compliance during construction.	Survey reports shall be submitted to the CPUC prior to construction.  Avoidance measures shall be implemented during construction.

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Implementing Actions	Monitoring/Reporting Requirements	Timing
	<ul style="list-style-type: none"> <li>• If pre-construction surveys indicate that no nests of special-status birds are present or that nests are inactive or potential habitat is unoccupied, no further mitigation shall be required.</li> <li>• If active nests of special-status birds are found during the surveys, the results of the surveys shall be forwarded to CDFG (as appropriate) and avoidance procedures shall be adopted, as determined necessary by CDFG, on a case-by-case basis. These can include construction buffer areas up to several hundred feet in the case of raptors, relocation of birds, or seasonal avoidance. If buffers are created, a no disturbance buffer zone shall be created around active nests during the breeding season or until a qualified biologist determines that all young have fledged. The size of the buffer zones and types of construction activities restricted within them shall be determined through consultation with the CDFG taking into account factors such as the following:               <ul style="list-style-type: none"> <li>a. Noise and human disturbance levels at the Proposed Project site and the nesting site at the time of the survey and the noise and disturbance expected during the construction activity;</li> <li>b. Distance and amount of vegetation or other screening between the Proposed Project site and the nest; and</li> <li>c. Sensitivity of individual nesting species and behaviors of the nesting birds.</li> </ul> </li> </ul>			

**TABLE 5-1 (continued)  
MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Implementing Actions	Monitoring/Reporting Requirements	Timing
<p><b>2.4-3:</b> Activities associated with the construction of the proposed Morrison Creek Substation could detrimentally affect special status species utilizing the site, through the temporary and permanent removal of existing vegetation.</p>	<ul style="list-style-type: none"> <li>• Construction activities commencing during the non-breeding season and continuing into the breeding season do not require surveys because it is assumed that any breeding birds taking up nests would be acclimated to Proposed Project-related activities already under way. However, if trees and shrubs are to be removed during the breeding season, the trees and shrubs shall be surveyed for nests prior to their removal, according to the survey and protective action guidelines described in a through c, in the bullet above.</li> <li>• Nests initiated during construction activities would be presumed to be unaffected by the construction activity, and a buffer zone around such nests would not be necessary.</li> <li>• Destruction of active nests of special-status birds and overt interference with nesting activities of special-status birds shall be prohibited.</li> </ul>	<p>PacifiCorp and its contractors shall implement measure as defined.</p>	<p>CPUC mitigation monitor to inspect compliance.</p>	<p>Immediately following construction activities.</p>
<p><b>2.4-4:</b> The proposed tap line and substation may result in the inadvertent electrocution and collision of raptors and other special status bird species.</p>	<p><b>2.4-4:</b> The Morrison Creek substation as well as any associated transmission and distribution line configurations should be designed as recommended in the PacifiCorp Bird Management Program Guidelines (PacifiCorp, 2006), or along recommendations provided by the Avian Power Line Interaction Committee. This shall minimize the chance for electrocution of protected raptors and other protected bird species and provide for a reporting system of any incidental bird mortalities resulting from the Morrison Creek Substation and its associated structures.</p>	<p>PacifiCorp and its contractors shall implement measure as defined.</p>	<p>CPUC mitigation monitor to inspect compliance.</p>	<p>Immediately following construction activities.</p>

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

<b>Environmental Impact</b>	<b>Mitigation Measures Proposed in this MND</b>	<b>Implementing Actions</b>	<b>Monitoring/Reporting Requirements</b>	<b>Timing</b>
<b>Cultural Resources</b>				
<p><b>2.5-1:</b> If construction activities associated with the Proposed Project encounter currently unknown cultural resources, either prehistoric or historic, pursuant to CEQA Guidelines Section 15064.5 or CEQA Section 21083.2(g), this could cause substantial adverse changes to the significance of the resource.</p>	<p><b>2.5-1:</b> In the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and PacifiCorp and/or the CPUC shall consult with a qualified archaeologist to assess the significance of the find. If any find is determined to be significant, representatives of PacifiCorp and/or the CPUC and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation, with the ultimate determination to be made by the CPUC. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, as necessary, and a report prepared by a Specialist according to current professional standards.</p>	<p>PacifiCorp shall provide CPUC staff with the name(s) and statement(s) of qualifications of its environmental monitor and designated archaeologist who will be responsible for implementation of all project-related cultural resources mitigation measures.</p>	<p>Receipt by the CPUC of the described documentation.</p>	<p>At least one week prior to the commencement of construction activities.</p>
	<p>In considering any suggested mitigation proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the CPUC shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, Proposed Project design, costs, and other considerations. If avoidance is infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the Proposed Project site while mitigation for historical resources or unique archaeological resources is carried out.</p>	<p>PacifiCorp to notify CPUC of discovery of any cultural resources</p>	<p>Receipt of verbal and/or written notification by the CPUC</p>	<p>Within 24 hours of discovery of cultural resources</p>
	<p>If the CPUC, in consultation with the qualified archaeologist, determines that a significant archeological resource is present and that the resource could be adversely affected by the Proposed Project, the CPUC shall require PacifiCorp to:</p> <ul style="list-style-type: none"> <li>• Re-design the Proposed Project to avoid any adverse effect on the significant archeological resource; or</li> </ul>	<p>PacifiCorp to coordinate with the CPUC to implement measure as defined</p>	<p>CPUC mitigation monitor to inspect to ensure compliance with agreed upon measures</p>	<p>At least once a week during all phases of construction, if cultural resources are found</p>

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Implementing Actions	Monitoring/Reporting Requirements	Timing
	<ul style="list-style-type: none"> <li>Implement an archeological data recovery program (ADRP) unless the qualified archaeologist determines that the archeological resource is of greater interpretive use than research significance, and that interpretive use of the resource is feasible. If the circumstances warrant an ADRP, such a program shall be conducted. The project archaeologist and the CPUC shall meet and consult to determine the scope of the ADRP. The archaeologist shall prepare a draft ADRP that shall be submitted to the CPUC for review and approval. The ADRP shall identify how the proposed ADRP would preserve the significant information the archeological resource is expected to contain. That is, the ADRP shall identify the scientific/historical research questions that are applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the Proposed Project. Destructive data recovery methods shall not be applied to portions of the archeological resources if nondestructive methods are practical.</li> </ul>			

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Implementing Actions	Monitoring/Reporting Requirements	Timing
<p><b>2.5-2:</b> The Proposed Project could adversely affect unidentified paleontologic resources at the proposed pole site or the substation locations.</p>	<p><b>2.5-2:</b> In the event of an unanticipated paleontological discovery during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist per up to date Society of Vertebrate Paleontology standards. The discovery shall be documented as needed, the potential resource evaluated, and the significance of the find shall be assessed under the criteria set forth in Section 15064.5 of the CEQA Guidelines. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the CPUC determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the Proposed Project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the CPUC for review and approval.</p>	<p>PacifiCorp to implement measure as defined.</p>	<p>PacifiCorp to submit contact information and qualifications of a Specialist to be notified of any unanticipated discoveries during construction.</p>	<p>Prior to start of construction.</p>
			<p>PacifiCorp and/or its contractor(s) to provide immediate verbal notification to the paleontologist and the CPUC of any discovered cultural resources; with follow up written documentation noting date of discovery, type of discovery and actions taken to protect the resource(s).</p>	<p>Immediately upon discovery.</p>
			<p>CPUC mitigation monitor to monitor compliance.</p>	<p>During all phases of construction.</p>

