

CHAPTER 2 PROJECT DESCRIPTION

2.1 INTRODUCTION

Pacific Power, a private commercial company, operates electric power Line 87 to deliver power to communities in Del Norte County. Line 87 was relocated to its present location in 1993. Power lines in this northwest part of the United States require vegetation management to prevent trees from growing up and damaging the power line. Line 87 has 8.15 miles of line within Del Norte Coast Redwoods State Park. The proposed Vegetation Management Program and the activity of conducting vegetation management on the line in the Park is being addressed in this MND under CEQA. The State Park has valuable natural resources which must be protected during the vegetation management activity. These resources are addressed and Mitigation Measures are developed in this document to reduce any potential impacts to less than significant and protect State Park resources.

2.2 PROJECT LOCATION

This IS/MND covers the section of Line 87 that is located within Del Norte Coast Redwoods State Park. This State Park is located along the northern coast of California in Del Norte County and is managed by the California Department of Parks and Recreation (DPR) (Figure 1 Regional Map and Transmission Line Location). The nearest city, Crescent City, is located approximately 8 miles to the north of the State Park. The State Park is bordered by the Pacific Ocean, Redwood National Park, Jedediah Smith Redwoods State Park, Smith River National Recreation Area, and private lands. U.S. Highway 101 runs through the State Park.

Throughout this IS/MND, the term “project site” is used to refer to the section of Line 87 that is located within the State Park that is being addressed in this IS/MND. The term “project area” is used to refer to the project site together with properties surrounding the project site in the general vicinity.

Del Norte Coast Redwoods State Park was significantly expanded in 2002 when a 25,000-acre acquisition area, known as the Mill Creek Addition, was transferred into State Park ownership and subsequently added to the Del Norte Coast Redwoods State Park. When the Mill Creek addition was added to State Park in 2002, portions of Line 87 became a part of the State Park. The Mill Creek General Plan Amendment has been accepted by DPR and the Mill Creek Addition Final EIR has been certified.

The Mill Creek Addition encompasses the Mill Creek and Rock Creek watersheds. The Mill Creek Watershed is located to the east of the State Park. These creeks are tributaries of the Smith River, which is a nationally-designated wild and scenic river. “Wild and Scenic” indicates that the river must remain undammed and allowed to follow its natural course. From the 1950s to 2000, the Mill Creek Addition area was intensively managed for commercial timber production. In support of the timber harvest, an extensive network of logging roads and skid trails was constructed within the Mill Creek Addition. Today, the property is characterized by mostly young forests that were planted after timber harvesting efforts.

Del Norte Coast Redwoods State Park, along with Prairie Creek Redwoods State Park, Jedediah Smith Redwoods State Park, and the National Park Service's (NPS) Redwood National Park, are managed cooperatively by the NPS and DPR as Redwood National and State Parks. These State and National Parks located in Humboldt and Del Norte Counties make up 45 percent of all the old-growth redwood forest remaining in California.

2.2.1 Locations of Line 87 Sections

The right-of-way (ROW) for the 8.15 miles of Line 87, that is contained within Del Norte Coast Redwoods State Park covers three geographic areas/sections within the State Park and adjacent private properties. The ROW refers to the cleared area directly under the power line and 25 to 50 feet on either side. The three sections are shown in Figure 2-1 Index to Sections and described in Table 2-1 Three Sections of Line 87.

Table 2-1. Three Sections of Line 87

Section	Power Pole Structures	Miles of Line 87 within State Park
Section 1 – Hamilton Road	13/12 - 9/14	1.75
Section 2 – Moratorium Road	9/14 - 1/18 and 7/1 - 1/1	4.47
Section 3 – Adjacent to Old Growth Forest	1/18 - 2/20	1.93
TOTAL	N/A	8.15

Each of these three sections/geographic areas, described below, will have different criteria for vegetation management and access.

2.2.1.1 Section 1 – Hamilton Road

The majority of Section 1 of Line 87 is located within the State Park and runs along Hamilton Road to an old mill site. Only 0.19 miles is located on private property. Hamilton Road is a paved road maintained by DPR and can be accessed from U.S. Highway 101. Section 1 includes 34 power pole structures and is approximately 1.94 miles long. See Figure 2-2 Hamilton Road – Section 1. See Figures 4-1.1 through 4-1.3 Project Area Photos for representative photographs of Section 1 – Hamilton Road.

2.2.1.2 Section 2 – Moratorium Road

Section 2 of Line 87 is located entirely within the State Park. Section 2 includes 46 power pole structures and is approximately 4.47 miles long. This section of the power line begins at Pole 9/14, crosses Mill Creek and the Old Mill Bridge at Pole 11/14, and runs to the beginning of the old growth forest area known as Hamilton Buffer at Pole 1/18. See Figure 2-3 Moratorium Road – Section 2. See Figures 4-2.1 through 4-2.3 Project Area Photos for representative photographs of Section 2 – Moratorium Road.