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

<b>Environmental Impact</b>	<b>Mitigation Measures Proposed in this MND</b>	<b>Implementing Actions</b>	<b>Monitoring/Reporting Requirements</b>	<b>Timing</b>
<p><b>2.5-3:</b> Proposed Project construction could result in damage to previously unidentified human remains.</p>	<p><b>2.5-3:</b> In the event that human skeletal remains are uncovered during Proposed Project construction or demolition activities, PacifiCorp shall immediately halt all work, contact the Del Norte County Coroner to evaluate the remains, and follow the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, PacifiCorp shall contact the California Native American Heritage Commission, pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease until appropriate arrangements are made. The Native American Heritage Commission shall assign a Most Likely Descendant, who shall have the right to access the find and provide a recommendation for treatment of the remains to the property owner, PacifiCorp, and the CPUC.</p>	<p>PacifiCorp and its contractor(s) to implement measure as defined.</p>	<p>PacifiCorp and/or its contractor(s) to provide immediate verbal notification to the Del Norte County Coroner and the CPUC of any discovered human remains; with follow up written documentation noting date of discovery, type of discovery and actions taken to protect the resource(s).</p> <p>PacifiCorp to contract Native American Heritage Commission if Coroner determines remains are Native American.</p> <p>CPUC mitigation monitor to monitor compliance</p>	<p>Immediately upon discovery.</p> <p>Upon notification that remains are Native American remains by the Del Norte County Coroner.</p> <p>During all phases of construction</p>
<p>Geology, Soils, and Seismicity</p> <p>No impacts identified.</p> <p>Hazards and Hazardous Materials</p>	<p><b>2.7-1:</b> Construction would require the use of certain materials such as fuels, oils, solvents, and other chemical products that, in large quantities, could pose a potential hazard to the public or the environment if improperly used or inadvertently released.</p>	<p><b>2.7-1a:</b> PacifiCorp and/or its contractor(s) shall implement construction best management practices including but not limited to the following:</p> <ul style="list-style-type: none"> <li>• Follow manufacturer's recommendations on use, storage, and disposal of chemical products used in construction;</li> <li>• Avoid overtopping construction equipment fuel gas tanks;</li> <li>• Use tarps and adsorbent pads under vehicles when refueling to contain and capture any spilled fuel;</li> </ul>	<p>CPUC mitigation monitor to monitor compliance.</p>	<p>During all phases of construction.</p>

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Implementing Actions	Monitoring/Reporting Requirements	Timing
	<ul style="list-style-type: none"> <li>• During routine maintenance of construction equipment, properly contain and remove grease and oils; and</li> <li>• Properly dispose of discarded containers of fuels and other chemicals.</li> </ul>			
	<p><b>2.7-1b:</b> PacifiCorp shall prepare a <i>Hazardous Substance Control and Emergency Response Plan</i> (Plan) and implement it during construction to ensure compliance with all applicable federal, State, and local laws and guidelines regarding the handling of hazardous materials. The Plan shall prescribe hazardous material handling procedures to reduce the potential for a spill during construction, or exposure of the workers or public to hazardous materials. The Plan shall also include a discussion of appropriate response actions in the event that hazardous materials are released or encountered during excavation activities. The Plan shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.</p>	PacifiCorp and its contractor(s) to implement measure as defined.	<p>PacifiCorp to submit the Plan to the CPUC for review and approval.</p> <p>CPUC mitigation monitor to inspect compliance at least once weekly.</p>	<p>Submit final plan to CPUC at least one week prior to start of construction.</p> <p>During all phases of construction.</p>
	<p><b>2.7-1c:</b> PacifiCorp shall prepare and implement a <i>Health and Safety Plan</i> to ensure the health and safety of construction workers and the public during construction. The Plan shall include information on the appropriate personal protective equipment to be used during construction. In addition, the Plan shall address emergency medical services in the case of an emergency. The Plan shall list procedures and specific emergency response and evacuation measures that would be required to be followed during emergency situations. PacifiCorp shall prepare the Plan and distribute it to all construction crew members involved in the project prior to construction and operation of the Proposed Project.</p>	PacifiCorp and its contractor(s) to implement measure as defined.	<p>PacifiCorp to submit the Plan to the CPUC for review and approval.</p> <p>CPUC mitigation monitor to inspect compliance at least once weekly.</p>	<p>Submit final plan to CPUC one week prior to start of construction.</p> <p>During all phases of construction.</p>

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

<b>Environmental Impact</b>	<b>Mitigation Measures Proposed in this MND</b>	<b>Implementing Actions</b>	<b>Monitoring/Reporting Requirements</b>	<b>Timing</b>
	<p><b>2.7-1d:</b> PacifiCorp shall establish and implement a <i>Workers Environmental Awareness Plan (WEAP)</i> to communicate environmental concerns and appropriate work practices to all construction field personnel. The training program shall emphasize site-specific physical conditions to improve hazard prevention, and shall include a review of the <i>Health and Safety Plan</i> and the <i>Hazardous Substance Control and Emergency Response Plan</i>. PacifiCorp shall submit documentation to the CPUC mitigation monitor prior to the commencement of construction activities that each worker on the Proposed Project has undergone this training program.</p>	PacifiCorp and its contractor(s) to implement measure as defined.	<p>PacifiCorp and/or its contractor(s) to submit a description of the training.</p> <p>PacifiCorp shall submit copies of sign-in sheets from the training session(s) to CPUC to verify compliance.</p>	<p>Training to be completed at least one week prior to start of construction.</p> <p>Sign-in sheets to be submitted prior to start of construction.</p>
	<p><b>2.7-1e:</b> PacifiCorp shall ensure that oil-absorbent material, tarps, and storage drums shall be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept at the project staging area and adjacent to all areas of work, and shall be clearly marked. Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the Proposed Project's <i>Hazardous Substance Control and Emergency Response Plan</i> (see Mitigation Measure 2.7-1b), which shall be implemented during construction.</p>	PacifiCorp and its contractor(s) to implement measure as defined.	CPUC mitigation monitor to inspect compliance at least once weekly.	During all phases of construction.
<p><b>2.7-2:</b> Construction activities could release previously unidentified hazardous materials into the environment.</p>	<p><b>2.7-2:</b> PacifiCorp's <i>Hazardous Substance Control and Emergency Response Plan</i> shall include provisions that would be implemented if any subsurface hazardous materials are encountered during construction. Provisions outlined in the plan shall include immediately stopping work in the contaminated area and contacting appropriate resource agencies, including the CPUC designated monitor, upon discovery of subsurface hazardous materials. The plan shall include the phone numbers of local, regional, and State agencies and primary, secondary, and final cleanup procedures. The <i>Hazardous Substance Control and Emergency Response Plan</i> shall be submitted to the CPUC for review and approval prior to the commencement of construction activities.</p>	PacifiCorp and its contractor(s) to implement measure as defined.	CPUC mitigation monitor to inspect compliance at least once weekly.	During all phases of construction.