2.2.1.3 Section 3 – Adjacent to Hamilton Buffer Old Growth Forest

The majority of Section 3 of Line 87 is located within the State Park. Only 0.03 miles is located on private property. Section 3 of the power line runs parallel to the eastern edge of the old

growth redwood tree line. Section 3 includes 14 power pole structures and is approximately 1.96 miles long. See Figure 2-4 Adjacent to Hamilton Buffer Old Growth Forest – Section 3. See Figures 4-3.1 through 4-3.4 Project Area Photos for representative photographs of Section 3 – Adjacent to Old Growth Forest.

2.2.2 Right-of-Way Easements

Pacific Power currently holds six granted right-of-way (ROW) easements in Del Norte Coast Redwoods State Park. The ROWs vary from 20 to 100 feet in width. Total ROW width varies by easement, designated for the poles, wires and other equipment. Proposed ROW clearing will not exceed the widths indicated on the easement or permit for the existing easements. The total acreage of the 4 ROWs is 62.54 acres which is 0.19 percent of Del Norte Coast Redwoods State Park. These ROWs will be managed according to the Vegetation Management Plan (VMP) and mitigation measures defined in the CEQA document. Where there is a conflict between the procedures, the most stringent environmental standard will apply.

Information on the ROWs is included below in Table 2-2 Granted Right-of-Way Easements. ROWs that are part of Redwood National State Parks, acquired between 1954 through 1997, are listed below.

Table 2-2. Granted Right-of-Way Easements

Easement	Date	Pole Numbers and Location	Total ROW Width	Easement Rights
Redwood National & State Parks				
Huffman 89-1287	May 28, 1954	11/12 – 17/12, Hamilton Road	20 feet	Remove trees in ROW, remove trees outside of ROW (danger trees) that could hit, making clearing necessary.
Stimson Lumber 89-1292 Overhanging Property	June 9, 1954	14/12 – 15/12, Hamilton Road	20 feet	Remove trees in ROW, remove trees outside of ROW (danger trees) that could hit, making clearing necessary.
Miller et al C010-270	May 1, 1963	17/12 – 9/14, Hamilton Road.	50 feet	Prune and remove trees in ROW, prune those outside of ROW which could encroach on ROW, making clearing necessary.
Miller Timber 97-1172 A+G	July 30, 1997	13A/13 – 13B/13 (For equipment – new pole installed in 1997 between existing structures).	50 feet	Keep ROW and adjacent lands clear of all brush, trees, timber, structures and other hazards.

2.3 BACKGROUND AND NEED FOR THE PROJECT

Line 87 requires vegetation management work to comply with State and federal clearance requirements. When a power outage occurs in this line, which is a radial feed, electricity cannot be fed or looped in from another source. Without the ability to feed this line from an alternative source during an outage, customers could be affected for 36 to 48 hours. The power line provides the only power to the City of Klamath Glen and to the State Park.

To comply with California State law and applicable fire regulations, all vegetation growing within the ROW under the power line and on both sides of the ROW must be trimmed periodically to prevent damage to the line, line failure, damage to electrical facilities, and fires. For the purpose of this document, an emergency to the electrical facility is defined as a condition that has caused an outage or fire or a condition that if not immediately unattended to, will result in either an outage or possible fire. This proposed action to manage vegetation is mandatory under California law. Without vegetation management, the power line could be broken by taller trees or by falling trees, causing power outages. Any falling power lines would likely cause fires, which may result in much greater damage to the Parks, vegetation, and wildlife, including threatened and endangered species. Approval of a Vegetation Management Program that establishes an acceptable protocol for vegetation management is imperative to continue to protect the environmental resources within the State Park and to assure that the power line operates safely. It is, therefore, vital that vegetation management activities continue to occur in 2013 and beyond.

Vegetation management work across the Pacific Power system depends on line voltage, line importance, vegetation conditions, clearance requirements, location, predominant species growth rates, and other factors. Vegetation management activities along the Del Norte-Yurok Line have been going on for past 18 years. The vegetation trimming activity has included cutting and trimming vegetation on the ROW on a periodic basis of approximately 3 to 6 years per cycle, and on an annual cycle when trees present individual hazards. The present Line 87 ROW was completely cleared of vegetation between 1993 and 1995. The Line 87 ROW has not had complete vegetation maintenance since 1995. Vegetation maintenance along the transmission line is vital because fast growing tree species can grow from ground level to 30 feet in less than 10 years. Recent vegetation removal in 2008, 2009, and 2010 has been completed on limited areas of the line but this has left an imminent threat to the safety and operation of the line because of incomplete removal.

Prior to 2002 when the 25,000-acre Mill Creek Addition was acquired, part of Line 87 was on private land east of the previous State Park boundary. When the Mill Creek Addition was added to the State Park, the power line became subject to DPR jurisdiction. It was then determined by DPR that an environmental document would be prepared to comply with the requirements of CEQA for the vegetation management activities on Line 87 within the Del Norte Coast Redwoods State Park.