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

<b>Environmental Impact</b>	<b>Mitigation Measures Proposed in this MND</b>	<b>Implementing Actions</b>	<b>Monitoring/Reporting Requirements</b>	<b>Timing</b>
<p><b>2.7-3:</b> Proposed Project construction activities could ignite dry vegetation and start a fire.</p> <p>Hydrology and Water Quality No impacts identified.</p> <p>Land Use, Plans, and Policies No impacts identified.</p> <p>Mineral Resources No impacts identified.</p> <p>Noise</p> <p><b>2.11-1:</b> The Proposed Project could generate adverse noise levels during project construction.</p> <p>Population and Housing No impacts identified.</p>	<p><b>2.7-3:</b> Water storage containers or water trucks shall be sited/constantly on-site in the Proposed Project area and be available for fire protection. All construction vehicles and work areas shall have fire suppression equipment and construction personnel shall be required to park vehicles away from dry vegetation. PacifiCorp shall contact and coordinate with the Smith River Fire Protection District (SRFPD) and the California Department of Forestry and Fire Protection (Cal-Fire) to determine the minimum amounts of fire equipment to be located at the construction site and appropriate locations for the water tanks. PacifiCorp shall submit verification of its consultation with SRFPD and Cal-Fire to the CPUC.</p> <p><b>2.11-1:</b> Construction activity shall be limited to the least noise-sensitive daytime hours between 7:00 a.m. and 8:00 p.m., with some exceptions (as approved by the CPUC) as required for safety considerations or certain construction procedures that cannot be interrupted.</p>	<p>PacifiCorp and its contractor(s) to implement measure as defined.</p> <p>PacifiCorp and its contractor(s) to implement measure as defined.</p>	<p>CPUC mitigation monitor to inspect compliance at least once weekly.</p> <p>CPUC mitigation monitor to monitor compliance.</p>	<p>During all phases of construction.</p> <p>During all phases of construction.</p>

**TABLE 5-1 (continued)**  
**MITIGATION MONITORING, REPORTING, AND COMPLIANCE PROGRAM FOR PACIFICORP'S MORRISON CREEK SUBSTATION PROJECT**

Environmental Impact	Mitigation Measures Proposed in this MND	Implementing Actions	Monitoring/Reporting Requirements	Timing
<b>Public Services</b>				
<b>2.13-1:</b> Proposed Project construction activities could temporarily increase the demand for fire protection services.	<b>2.13-1a:</b> Implement Mitigation Measure 2.7-1c.	PacifiCorp and its contractor(s) to implement measure as defined.	PacifiCorp to submit the Plan to the CPUC for review and approval.  CPUC mitigation monitor to inspect compliance at least once weekly.	Submit final plan to CPUC one week prior to start of construction.  During all phases of construction.
	<b>2.13-1b:</b> Implement Mitigation Measure 2.7-3.	PacifiCorp and its contractor(s) to implement measure as defined.	CPUC mitigation monitor to inspect compliance at least once weekly.	During all phases of construction.
<b>Recreation</b>				
No impacts identified.				
<b>Transportation / Traffic</b>				
No impacts identified.				
<b>Utilities and Service Systems</b>				
<b>2.16-1:</b> Proposed Project construction activities could inadvertently contact underground utility lines and/or facilities during excavation and other ground disturbance, possibly leading to short-term utility service interruptions.	<b>2.16-1:</b> PacifiCorp shall ensure that Underground Service Alert is notified at least two working days prior to initiation of construction activities that require subsurface ground disturbance so that Underground Service Alert can verify the location of all existing underground facilities and alert the other utilities to mark their facilities in the area of anticipated construction activities.	PacifiCorp and its contractor(s) to implement measure as defined.	PacifiCorp to submit written summary of discussion with Underground Service Alert to the CPUC.	Prior to and during all phases of construction.
<b>Mandatory Findings of Significance</b>				
No additional impacts identified.				

# Appendix A

## Electric and Magnetic Fields



# APPENDIX A

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## Electric and Magnetic Fields

The California Public Utilities Commission (CPUC) and the California Department of Health Services (CDHS) have not concluded that exposure to magnetic fields from utility electric facilities is a health hazard. Many reports have concluded that the potential for health effects associated with electric and magnetic field (EMF) exposure is too speculative to allow the evaluation of impacts or the preparation of mitigation measures. EMF is a term used to describe electric and magnetic fields that are created by electric voltage (electric field) and electric current (magnetic field). Power frequency EMF is a natural consequence of electrical circuits, and can be either directly measured using the appropriate measuring instruments or calculated using appropriate information. EMFs are present wherever electricity flows: around appliances and power lines, in offices, schools, and homes. Electric fields are invisible lines of force, created by voltage, and are shielded by most materials. Units of measure are volts per meter (V/m). Magnetic fields are invisible lines of force, created by electric current and are not shielded by most materials, such as lead, soil and concrete. Units of measure are Gauss (G) or milliGauss (mG, 1/1000 of a Gauss). Electric and magnetic field strengths diminish with distance. These fields are low energy, extremely low frequency fields, and should not be confused with high energy or ionizing radiation such as X-rays and gamma rays.

### Possible Health Effects

The possible effects of EMF on human health have come under scientific scrutiny. Concern about EMF originally focused on electric fields; however, much of the recent research has focused on magnetic fields. Uncertainty exists as to what characteristics of magnetic field exposure need to be considered to assess human exposure effects. Among the characteristics considered are field intensity, transients, harmonics, and changes in intensity over time. These characteristics may vary from power lines to appliances to home wiring, and this may create different types of exposures. The exposure most often considered is intensity or magnitude of the field.

There is a consensus among the medical and scientific communities that there is insufficient evidence to conclude that EMF causes adverse health effects. Neither the medical nor scientific communities have been able to provide any foundation upon which regulatory bodies could establish a standard or level of exposure that is known to be either safe or harmful. Laboratory experiments have shown that magnetic fields can cause biologic changes in living cells, but scientists are not sure whether any risk to human health can be associated with them. Some studies have suggested an association between surrogate measures of magnetic fields and certain cancers while others have not.

# California Public Utilities Commission Summary

## Background

On January 15, 1991, the CPUC initiated an investigation to consider its role in mitigating the health effects, if any, of electric and magnetic fields from utility facilities and power lines. A working group of interested parties, called the California EMF Consensus Group, was created by the CPUC to advise it on this issue. It consisted of 17 stakeholders representing citizens groups, consumer groups, environmental groups, State agencies, unions, and utilities. The Consensus Group was charged to 1) consider a balanced set of facts and concerns; 2) define near-term research objectives; and 3) develop interim policies and procedures to guide the electric utilities in educating their customers, reducing EMF, and responding to potential health concerns. The Consensus Group's fact-finding process was open to the public, and its report incorporated concerns expressed by the public. Its recommendations were filed with the Commission in March of 1992. In August of 2004, the CPUC opened an Order Instituting Rulemaking to update the Commission's policies and procedures related to electric and magnetic fields emanating from regulated utility facilities. The final decision was issued in D.06-01-042.

## Findings

Based on the work of the Consensus Group, written testimony, and evidentiary hearings, the CPUC issued its decision (D.06-01-042) to address public concern about possible EMF health effects from electric utility facilities. The conclusions and findings included the following:

- The body of scientific evidence continues to evolve. However, it is recognized that public concern and scientific uncertainty remain regarding the potential health effects of EMF exposure.
- It is not appropriate to adopt any specific numerical standard in association with EMF until we have a firm scientific basis for adopting any particular value.

## Interim Policies

The CPUC's decision specifically requires seven measures. One of these measures that is applicable to the Proposed Project is as follows:

- No-cost and low-cost steps to reduce EMF. In response to a situation of scientific uncertainty and public concern, the CPUC felt it appropriate for utilities to take no-cost and low-cost measures where feasible to reduce exposure from new or upgraded utility facilities. It directs that no-cost mitigation measures be undertaken, and that low-cost options be implemented through the project certification process. Four percent of total project budgeted cost is the benchmark in developing EMF mitigation guidelines, and mitigation measures should achieve some noticeable reductions.

The CPUC will continue to monitor these issues. If new information develops in the future, the CPUC may amend its decision to reflect new scientific evidence.

## Exemption Criteria

The CPUC agreed that "Utility management should have reasonable latitude to deviate and modify their guidelines as conditions warrant and as new EMF information is received. However,

if the EMF guidelines are to be truly used as guidelines, the utilities should incorporate criteria which justify exempting specific types of projects from the guidelines."

PacifiCorp will use the following guidelines to determine those specific types of projects that will be exempt from no/low cost field reduction:

- Operation, repair, maintenance replacement or minor alteration of existing structures: facilities or equipment.
- Restoration or rehabilitation of deteriorated or damaged structures, facilities or equipment to meet current standards of public safety.
- Addition of safety devices.
- Replacement or reconstruction of existing structures and facilities on the same site and for the same purpose as the replaced structure or facility.
- Emergency restoration projects.
- Re-conductoring projects except when structures are reframed or reconfigured.
- Projects located on land under the jurisdiction of the Forest Service, Bureau of Land Management or other governmental agency.
- Privately owned tree farms.
- Agricultural land within the Williamson Act.
- Areas not suited to residential/commercial development. Such areas might include steep slopes, areas subject to flooding or areas without access to public facilities.

The intent of the exemption criteria is to exclude two types of projects. The first type of projects are those that either replace or make minor additions or modifications to existing facilities. This will include pole replacements or relocations less than 2,000 feet in length. Those projects where more than 2,000 feet of line is relocated or reconstructed or where the circuit is reinsulated or reconfigured should be considered for low cost magnetic field management techniques.

The second type projects are those located in undeveloped areas.

## **EMF Reduction**

PacifiCorp will use the following Guidelines in the application of no and low cost steps to reduce magnetic field strengths:

- PacifiCorp will take low cost steps to reduce fields from new and upgraded facilities in accordance with CPUC decision D.06-01-042 on EMF.
- No cost measures will be implemented when available and practical.
- Mitigation measures should not compromise the reliability, operation, safety or maintenance of the system.
- Total cost of mitigation measures should not exceed four percent of the total cost of the Proposed Project.
- Mitigation measures should have a noticeable reduction in the magnetic field level approximately 15 percent or more.

PacifiCorp's no-cost/low-cost mitigation option is to extend the proposed fence line on the southwest side of the substation to the edge of the proposed property line, which would restrict public access from the area where the 69 kV circuit would drop into the substation.

# Appendix B

## Construction Emission Estimates





# **APPENDIX B**

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## **Construction Emission Estimates**



Urbemis 2007 Version 9.2.2

Detail Report for Annual Construction Unmitigated Emissions (Tons/Year)

File Name: C:\MATT\Morrison Creek Substation\Morrison.urb9

Project Name: Morrison Creek Substation Project

Project Location: Mendocino County APCD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Annual Tons Per Year, Unmitigated)

<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10 Total</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5 Total</u>	<u>CO2</u>
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2008	0.04	0.39	0.30	0.00	0.08	0.02	0.10	0.02	0.01	0.03	45.38
Fine Grading 07/14/2008-07/18/2008	0.01	0.09	0.06	0.00	0.03	0.00	0.03	0.01	0.00	0.01	7.79
Fine Grading Dust	0.00	0.00	0.00	0.00	0.03	0.00	0.03	0.01	0.00	0.01	0.00
Fine Grading Off Road Diesel	0.01	0.09	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.53
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25
Fine Grading 07/21/2008-08/01/2008	0.01	0.12	0.05	0.00	0.04	0.00	0.05	0.01	0.00	0.01	13.57
Fine Grading Dust	0.00	0.00	0.00	0.00	0.04	0.00	0.04	0.01	0.00	0.01	0.00
Fine Grading Off Road Diesel	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.17
Fine Grading On Road Diesel	0.01	0.09	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.27
Fine Grading Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13
Building 08/04/2008-08/07/2008	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.97
Building Off Road Diesel	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.28
Building Vendor Trips	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.04
Building Worker Trips	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.65
Building 08/04/2008-09/05/2008	0.01	0.10	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.44
Building Off Road Diesel	0.00	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.87
Building Vendor Trips	0.00	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.51
Building Worker Trips	0.00	0.01	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.06
Demolition 09/15/2008-09/19/2008	0.00	0.04	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.00	3.61
Fugitive Dust	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Demo Off Road Diesel	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.85
Demo On Road Diesel	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.63
Demo Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.13

Phase Assumptions

Phase: Demolition 9/15/2008 - 9/19/2008 - Construction Demolition

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Building Volume Total (cubic feet): 12500

Building Volume Daily (cubic feet): 12500

On Road Truck Travel (VMT): 162.04

Off-Road Equipment:

1 Cranes (450 hp) operating at a 0.43 load factor for 4 hours per day

1 Graders (174 hp) operating at a 0.61 load factor for 4 hours per day

Phase: Fine Grading 7/14/2008 - 7/18/2008 - Site Preparation

Total Acres Disturbed: 1.75

Maximum Daily Acreage Disturbed: 0.5

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 0

Off-Road Equipment:

1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day

1 Off Highway Trucks (395 hp) operating at a 0.57 load factor for 3 hours per day

1 Rubber Tired Dozers (498 hp) operating at a 0.59 load factor for 8 hours per day

1 Tractors/Loaders/Backhoes (101 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Fine Grading 7/21/2008 - 8/1/2008 - Soil and Rock Import

Total Acres Disturbed: 1.75

Maximum Daily Acreage Disturbed: 0.44

Fugitive Dust Level of Detail: Default

20 lbs per acre-day

On Road Truck Travel (VMT): 560

Off-Road Equipment:

1 Rubber Tired Dozers (498 hp) operating at a 0.59 load factor for 2 hours per day

Phase: Building Construction 8/4/2008 - 8/7/2008 - Substation Construction

Off-Road Equipment:

1 Cranes (450 hp) operating at a 0.43 load factor for 4 hours per day

1 Off Highway Trucks (210 hp) operating at a 0.57 load factor for 6 hours per day

1 Rollers (133 hp) operating at a 0.56 load factor for 4 hours per day

Phase: Building Construction 8/4/2008 - 9/5/2008 - Trucks

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Off-Road Equipment:

1 Other Equipment (325 hp) operating at a 0.62 load factor for 3 hours per day

# Appendix C

## Biological Resources – Special Status Species





# APPENDIX C

## Biological Resources – Special Status Species

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The following table describes special-status species in the project area considered in the evaluation of the Proposed Project to remove the Simonson Substation and construct the Morrison Creek Substation in Smith River, California. Table C-1 lists 26 special-status plant species and 38 special-status wildlife species reported to occur in the project area based on: California Natural Diversity Database (CDFG, 2007b), California Native Plant Society Electronic Inventory (CNPS, 2007), special-status species information from the U.S. Fish and Wildlife Service (USFWS, 2007), and biological literature of the region.