2.4 PROJECT OBJECTIVES AND IMPLEMENTATION

The overall project objective is to manage the vegetation so the powerline is not affected by trees or brush while at the same time trimming the vegetation in a manner that protects the resources of the State Park. Pacific Power prepared an initial vegetation management plan, in collaboration with multiple agencies, to establish an initial protocol for vegetation management along this electric transmission line. The "Overview of Vegetation Management Activities" (2009, see Appendix A), provides the methods to remove undesirable vegetation while reducing the overall impact on the environment.

As a part of the preparation of the IS/MND, DPR and Pacific Power have jointly developed additional procedures and mitigation measures that will govern all work in the State Park.

These procedures and mitigation measures modify and supersede the 2009 Plan. Implementation of the 2009 measures identified in Appendix A and the procedures and mitigation measures identified herein will both protect the Park's unique environment and at the same time: 1) establish sustainable, stable, low-growing plant communities that are compatible with the power line, and 2) discourage undesirable tall vegetation that could pose potential safety or reliability issues.

2.5 PROJECT DESCRIPTION

Pacific Power proposes to conduct vegetation management activities in Del Norte Coast Redwoods State Park along the Line 87 power line. This Initial Study/Proposed Mitigated Negative Declaration (IS/MND) covers the section of Line 87 that is located within Del Norte Coast Redwoods State Park and addresses the impacts of vegetation management on Line 87 within Del Norte Coast Redwoods State Park.

Line 87 requires vegetation management work to comply with State and federal clearance requirements. Pacific Power's existing vegetation management program controls tall growing vegetation under or around Pacific Power's power lines to provide safe and reliable power to its customers. Vegetation conditions can often pose significant threats to transmission facilities, which can result in lengthened power outages and safety risks for the public. Vegetation that comes into contact with power line conductors can cause line breaks, pole damage, and can also cause wildfires, which can also be a threat to the public, wildlife and habitat within the State Park.

Based on past experience in the State Park, one crew of three tree workers requires one week, on average to completely trim one span of the power line. A span is the distance from one pole to the next, with some spans being short and others much longer. Pacific Power will use the suspension (climbing ropes) technique to climb trees. Each single crew would have two to three chainsaws active during the work day. There are 91 spans in the State Park. The non-breeding season for all birds in the State Park is only 18 weeks from September 16 to January 31. To perform vegetation management on the entire line in the State Park in the 18 week non-breeding season, it would take 5 crews. This would mean 15 tree workers full time for 18 weeks.

Every three years, vegetation in any given location along the power line would be addressed, with complete vegetation management done the first time, which would last 3 years. In year 4, line maintenance for problem vegetation on the entire line would be conducted. In the sixth year, the entire cycle would be repeated for all 91 spans.

2.5.1 Procedures Addressing Biological and Cultural Resources

Procedures addressing biological and cultural resources are as follows:

1. Trees needing to be felled will be left on site to provide wildlife habitat.
2. Pacific Power ROW flyovers of the line will be conducted only in the non-breeding bird seasons (September 16 to January 31), and will comply with height restrictions of 150 foot minimum elevation for the airship.

3. Pacific Power will not conduct work in the Park during the northern spotted owl and marbled murrelet breeding seasons (February 1 through September 15).
4. On an ongoing basis, Pacific Power will collect data and perform mapping in a GIS database all observation information on State and federally listed species, species of special concern, fully protected species, and California Native Plant Society (CNPS) Rare Plant Rank 1A, 1B and 2 species including the northern spotted owl, marbled murrelet, raptors and all avian nests of all species observed along the power line corridor. The Pacific Power Environmental Map and GIS database of the 98-acre ROW that depicts these areas will be prepared and provided annually to DPR, California Department of Fish and Wildlife (CDFW), and US Fish and Wildlife Service (USFWS) and consulted periodically while planning vegetation management activities. Pacific Power forestry crews will work with DPR, CDFW, and USFWS biologists to provide the best possible information from the observations. Whenever sensitive resources are identified by any of the parties, measures provided in this program will be employed so as to protect the resource during the power line maintenance activities. If sensitive resources are detected that are not addressed in this IS/MND, Pacific Power will consult with and implement measures to protect those resources as provided for by DPR, CDFW, and USFWS.
5. Flyovers of the line will be conducted only in the non-breeding bird seasons (September 16 to January 31), and will comply with height restrictions of 150 foot minimum elevation for the airship.
6. A 200-foot buffer will be maintained for all fish-bearing streams. If cutting with the 200-foot buffer is required, precautions would be taken to protect the stream. The precautions include the following: no entry into the stream by men or equipment, no removal of woody debris in the stream, no removal of low growing vegetation along the stream banks, no disturbance of soils which would cause stream sedimentation, protection of all stream banks and riparian habitat, maintenance of stream shading, and no disturbance of the stream bed in any manner. Vegetation removal would be very minimal in these locations to assure that streams, banks, soils, and watershed values are protected. (Biological Resources Mitigation Measure BIO-4 also addresses operations proximate to fish-bearing streams. See Chapter 5.)
7. Only specific trees adjacent to fish-bearing streams will be pruned to meet post-work clearance requirements, while at the same time leaving sufficient vegetation to shade the area under the power line crossing. These trees will be identified by a Pacific Power representative together with CDFW and USFWS representatives. Some small diameter, taller growing trees will also be removed, with the lower growing trees or saplings left to shade the drainage. Taller growing trees within the ROW will require some side pruning to obtain clearance from outer conductors.
8. Any historic, prehistoric archaeological or other sites of cultural interest encountered during operations on the Pacific Power ROW will be left completely undisturbed and flagged with a 10-meter buffer zone for avoidance during project implementation. The location of the site will not be disclosed in order to ensure confidentiality, but the occurrence will be reported immediately to DPR and appropriate follow-on measures will be determined.