**TABLE C-1  
SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE**

<b>Common Name Scientific Name</b>	<b>Listing Status USFWS/ CDFG/CNPS<sup>1</sup></b>	<b>General Habitat</b>	<b>Potential for Species Occurrence Within the Project Area</b>	<b>Period of Identification</b>
<b>Species Listed</b>				
<b>Animals</b>				
<i>Invertebrates</i>				
Oregon silverspot butterfly <i>Speyeria zerene hippolyta</i>	FT/--	Coastal meadows in Del Norte County. The larvae feed only on the foliage of the western dog violet ( <i>Viola adunca</i> ). Host plant most common in northern coastal dune scrub and northern coastal bluff scrub.	<b>Low.</b> Host plant not present within the project area.	Spring
<i>Fish</i>				
Southern Oregon/Northern California coast coho salmon <i>Oncorhynchus kisutch</i>	FT/CT	Spawns and rears in coastal streams containing gravelly substrate, cool water, adequate flow, instream cover, and riparian shading.	<b>Low.</b> Present in Rowdy Creek, but stream is ¼ mile from the project area.	Year-round
<i>Birds</i>				
Marbled murrelet <i>Brachyramphus marmoratus</i>	FT/CE	Near coastal waters, tide-rips, bays, and mountains. Nesting sites are in higher elevations, exclusively in old growth forests.	<b>Low.</b> No large trees are present with the project area.	Year-round
Bald eagle <i>Haliaeetus leucocephalus</i>	--/CE	Can live in a variety of habitats with adequate nest trees, roosts and feeding grounds. Open water such as a lake or an ocean, however, is a necessity.	<b>Low.</b> No large trees are present with the project area. Rowdy Creek may be used for foraging. One historic nest ¼ mile east of the project site, not active since the mid-1970's. In 2007 a pair nested near the mouth of the Smith River, approximately 3 miles away.	Winter
Bank swallow <i>Riparia riparia</i>	--/CT	Colonial nester on vertical banks or cliffs with fine-textured soils near water.	<b>Low.</b> May nest within the banks of Rowdy Creek, but not likely to nest within the project area. CNDDDB record for a nesting location on Smith River, approximately 3 miles from the project site.	Spring

<sup>1</sup> Key to listing status codes can be found at the end of the Table.

**TABLE C-1  
SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE (CONT.)**

<b>Common Name Scientific Name</b>	<b>Listing Status USFWS/ CDFG/CNPS<sup>1</sup></b>	<b>General Habitat</b>	<b>Potential for Species Occurrence Within the Project Area</b>	<b>Period of Identification</b>
Northern spotted owl <i>Strix occidentalis caurina</i>	FT/--	Resides in dense, multi-layered mixed conifer, redwood and Douglas fir habitats.	<b>Low.</b> Potential nesting habitat available in adjacent mixed hardwood forest, but no large trees are present within the project area. CNDDDB has 1 record for a nest ¼ mile north of the property. It has not been active for the last 2 years.	Year-round
<b>Plants</b>				
McDonald's rock cress <i>Arabis macdonaldiana</i>	FE/CE/1B.1	Lower montane coniferous forest, upper montane coniferous forest. Rocky outcrops, ridges, slopes, and flats on serpentine.	<b>Low.</b> Suitable habitat potentially available in mixed hardwood forest adjacent to project site, but no suitable habitat available within project site.	May–July
Western lily <i>Lilium occidentale</i>	FE/CE/1B.1	Grows in a variety of habitats including coastal scrub, freshwater marsh, bogs and fens, coastal bluff scrub, coastal prairie, and northern coast coniferous forest.	<b>Low.</b> No suitable habitat available.	June–July
<b>Other Special Status Species</b>				
<b>Animals</b>				
<b>Insects</b>				
Mardon skipper <i>Polites mardon</i>	C/--	Found in open grassland, specifically prairie and meadows dominated by native bunchgrasses. Invasion by non-native plants is a very large threat.	<b>Low.</b> No suitable habitat available, grassland present within site is dominated by non-native grass and herb species.	May–August
<b>Amphibians</b>				
Tailed frog <i>Ascaphus trueii</i>	--/CSC	Inhabits cold, clear, rocky streams or seeps in wet forests.	<b>Low.</b> May be present in Rowdy Creek, but no suitable habitat within project area. Stays near streams, except occasionally in wetter conditions when they may disperse away from streams.	Year-round
Del Norte salamander <i>Plethodon elongates</i>	--/CSC	Found in moist talus in humid shaded and closed-canopy coastal forests of mixed hardwoods and conifers. Also found in rock rubble of old riverbeds, and under bark and logs on forest floor, usually in rocky areas.	<b>Low.</b> May be present in adjacent habitat, but no suitable habitat present within the project site.	Year-round

**TABLE C-1  
SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE (CONT.)**

Common Name <i>Scientific Name</i>	Listing Status USFWS/ CDFG/CNPS <sup>1</sup>	General Habitat	Potential for Species Occurrence Within the Project Area	Period of Identification
Northern red-legged frog <i>Rana aurora aurora</i>	---/CSC	Found in humid forests, woodlands, grasslands, and streamsides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Breeding habitat is in permanent water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps.	<b>Moderate.</b> Potential breeding habitat present in Rowdy Creek. May disperse into adjacent habitats, including grassland.	Year-round
Foothill yellow-legged frog <i>Rana boylei</i>	---/CSC	Frequents shallow, slow, gravelly streams and rivers with sunny banks, in forests, chaparral, and woodlands.	<b>Low.</b> Potential breeding habitat present in Rowdy Creek. Typically stay close to stream during spring, summer and fall, and hibernate during the winter. Project's adjacency to Rowdy Creek provides some potential for occurrence, but typically more aquatic than northern red-legged frog.	Year-round
Southern torrent salamander <i>Rhyacotriton variegates</i>	---/CSC	Found in cold, clear well-shaded streams, waterfalls and seepages, particularly those running through talus and under rocks all year.	<b>Low.</b> May be present in Rowdy Creek, but no suitable habitat within project area.	Year-round
<i>Fish</i>				
Summer-run steelhead trout <i>Oncorhynchus mykiss irrideus</i>	FC/CSC	Spawns and rears in coastal streams containing gravelly substrate, cool water, adequate flow, instream cover, and riparian shading.	<b>Low.</b> Present in Rowdy Creek, but stream is ¼ mile from the project area.	Year-round
Chinook salmon <i>Oncorhynchus tshawytscha</i>	FC/CSC	Spawns and rears in coastal streams containing gravelly substrate, cool water, adequate flow, instream cover, and riparian shading.	<b>Low.</b> Present in Rowdy Creek, but stream is ¼ mile from the project area.	Year-round
<i>Birds</i>				
Cooper's hawk <i>Accipiter cooperii</i>	--/CSC	Nests conifers or deciduous stands near riparian areas.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable breeding habitat within project site.	March– August
Northern goshawk <i>Accipter gentilis</i>	---/CSC	Inhabits deep, conifer –dominated, mixed woodlands.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable breeding habitat within project site.	Year-round

**TABLE C-1  
SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE (CONT.)**

<b>Common Name Scientific Name</b>	<b>Listing Status USFWS/ CDFG/CNPS<sup>1</sup></b>	<b>General Habitat</b>	<b>Potential for Species Occurrence Within the Project Area</b>	<b>Period of Identification</b>
Sharp-shinned hawk <i>Accipiter striatus</i>	--/CSC	Nests in forest canopy.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable breeding habitat within project site.	April–August
Golden eagle <i>Aquila Chrysaetos</i>	--/CSC	Nests in large trees, snags, and cliffs, winters on lakes and reservoirs.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable breeding habitat within project site. Observed circling project site.	Year–round
Long-eared owl <i>Asio Otus</i>	--/CSC	Riparian habitats dominated by dense willows, cottonwoods, or live oaks; forages in open areas.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable breeding habitat within project site.	Year–round
Short-Eared Owl <i>Asio Flammeus</i>	--/CSC	Nests on ground in tall emergent vegetation or grasses, forages over a variety of open habitats.	<b>Low.</b> Foraging habitat present within project area, but no suitable breeding habitat.	Year–round
Ruffed Grouse <i>Bonasa Umbellus</i>	---/CSC	Found in deciduous and mixed woodlands..	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable breeding habitat within project site.	Year–round
Ferruginous Hawk <i>Buteo Regalis</i>	--/CSC	Occur in semiarid grasslands, rocky outcrops and shallow canyons. Nests on rocky outcrops, hillsides, rock pinnacles, or in trees.	<b>Low.</b> Suitable foraging habitat present within project site, but species only winters in California.	Winter
Vaux's swift <i>Chaetura vauxi</i>	---/CSC	Fairly common in woodlands near water.	<b>Low.</b> No suitable breeding habitat within project site. May breed in areas adjacent to project site.	March–August
Northern harrier <i>Circus cyaneus</i>	--/CSC	Mostly nests in emergent vegetation, wet meadows or near rivers and lakes, but may nest in grasslands away from water.	<b>Moderate.</b> Suitable nesting habitat (grasslands) is present within project site, additional suitable nesting habitat (riparian) is present within areas adjacent to project site.	Year–round
Yellow warbler <i>Dendroica petechia</i>	---/CSC	Favors wet habitats, especially willows and alders; open woodlands, gardens, and orchards.	<b>Low.</b> May nest in riparian habitat adjacent to project site, but not likely to nest within project site.	March–August
White-tailed kite <i>elanus leucurus</i>	FSC/-- 3503.5	Nests in trees adjacent to grasslands, forages over grasslands and agricultural lands.	<b>Low.</b> Foraging habitat present within project site, but no nesting habitat present. Nesting habitat present in areas adjacent to project area.	Year–round

**TABLE C-1  
SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE (CONT.)**

Common Name Scientific Name	Listing Status USFWS/ CDFG/CNPS <sup>1</sup>	General Habitat	Potential for Species Occurrence Within the Project Area	Period of Identification
Yellow-breasted chat <i>Icteria virens</i>	---/CSC	Dense second-growth, riparian thickets, and brush.	<b>Low.</b> A very limited amount of brush occurs within the project site, but is likely too small to support the species. Suitable breeding habitat occurs adjacent to the site.	March–August
Loggerhead shrike <i>Lanius ludovicianus</i>	FSC/CSC	Prefers open habitats with scattered shrubs, trees, posts, fences, utility lines, or other perches. Nests in dense brush or trees.	<b>High.</b> Suitable foraging habitat present within project site. Scattered trees and dense brush around the Simonson substation and at the edge of the proposed Morrison Creek substation provide nesting habitat.	Year–round
Purple martin <i>Progne subis</i>	---/CSC	Breeds near human settlements where nest houses are provided, especially near water and large open areas.	<b>Low.</b> No nest boxes provided within project site.	February–August
<i>Mammals</i>				
Pallid bat <i>Antrozous pallidus</i>	--/CSC	Day roosts are mainly in caves, crevices and mines; also found in buildings and under bark. Forages in open lowland areas.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable nursery or roosting sites within project site.	February–August
California red tree vole <i>Arborimus pomo</i>	---/CSC	Largely restricted to the fog belt. Occurs in old-growth and other forests, mainly Douglas-fir, redwood, and montane hardwood-conifer habitats.	<b>Low.</b> Suitable habitat available in adjacent areas but not within the project area.	Year–round
Humboldt marten <i>Martes Americana humboldtensis</i>	---/CSC	Optimal habitats are various mixed evergreen forests with more than 40% crown closure, with large trees and snags. Important habitats include red fir, lodgepole pine, subalpine conifer, mixed conifer, Jeffrey pine, and eastside pine.	<b>Low.</b> No suitable habitat available within the project site.	Year–round
Pacific fisher <i>Martes pennanti pacifica</i>	---/CSC	Found in large areas of mature, dense forest stands (coniferous and deciduous-riparian) with snags and greater than 50% canopy closure.	<b>Low.</b> No suitable habitat available within the project site.	Year–round
(Western) long-eared myotis <i>Myotis evotis</i>	--/CSC	Coniferous forests of high mountains; sometimes in buildings, sometimes roosting in tree bark; night roosts in caves.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable nursery or roosting sites within project site.	February–August
Long-legged myotis <i>Myotis volaris</i>	--/CSC	Roosts in trees, crevices, and buildings, especially in forested areas.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable nursery or roosting sites within project site.	February–August

**TABLE C-1  
SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE (CONT.)**

<b>Common Name Scientific Name</b>	<b>Listing Status USFWS/ CDFG/CNPS<sup>1</sup></b>	<b>General Habitat</b>	<b>Potential for Species Occurrence Within the Project Area</b>	<b>Period of Identification</b>
Yuma myotis <i>Myotis yumanesis</i>	--/CSC	Can occur in many different habitats. Requires a source of open water. Roosts most commonly in abandoned buildings.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable nursery or roosting sites within project site.	February–August
Dusky-footed woodrat <i>Neotoma fuscipes</i>	FSC/CSC	Woodland, build houses from plant materials and man-made debris.	<b>Low.</b> Habitat available adjacent to site, but no woodland present within project site.	Year–round
Townsend's big-eared bat <i>Plecotus townsendii</i>	FSC/CSC	Roosts in caves, mines, buildings or other human-made structures for roosting. Forages in open lowland areas.	<b>Low.</b> May breed in areas adjacent to project site and forage within project site. No suitable nursery or roosting sites within project site.	February–August
<b>Plants</b>				
Small groundcone <i>Boschniakia hookeri</i>	--/--/2.3	North coast coniferous forests.	<b>Low.</b> No suitable habitat present.	April–August
Yellow-tubered toothwort <i>Cardamine nuttallii</i> var. <i>gemmata</i>	--/--/1B.3	Lower montane coniferous forest, serpentinite north coast coniferous forest.	<b>Low.</b> No suitable habitat present. Possible occurrence in hardwood/conifer forest adjacent to project site.	April–May
Serpentine sedge <i>Carex serpenticola</i>	--/--/2.3	Meadows and seeps.	<b>Low.</b> No suitable habitat present.	March–May
Green sedge <i>Carex viridula</i> var. <i>viridula</i>	--/--/2.3	Bogs and fens, marshes and swamps and north coast coniferous forest.	<b>Low.</b> No suitable habitat present.	September–August
Siskiyou Indian paintbrush <i>Castilleja miniata</i> ssp. <i>elata</i>	--/--/2.2	Bogs and fens as well as lower montane coniferous forest (seeps that are often serpentinite).	<b>Low.</b> No suitable habitat present. Possible occurrence in hardwood/conifer forest adjacent to project site.	May–August
Waldo buckwheat <i>Eriogonum pendulum</i>	--/--/2.2	Lower and upper montane coniferous forest.	<b>Low.</b> No suitable habitat present. Possible occurrence in hardwood/conifer forest adjacent to project site.	August – September
Howell's fawn lily <i>Erythronium howellii</i>	--/--/1B.3	Lower montane coniferous forest and north coast coniferous forest.	<b>Low.</b> No suitable habitat present.	April–May
Mendocino gentian <i>Gentiana setigera</i>	--/--/1B.2	Lower montane coniferous forest, meadows and seeps.	<b>Low.</b> No suitable habitat present. Possible occurrence in hardwood/conifer forest adjacent to project site.	August–September