2.5.2 Procedures Addressing Soil Stability, Worker Safety and Stormwater

Procedures addressing soil stability, worker safety and stormwater are as follows:

9. Should soil erosion conditions occur at any time near streams, on roads, or on the ROW where damage to the environment, roads, trails or streams would occur, regardless of the cause, and such conditions come to the attention of Pacific Power crews, the crew will immediately take corrective measures to fix the problem and at the same time report the problem to DPR. Corrective action can include installing erosion control mats, water bars, sediment catchment devices, ground cover, or repairing culverts, etc. to stop erosion problems. If the problem is too large for a crew to handle, immediate reporting to DPR shall occur.
10. Pacific Power personnel and their contractors in the Park shall never handle fuel, oils or chemicals except on a road or trail surface, or other somewhat impermeable surface that is not tributary to any potential or flowing drainage course. Thus, if a spill occurs, it shall be localized on the road surface so it can be contained and cleaned up immediately. Shovels, plastic sheets, and a container shall be carried in each vehicle so that a cleanup can be performed anywhere when work is occurring on the ROW. In no case shall vehicle maintenance be performed in the Park. All fuel and oil containers brought into the Park shall be carried in leak proof and safe containers and shall be secured for safe transportation on very rough roads.
11. Trucks or full size vehicles will not be driven on backcountry roads during or immediately after inclement weather. The exception to this policy is an emergency situation requiring vehicle access. Backcountry roads are defined as dirt and gravel surfaced roads used for administrative access that are not designated for public vehicle use. Inclement weather is defined as precipitation sufficient to saturate and soften the road base to the point where surface displacement and rutting occurs beneath the weight of the vehicle's tires. Emergencies are defined as medical assistance, search and rescues, law enforcement responses, fires and other immediate threats to the public or park resources. In the event that emergency access occurs, immediate erosion control measures will be taken by Pacific Power. This will not include the use of straw or other material that could contain weed or exotic plant seeds.
12. ATV/UTVs can be driven on the backcountry roads during periods of inclement weather if the road surface is not saturated to the point where the vehicle's tires displace the surface soils and cause ruts in the road surface.
13. In the event of an earthquake, all work on the ROW will stop, crews will exit trees immediately and assemble in the most open and stable area available until the earthquake stops. Immediate check-in with supervisors and DPR shall be performed to determine if work is safe to continue or if work shall be suspended.

2.5.3 Vegetation Management Techniques and Procedures

2.5.3.1 General Vegetation Management Techniques and Procedures

14. Where chipper access is available, debris will be chipped and scattered on the forest floor.
15. Pacific Power will use the suspension (climbing ropes) technique to climb trees. The use of tree spikes will only be permitted under the following conditions:
 - Where the complete removal of the tree is required.
 - In the case of worker safety.

In these circumstances, Pacific Power will obtain prior concurrence in writing from the District Superintendent (or designee), except in the case of imminent hazard or emergency.

16. No large snag trees greater than 10 inches in diameter will be cut without approval of the District Superintendent (or designee).
17. All logs will be left whole, unless sequential cutting of pieces of hazardous tree sections are required for tree crew safety. Some trees will be sectioned down to ensure tree crew safety.
18. Larger logs on the ground, approximately 10 inches or more in diameter, will be left in their entirety in or adjacent to the ROW corridor. In some cases where leaving a log in a certain location would cause more soil and environmental damage, an alternative method which best protects the soil and environment may be used.
19. When working in old growth trees, Pacific Power and the contractors will not dislodge litter or soil accumulations from within the canopy.
20. Pacific Power will comply with pruning standards established in the ANSI A300 Part 1 including the avoidance of using heading cuts which is “the reduction of a shoot, stem, or branch back to a bud or to a lateral branch not large enough to assume the terminal role” (4.18), and by “pruning to a lateral, so the remaining lateral branch should be large enough to assume the terminal role” (5.3.4). This is accomplished by pruning to laterals that are at least a third the size of the parent stem. Pacific Power understands that dead limbs may be considered potential murrelet habitat and will leave said limbs if they are secure and sufficiently clear of the power lines.
21. In the event that service must be restored as quickly as possible (ANSI A300 Section 9.4, 2008 ANSI Z133.1, 29 CFR 1910.331 – 335, 29 CFR 1910.268, or 29 CFR 1910.269), Pacific Power will limb trees as necessary to restore power to maintain public health and safety. Following the emergency, Pacific Power will prune as necessary to repair emergency techniques and will notify DPR in writing of deviations from the vegetation management procedures or mitigation measures.
22. All stumps will be left at a height of less than 11 inches. No chemical treatment of stumps will be permitted.
23. No herbicides will be used in the State Park.
24. Pacific Power will notify DPR seven days in advance of conducting vegetation management or ground disturbing activities within the ROW by contacting the Park’s information line at (707) 465-7332, during normal business hours, with a description of the proposed activity and a contact person. Advanced notice is not necessary in the case of responding to emergencies; however, Pacific Power will contact DPR Northern Communications Center (NORCOM) at (916) 358-1300, as soon as reasonable, with the name of the park, nature of the emergency, and location. Notice is not necessary for routine line inspection and work review by vehicle. For each major power line section, a pre-meeting may be held with Pacific Power, Pacific Power’s designated contractor, DPR representatives, and other interested agencies to ensure that the work planned will be compliant with vegetation management restrictions and all mitigation measures from this IS/MND, federal and State clearance regulations, ROW easements, treatment prescriptions, and other items pertinent to the particular area of work. Contact information for personnel for Pacific Power and their designated contractor(s) for field and home office locations will be provided to appropriate agencies and personnel.
25. The Pacific Power area forester will complete audits of the work to ensure compliance with all necessary mitigations measures and requirements. Any violation of project requirements or applicable regulations will be reported by the Pacific Power area forester or observing agency to DPR and corrective actions will be planned and implemented.

26. Only equipment listed below is approved to conduct the vegetation management activities along Line 87:
- 4 door 4 x 4 pickup truck and trailer (to be used on existing roads only)
 - Bucket truck (to be used on existing roads only)
 - Mechanical chipper (to be used on existing roads only)
 - Kawasaki Mule All-terrain vehicle (ATV/UTV)
 - Climbing gear and tree climbing equipment
 - Hand held cutting tools
 - Pole pruners
 - Chain saws and hand saws
 - Forestry chip truck (dumping body), where applicable
 - Gas-powered hedger to cut through patches of Himalayan blackberry (*Rubus armeniacus*)
 - All necessary firefighting tools required by CalFire Protection during the fire season.
27. Work crews will conduct vegetation management activities only within the specified ROW(s) width for each Section of Line 87 unless prior approval is provided in writing from the DPR District Superintendent (or designee).

Depending on the terrain, land slope, and type of pole structures, work crews will also follow the vegetation management techniques described below.

2.5.3.2 Flat Terrain – Wire Zone and Border Zone

On flat terrain with slope less than 5 percent, there are two types of zones located around power lines and poles – the Wire Zone and Border Zone. The “Wire Zone – Border Zone” vegetation management technique is utilized to achieve the goals of controlling vegetation height to protect the power line, as defined in the paragraph below, and so that lower-growing plant communities can be left in place when they do not affect the power line. The Wire Zone and Border Zone are shown in Figure 3-1 Vegetation Management. The majority of the line through the park is not on flat terrain but it in uneven terrain.

The Wire Zone requires vegetation be maintained at 10 feet height or less. Tree species that have the capability to grow into the facilities and endanger the line will be removed in the Wire Zone. These species include:

- redwood (coastal redwood) (*Sequoia sempervirens*)
- Douglas-fir (*Pseudotsuga menziesii* var. *menziesii*)
- red alder (*Alnus rubra*)
- western red cedar (*Thuja plicata*)
- Sitka spruce (*Picea sitchensis*)
- cascara buckthorn (*Rhamnus purshiana*)

- tanoak (*Lithocarpus densiflorus*)
- Pacific madrone (*Arbutus menziesii*)
- big-leaf maple (*Acer macrophyllum*)
- willow species (*Salix* sp.)

In the Wire Zone lower growing plants (under 10 feet at maturity) would be left in place, including species such as:

- sword fern (*Polystichum munitum*)
- Pacific rhododendron (*Rhododendron macrophyllum*)
- western Azalea (*Rhododendron occidentale*)
- huckleberry (*Vaccinium* sp.)
- salal (*Gaultheria shallon*)
- black elderberry (*Sambucus melanocarpa*)
- other native shrubs, grasses, wildflowers

In the Border Zone, vegetation is generally required to be maintained at 25 feet height or less. Tall shrubs or short trees (up to 25 feet in height at maturity) would be left in the Border Zone, including elderberry, rhododendron, etc.

Outside the Border Zone, also shown in Figure 3-1, tall growing trees are not limited except where they may fall onto the line or otherwise conflict with the integrity of the line.

2.5.3.3 Uneven Terrain

Uneven Terrain Regions, which is the most prevalent slope type in the park, is located under and adjacent to power lines and poles on uneven terrain with slopes greater than 5 percent. Under clearance regions as shown in Figure 3-1 are defined as Region A, B, or C (defined below). Each region depends on the terrain and the land slope. Vegetation removal guidelines on uneven terrain also depend on under clearance regions depicted in Figure 3-1.