**TABLE C-1**  
**SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE (CONT.)**

Common Name Scientific Name	Listing Status USFWS/ CDFG/CNPS <sup>1</sup>	General Habitat	Potential for Species Occurrence Within the Project Area	Period of Identification
Pacific gilia <i>Gilia capitata</i> ssp. <i>pacifica</i>	--/--/1B.2	Coastal bluff scrub, chaparral, coastal prairie, and valley and foothill grassland.	<b>Moderate.</b> Grassland habitat available, providing potential habitat. The relatively small size of the grassland patch prevents a high potential from occurring.	April–August
Marsh pea <i>Lathyrus palustris</i>	--/--/2.2	Bogs and fens, coastal prairie, coastal scrub, lower montane coniferous forest, marshes and swamps and north coast coniferous forest.	<b>Low.</b> No suitable habitat present.	March–August
Opposite-leaved lewisia <i>Lewisia oppositifolia</i>	--/--/2.2	Lower montane coniferous forest.	<b>Low.</b> No suitable habitat present. Possible occurrence in hardwood/conifer forest adjacent to project site.	April–May
Howell's sandwort <i>Minuartia howellii</i>	--/--/1B.3	Chaparral and lower montane coniferous forest.	<b>Low.</b> No suitable habitat present.	April–July
Indian-pipe <i>Monotropa uniflora</i>	--/--/2.2	Broadleaved upland forest and north coast coniferous forest.	<b>Low.</b> No suitable habitat present.	June–August
Wolf's evening-primrose <i>Oenothera wolfii</i>	--/--/1B.1	Coastal bluff scrub, coastal dunes, coastal prairie and usually mesic lower montane coniferous forest.	<b>Low.</b> No suitable habitat present.	May–October
Del Norte pyrrocoma <i>Pyrrocoma racemosa</i> var. <i>congesta</i>	--/--/2.3	chaparral, serpentinite lower montane coniferous forest.	<b>Low.</b> No suitable habitat present.	August–September
Great burnet <i>Sanguisorba officinalis</i>	--/--/2.2	Found in a variety of moist habitats including bogs and fens; broadleaved upland forest; meadows and seeps; marshes and swamps; north coast coniferous forest; and riparian forest.	<b>Low.</b> No suitable habitat present. Possible occurrence in hardwood/conifer forest or riparian forest adjacent to project site.	July–October
Siskiyou checkerbloom <i>Sidalcea malviflora</i> ssp. <i>patula</i>	--/--/1B.2	Coastal bluff scrub, coastal prairie and often on road cuts in north coast coniferous forest.	<b>Low.</b> No suitable habitat present.	May–October
Coast checkerbloom <i>Sidalcea oregano</i> ssp. <i>eximia</i>	--/--/1B.2	Lower montane coniferous forest, meadows and seeps, and north coast coniferous forest.	<b>Low.</b> No suitable habitat present.	June–August

**TABLE C-1**  
**SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE (CONT.)**

Common Name Scientific Name	Listing Status USFWS/ CDFG/CNPS <sup>1</sup>	General Habitat	Potential for Species Occurrence Within the Project Area	Period of Identification
Serpentine catchfly <i>Silene serpentinicola</i>	--/--/1B.2	Gravelly or rocky serpentinite openings within chaparral or lower montane coniferous forest.	<b>Low.</b> No suitable habitat present.	May–July
Howell's jewel-flower <i>Streptanthus howellii</i>	--/--/1B.2	Lower montane coniferous forest, usually serpentinite and rocky.	<b>Low.</b> No suitable habitat present.	July–August
Arctic starflower <i>Trientalis arctica</i>	--/--/2.2	Bogs, fens, coastal meadows and coastal seeps.	<b>Low.</b> No suitable habitat present.	June–July
Little-leaved huckleberry <i>Vaccinium scoparium</i>	--/--/2.2	Rocky subalpine coniferous forest.	<b>Low.</b> No suitable habitat present.	June–August
Marsh violet <i>Viola palustris</i>	--/--/2.2	Coastal bogs and fens and mesic coastal scrub.	<b>Low.</b> No suitable habitat present.	March–August
Western bog violet <i>Viola primulifolia</i> ssp. <i>occidentalis</i>	--/--/1B.2	Bogs, fens, marshes and swamps.	<b>Low.</b> No suitable habitat present.	April–September

**TABLE C-1  
SPECIAL STATUS SPECIES CONSIDERED IN THE EVALUATION OF THE PROJECT SITE (CONT.)**

**STATUS CODES:**

FEDERAL: (U.S. Fish and Wildlife Service)

FE = Listed as Endangered (in danger of extinction) by the Federal Government.

FT = Listed as Threatened (likely to become Endangered within the foreseeable future) by the Federal Government.

FP = Proposed for Listing as Endangered or Threatened.

FC = Candidate to become a *proposed* species.

FSC = Federal Species of Concern. May be Endangered or Threatened, but not enough biological information has been gathered to support listing at this time.

STATE: (California Department of Fish and Game)

CE = Listed as Endangered by the State of California

CT = Listed as Threatened by the State of California

CR = Listed as Rare by the State of California (plants only)

CSC = California Species of Special Concern

\* = Special Animals

3503.5=Protection for nesting species of Falconiformes (hawks) and Strigiformes (owls)

California Native Plant Society

List 1A=Plants presumed extinct in California

List 1B=Plants rare, Threatened, or Endangered in California and elsewhere

List 2= Plants rare, Threatened, or Endangered in California but more common elsewhere

List 3= Plants about which more information is needed

List 4= Plants of limited distribution

An extension reflecting the level of threat to each species is appended to each rarity category as follows:

.1 – Seriously endangered in California

.2 – Fairly endangered in California

.3 – Not very endangered in California

SOURCES: CDFG, 2007a; CDFG, 2007b; CNPS, 2007; USFWS, 2007; University of Michigan School of Zoology, 2006; Galea, 2007; and CaliforniaHerps.com, 2007.