Region A: Region A is defined as any location where the conductor to ground clearance is less than 50 feet. In Region A where the lines are less than 50 feet off the ground, tall growing trees will be removed and low growing shrubs and plants (under 10 feet at maturity) will be left in the Wire Zone. Uneven Terrain Region A is the same as the Wire Zone on Flat Terrain. Only Region A vegetation species can be left under the power line. Acceptable Region A plant species includes grasses, wildflowers, legumes, ferns and other low-growing shrubs that are less than 10 feet at maturity including:

- sword fern (*Polystichum munitum*)
- Pacific rhododendron (*Rhododendron macrophyllum*)
- western Azalea (*Rhododendron occidentale*)
- huckleberry (*Vaccinium* sp.)

- salal (*Gaultheria shallon*)
- black elderberry (*Sambucus melanocarpa*)
- other native shrubs, grasses, wildflowers

Region B: Region B in Uneven Terrain is defined as any location where the conductor to ground clearance is more than 50 feet, but less than 100 feet off the ground. This is shown in Figure 3-1. In Region B where the lines are between 50 feet and 100 feet off the ground, taking into account line sag, a Border Zone-type community consisting species less than 25 feet in height can be left alone. Tall shrubs or short trees (up to 25 feet in height at maturity) would be left in this zone.

Tree species that have the capability to grow into the facilities, which may require removal depending on the situation, include redwood, Douglas-fir, red alder, western red cedar, Sitka spruce, cascara buckthorn, tanoak, Pacific madrone, big-leaf maple and some species of willow.

Region C: Region C is defined as any location where the conductor to ground clearance is greater than 100 feet off the ground. In Region C where the lines are 100 feet or more off the ground, all species, including the tall growing trees, can be left as long as they have 50 feet of clearance at maximum potential of line sag. No specific vegetation removal is required in this zone. All tree and shrub species will be left in this zone. Trees will not be cut except in cases where the tree creates a risk to the power line where it could fall onto the line or create some other type of hazard.

2.5.3.4 Pole and Support Structure Clearance Specifications

Clearances and ROW widths are also determined by the type of pole structure, such as a single pole structure or an “H” structure, and type of equipment in use (Figure 3-2 Single Pole Structure Clearance, and Figure 3-3 H-Structure Clearances).

Trees and brush also need to be cleared around poles and support structures: this requires a 10 foot radius on single pole construction, a 25 foot radius around H-structures, and a 5 foot radius around guy anchors. Clearance around the poles and equipment is necessary for climbing space, emergency access to equipment, and to prevent equipment sparks from falling into vegetation and potentially starting a fire. Many of the areas around the base of the structures were cleared and compacted during construction and have not re-grown due to the compacted base areas of the structures. Other areas around the base of structures need to be cleared to meet safety standards. This activity is required by law in California and is not subject to a discretionary CEQA decision by DPR.

The North American Electric Reliability Corporation (NERC) Vegetation Management Standard FAC-003-1 (NERC 2006) requires that minimum clearances are met for the power line. The NERC Vegetation Management Standard FAC-003-1 (NERC 2006) references the Institute of Electronic and Electrical Engineers Standard 516-2003 for minimum flash distances for specific voltages. Pacific Power is required to comply with these standards. The clearances are provided below, obtained from Pacific Power’s Transmission and Distribution Vegetation Management Program (Pacific Power 12/08).

- Minimum Flash Distance for 69 kV Line: 1.3 feet.
- Minimum clearances following clearing work (NERC Clearance 1) for 69 kV line: 25 feet.
- Under and side clearance work thresholds (NERC Clearance 2) for 69 kV line: 10 feet.

Thus, once clearing of the line is completed, all lines must have a 25 clearance radius and all structures on the ground supporting the power line must have a 10 foot clearance.

Clearances must take into account the effects of ambient temperature on conductor sag and the effects of wind velocities on conductor sway. Hot days and high winds are common in the project area and past and proposed vegetation clearance by Pacific Power takes this into consideration. If clearances greater than the 25 foot standard are anticipated due to weather conditions, Pacific Power will provide data and request specific approvals from DPR on a site by site basis.

2.5.4 Access to the Line 87 ROW

All work crews will follow State Highway and State Park Back Country road driving policies. The Redwood National and State Parks Superintendents' Policy No. 1 addressing Seasonal Road Use in the Parks is contained in Appendix F. Access to ROW by work crews will be obtained via State Park/Pacific Power-maintained dirt roads, ATV/UTV trails, and foot trails. Once a work crew accesses the power line ROW via the existing access routes, movement will occur up and down the line within the ROW. While ROWs can vary from 20 to 100 feet in width, the ROW generally refers to the cleared area directly under the power line and 25 to 50 feet on either side.

2.5.4.1 U.S. Highway 101

Entrance to the State Park is from U.S. Highway 101 (Highway 101). Work crews will use Highway 101 to access Hamilton Road (a State Park paved road) and Wilson Creek Road (a private paved road), and conduct project activities within Sections 1 and 3.