# Appendix D

## Certificate of Service and Distribution List





# **APPENDIX D**

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## **Certificate of Service and Distribution List**

**CERTIFICATE OF SERVICE**

I, Rachel Baudler, certify that I have on this date caused the following:

Notice of Publication of the Initial Study/Mitigated Negative Declaration, regarding PacifiCorp's Application (No. A.07-07-018) to the California Public Utilities Commission to construct the proposed Morrison Creek Substation and remove the existing Simonson Substation near the community of Smith River pursuant to General Order (GO) 131-D, to be served by United States Postal Service mail to the owners of property adjacent to the Proposed Project.

I declare under penalty of perjury pursuant to the laws of the State of California that the foregoing is true and correct.

Executed on November 19, 2007 in San Francisco, California.

  
Rachel Baudler

AGENCY	ADDRESS	CITY	ST	ZIP	CONTACT NAME/TITLE
<b>CLIENT/APPLICANT</b>					
California Public Utilities Commission, Energy Division, ARE 4-A	505 Van Ness Ave	San Francisco	CA	94102	Michael Rosauer
PacifiCorp	825 NE Multnomah St., Suite 2000	Portland	OR	97232	Cathie Allen
PacifiCorp	825 NE Multnomah St., Suite 1800	Portland	OR	97232	Ryan Flynn
PacifiCorp	825 NE Multnomah, Suite 1700	Portland	OR	97232	John Aniello, Project Manager
Goodin, MacBride, Squeri, Day, & Lamprey, L	505 Sansome St., Suite 900	San Francisco	CA	94111	Jeanne B. Armstrong
Goodin, MacBride, Squeri, Day, & Lamprey, L	505 Sansome St., Suite 900	San Francisco	CA	94111	Joseph F. Wiedman
<b>LOCAL AGENCIES</b>					
County of Del Norte, Planning Division	981 H Street, Suite 110	Crescent City	CA	95531	Heidi Kunstall
County of Del Norte, Engineering Division	981 H Street, Suite 110	Crescent City	CA	95531	Art Reeve
County of Del Norte, Roads Division	500 East Cooper	Crescent City	CA	95531	Joe Hoke
County of Del Norte, Office of Emergency Services	981 H Street, Suite 240	Crescent City	CA	95531	Jeannine Galatioto, Emergency Services Director Glenn E. Anderson, Agriculture Commissioner
County of Del Norte, Agriculture Department	2650 W. Washington Blvd.	Crescent City	CA	95531	Ed Fulton, Superintendent
County of Del Norte, Park Department	840 9th Street, Suite 11	Crescent City	CA	95531	Dean Wilson, Sheriff
County of Del Norte, Sheriff Department	650 Fifth Street	Crescent City	CA	95531	
Del Norte Fire Safe Council c/o CDF	1025 Highway 101 North	Crescent City	CA	95531	
The North Coast Unified Air Quality Management District	2300 Myrtle Ave	Eureka	CA	95501	Jason L. Davis, Division Manager
Del Norte County LAFCo	508 H St., Suite 2	Crescent City	CA	95531	Darren McElfresh, EO
County of Del Norte Board of Supervisors	981 H Street	Crescent City	CA	95531	
Smith River Rancheria	140 Rowdy Creek Road	Smith River	CA	95567	Suntayea Steinruck, NAGPRA/THPO Officer
North Coastal Information Center, Yurok Tribe Culture Department	15900 Highway 101 North	Klamath	CA	95591	Dr. Thomas Gates
Smith River Community Service District	241 First Street	Smith River	CA	95567	
<b>STATE AGENCIES</b>					
California Dept. of Transportation (Caltrans) District 1	P.O. Box 3700	Eureka	CA	95502	John Carson, Permit Department
California / Occupational Safety and Health Administration (DOSH)	2424 Arden Way	Sacramento	CA	95825	
California Department of Health Services	1501 Capital Ave, Suite 6001	Sacramento	CA	95814	Sandra Shewry, Director
California Department of Toxic Substances Control	1001 I Street	Sacramento	CA	95814	Jim Marxen, Deputy Director, External Affairs
California Department of Fish and Game	619 Second Street	Eureka	CA	95501	Gordon Leppig
California Department of Forestry and Fire Protection (Cal-Fire), Humboldt-Del Norte Unit	118 Fortuna Boulevard	Fortuna	CA	95540	Ralph Minnich, Unit Chief
California Energy Commission	Media and Public Communications Office, 1516 Ninth Street, MS-29	Sacramento	CA	95814	B.B. Blevins, Executive Director
North Coast Regional Water Quality Control Board	5550 Skylane Boulevard, Suite A	Santa Rosa	CA	95403	John Short
California Resources Agency	1416 9th Street, Ste 1311	Sacramento	CA	95814	Mike Chrisman, Secretary Milford Wayne Donaldson, State Historic Preservation Officer
Office of Historic Preservation	1416 9th Street, Room 1442-7	Sacramento	CA	95814	
California Native American Heritage Commission	915 Capitol Mall, Room 364	Sacramento	CA	95814	Larry Myers
Redwood State Park	1111 Second Street	Crescent City	CA	95531	John Kolb, Superintendent Catherine Witherspoon, Executive Officer
California Air Resources Board	1001 I Street	Sacramento	CA	95812	
<b>FEDERAL AGENCIES</b>					
U.S. Army Corps of Engineers, San Francisco District - Civil Works Office	1455 Market Street	San Francisco	CA	94103	Jane M. Hicks, Chief, Regulatory Branch
U.S. Department of Agriculture - California	5630 South Broadway	Eureka	CA	95503	Deborah Coggins Sally Seymour, Director, Planning and Public Affairs
U.S. Environmental Protection Agency	75 Hawthorne Street	San Francisco	CA	94105	
U.S. Environmental Protection Agency	75 Hawthorne Street, Mail Code WTR-8	San Francisco	CA	94105	Michael Monroe
U.S. Fish and Wildlife Service - Arcata Office	1655 Heindon Road	Arcata	CA	95521	Amedee Brickly
Redwood National Park	1111 Second Street	Crescent City	CA	95531	Andrew Ringold, Supervisor Lou Woltering, Forest Supervisor
Six River National Forest, Supervisor's Office	1330 Bayshore Way	Eureka	CA	95501	William C. Withycombe, Regional Administrator
Federal Aviation Administration, Western-Pacific Region	P.O. Box 92007	Los Angeles	CA	90009	
<b>APPEARANCES</b>					
<b>Library/Miscellaneous</b>					
Del Norte County Library, Smith River Branch	241 First Street	Smith River	CA	95567	Bob Lynch
Del Norte County Library, Crescent City Branch	190 Price Mall Circle	Crescent City	CA	95531	
State Clearinghouse, Office of Planning & Research	1400 Tenth Street	Sacramento	CA	95814	
Del Norte County Clerk/Recorder	981 H Street, Suite 160	Crescent City	CA	95531	

<b>APN#</b>	<b>Landowner</b>	<b>Mailing Address</b>	<b>City</b>	<b>State</b>	<b>Zip Code</b>
103-08-508	PacifiCorp				
103-08-057, 103-05-056, 103-05-009	Arcata Redwood Company	P.O. Box 68	Korbal	CA	95560
103-08-044	Richard D. Lelo	P.O. Box 510	Smith River	CA	95567
103-08-014	Stephen M & Galene D. Tomay	P.O. Box 559	Smith River	CA	95567
103-08-048	TMT Research Development Inc.	105 Timbers Blvd	Smith River	CA	95567
103-08-046	David R. Snazuk	P.O. Box 1096	Gold Beach	CA	97444