2.5.4.2 Hamilton Road

Hamilton Road is a paved State Park-maintained vehicle road. Hamilton Road begins at the State Park entrance and proceeds east toward the Old Mill Site. Hamilton Road will be used by the work crews for project activities conducted within Section 1. Hamilton Road will also be used to access backcountry roads to conduct project activities within Section 2.

Work crews would use U.S. Highway 101 to access Hamilton Road. A large truck and mechanical chipper would be utilized to travel along Hamilton Road and conduct vegetation management activities within Section 1. The truck would have a mechanically-operated bucket to reach the areas that need trimming. The limbs that are cut would go into a mechanical chipper which travels with the truck to masticate the woody debris. For areas where chipper access is available, debris would be chipped and scattered on the forest floor, but away from any roads or watercourses. All work will be conducted from September 16 to January 31, outside the avian breeding season.

2.5.4.3 Dirt Roads Maintained by the State Park

There are three main dirt roads maintained by the State Park: Moratorium Road, West Branch Road, and Flashlight Road. These dirt roads are generally known as backcountry roads, defined, as stated previously, as dirt and gravel surface roads used for administrative access that are not currently designated for public vehicle use, but may be in the future. Vehicles driven on backcountry roads will be four wheel drive trucks or ATV/UTVs. Tire chains will not be used on these dirt roads.

Pacific Power will follow Redwood National and State Parks Superintendents' Policy No. 1 addressing Seasonal Road Use in the Parks (Appendix F). Vehicles will not drive on backcountry roads with trucks or full size vehicles during or immediately after inclement weather. Inclement weather is defined as precipitation sufficient to saturate and soften the road base to the point where surface displacement and rutting occurs beneath the weight of the vehicle's tires. The winter period is defined as October 15 through May 15 or the beginning of the prolonged stormy weather season to the beginning of the prolonged dry weather season on the North Coast. The exception to this policy is an emergency situation requiring vehicle access. Emergencies are defined as medical assistance, search and rescues, law enforcement responses, emergency actions needed to maintain the integrity of the power line, fires and other immediate threats to the public or State Park resources.

During periods of inclement weather, ATV/UTVs may be driven on these roads if the road surface is not saturated to the point where the vehicle's tires displace the surface soils and cause ruts. Backcountry roads that have been re-engineered during the previous dry season and not treated with base rock will not be driven on by any truck or full size vehicle during the following rainy season unless there is an emergency. These roads will be given a full winter to cure or firm up before being driven on by full-size vehicles.

2.5.4.4 ATV/UTV Trails

ATV/UTV trails are roads that are too small for trucks or full size vehicles to pass, and which may only be driven on by four wheel drive ATV/UTVs. The ATV/UTV trails are not maintained by the State Park. Tire chains will not be used on the ATV/UTVs. The ATV/UTVs will always have a winch and other emergency equipment, as the winch is very effective at extracting vehicles that are stuck in place. It shall be the policy that if conditions on the ATV/UTV trails are wet or muddy enough to cause the ATV/UTV vehicles to get repeatedly stuck then operations on these trails shall be suspended until conditions improve. This is to prevent tearing up the trail surfaces and creating environmental damage to the trails, ground, vegetation, and habitats.

On some ATV/UTV trails, trees or limbs fall which can temporarily block the roads, making response to power outages and maintenance difficult. In these situations, cutting of downed logs or limbs to allow access to the transmission corridor will be required to keep the roads passable to ATV/UTVs so that State Park, emergency, or power line personnel may access the power line ROW. Small trees and brush on the access trails to the power line shall be trimmed as required. Only minimum cutting will be utilized so that the ATV/UTV can pass. No trees greater than 10 inch will be cut. In cases where vegetation has grown up directly in the road, making the ATV/UTV trail impassible, then Pacific Power may remove vegetation sufficiently to allow

the ATV/UTV to pass. Trimming will be conducted as the crews are going to or from the power line and shall be an incidental activity to keep the trails passable. No clearing or other disturbance of the ground would occur. No ground scraping shall be conducted. Low growing native grass, plants, and shrubs which a vehicle may pass over or through shall be left in place and maintained on the trail surface to protect the soils and to prevent sedimentation and erosion. This trimming may be conducted only in times that are not in the Spotted Owl and marbled murrelet breeding season (February 1 through September 15), while the crews are using the ATV/UTV trails, control of weed and exotic plants will be addressed under Mitigation Measure (MM)-3 (see Chapter 5).

2.5.4.5 Foot Trails

In some areas, such as power line corridor work areas with no vehicular access, no vehicles or ATV/UTVs would be allowed, and work crews would use foot trails to access the work area. Work crews would travel on dirt roads or ATV/UTV trails as far as they could toward the power line corridor work area, then access the work area on foot. There are some foot trails that provide access to the power line corridor; however, in many cases, there are no trails. Work crews would work their way around dense vegetation to access the power line corridor in each of the three sections.

2.5.4.6 General Access

Additional procedures describing general vehicular access and driving controls are as follows:

28. All equipment and vehicles utilized for the project will be washed prior to entering the State Park to prevent the potential spread of disease and exotic weeds.
29. Vehicles driven on backcountry roads, as a general practice, will have four wheel drive and be engaged in four wheel drive. Tire chains will not be used as a means to improve traction in order to gain access and shall only be employed in emergencies or situations when extrication is not possible through mechanical assistance (e.g., winch, or towing by another vehicle).
30. Speed limits on all park roads are 15 mph unless otherwise posted and will be observed at all times.
31. Backcountry roads that have been re-engineered during the previous dry season and not treated with base rock will not be driven on by any truck or full size vehicle or ATV/UTV during the following rainy season unless there is an emergency. These roads will be given a full winter to cure or firm up before being driven on.
32. ATV/UTV trails or roads that are too small for trucks or full size vehicles to pass, may only be driven on by four wheel drive ATV/UTVs. Tire chains will not be used on the ATV/UTVs as a means to improve traction in order to gain access except in emergencies or situations when extrication is not possible through mechanical assistance (e.g. winch or towing by another vehicle). The ATV/UTVs will carry emergency equipment at all times.
33. In cases along ATV/UTV trails where trees or limbs have fallen that temporarily block the trails (making response to power outages and maintenance difficult), cutting of downed logs or limbs to allow access to the transmission corridor will be permitted. Only minimal cutting will be utilized so that the ATV/UTV can pass. In cases where vegetation has grown up directly in the trail, making the ATV/UTV trail impassible, crews may remove

vegetation sufficiently to allow the ATV/UTV to pass. No other clearing or other disturbance of the ground shall occur at any time, and low growing grass, plants, and shrubs shall be maintained on the trail surface to protect the soils and to prevent sedimentation and erosion.

2.6 CONSISTENCY WITH LOCAL PLANS AND POLICIES

The proposed Vegetation Management Program is consistent with the mission of DPR “*To provide for the health, inspiration and education of the people of California by helping to preserve the state’s extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high quality outdoor recreation.*”

The proposed Vegetation Management Program is also consistent with the Redwood National and State Parks General Management Plan, and the Final General Plan Amendment/EIR for the Mill Creek Addition (2010).

2.7 DISCRETIONARY APPROVALS

DPR and Pacific Power will engage in all necessary reviews and acquire all necessary permits prior to implementing any project components requiring regulatory review. DPR retains approval authority for the proposed Vegetation Management program within the State Park. Additional approval or permits could be required as noted:

- A Cultural Resources Permit 5024 may be required if construction on roads requires excavation.
- If culverts on roads need to be replaced, consultation with pertinent State and federal agencies will take place to obtain proper permits (401, 404, and 1600). Consultation for stormwater protection measures may also be required (i.e. NPDES through the North Coast Water Board, the applicable Regional Water Quality Control Board).
- Prior to operations, a letter of Technical Assistance will be obtained from USFWS, identifying any operating restrictions for the Northern Spotted Owl or the marbled murrelet.
- Consultation with CDFW will be initiated prior to operations that may affect the marbled murrelet.

2.8 RELATED PROJECTS

DPR has other natural resource restoration projects that have been recently performed, and/or are underway or planned for the State Park in the vicinity of the proposed project area:

- From 2003 to 2010, DPR treated approximately 1,315 hectares (3,250 acres) of young forests within the Park, and will treat approximately 121 additional hectares (300 acres) in 2011. These areas were planted between 1980 and 1993.
- From 2004 to 2011, DPR removed and recontoured approximately 79 kilometers (49 miles) of undriveable and failing logging roads within the Park to prevent future catastrophic erosion, and improve wildlife habitat and the aesthetic quality of the watershed. A similar amount may be removed and recontoured in coming years as funding allows.

- DPR is in the process of restoring the East Fork of Mill Creek. Since 2006, DPR has begun to restore complexity and improve habitat by building approximately 24 complex wood jams that resemble natural log jams along the East Fork. In the Summer/Fall of 2011, approximately 70 more structures were planned to be installed in the East Fork and its tributaries.
- Over 10,000 native conifers have been planted in historically conifer dominated stands that were converted to alder stands due to past harvest history. These areas are all adjacent to the East Fork and West Branch of Mill Creek.

2.9 DOCUMENTS INCORPORATED BY REFERENCE

As permitted by §15150 of the CEQA Guidelines, this IS/MND references certain technical studies and environmental documents. Information from the documents, incorporated by reference and cited below, has been briefly summarized in the appropriate discussions in Section 3. The documents that have been used in the preparation of this IS/MND and that are hereby incorporated by reference are:

- EDAW. 2010. Final General Plan Amendment/Environmental Impact Report (EIR), Mill Creek Addition, Del Norte Coast Redwoods State Park.
- California Department of Parks and Recreation. 2006. Final Mitigated Negative Declaration, Mill Creek Acquisition Forest Ecosystem Restoration and Protection Project. North Coast Redwoods District, CA.
- Stillwater Sciences. 2002. Mill Creek Property Interim Management Recommendations. Prepared for Save-the-Redwoods League, San Francisco and California Coastal Conservancy, Oakland, California (Section 2).

A complete listing of all documents utilized in the preparation of this IS/MND is provided in Section 7.0 References.