
National Park Service
Cultural Landscapes Inventory
2021



Old Redwood Highway Historic District
Redwood National and State Parks
 Prairie Creek Redwoods State Park
 Del Norte Coast Redwoods State Park
 Redwood National Park



**DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION**

Armando Quintero, *Director*

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

December 30, 2021

In reply to: NPS_2021_1102_002

Steven N. Metz, Superintendent
Redwood National Park
1111 Second Street
Crescent City, CA 95531

RE: Section 110 Evaluation, Old Redwood Highway Historic District

Dear Mr. Metz:

Pursuant to Section (a)(2)(A) of Section 110 of the National Historic Preservation Act (NHPA), the Office of Historic Preservation has been asked to review the determination of eligibility of resources associated with the above identified property, per Section 110 of the National Historic Preservation Act, located in Redwood National and State Parks, Humboldt and Del Norte County.

This office concurs with your determination regarding the eligibility of Old Redwood Highway Historic District. The district is eligible for the National Register of Historic Places (National Register) under Criteria A and C with a period of significance of 1919-1930 at the state level of significance, within the historic contexts of Transportation, Entertainment/Recreation (tourism), Architecture (landscape), and Engineering. This cultural landscape inventory documents a total length of 25.6 miles, including 20.1 miles not previously evaluated as the existing Old Redwood Highway Historic District, encompassing 307.9 acres. Tables documenting the contributing and non-contributing resources within the district are enclosed.

If you have any questions about our assessment of this document, please contact William Burg of my staff at (916) 445-7004 or william.burg@parks.ca.gov.

Sincerely,

State Historic Preservation Officer
California Office of Historic Preservation

Enclosures

Table 1: Contributing Resources, Old Redwood Highway Historic District

Contributing Resources
Contributing Resource Name
Enderts Beach Road
Coastal Trail Nickel Creek Section
Coastal Trail Damnation Creek Section
Coastal Drive (1.1 miles of 2 miles)
Alder Camp Road (1 mile of 2 miles)
Coastal Trail Tey-wo-lew Section
Red Alder Road
Newton B. Drury Parkway
Concrete box culverts (37)
Steel pipe culvert with concrete headwall (39)
Large concrete culverts at Nickel Creek and Boyes Creek
Continuous views of ocean and shoreline along Coastal Trail Tey-wo-lew Section and Coastal Drive
Continuous close views of redwoods along Coastal Trail Damnation Creek Section, Red Alder Road, and Newton B. Drury Parkway
View of ocean at southern turnout on Coastal Trail Tey-wo-lew Section
View of ocean at northern turnout on Coastal Trail Damnation Creek Section
Bronze memorial plaques (3)
Location marker posts (6)
Documented archeological sites (8):
1894 Crescent City to Trinidad Wagon Road (REDW00169)
CA-DNO-30/CA DNO-56
Enderts Beach Cottage Resort (REDW00166)
Pozzi Auto Court (REDW00165)
Radar Station Quarters (REDW00155)
Trinidad to Klamath Trail (REDW00167)
Webster's Store (no record number)

Table 2: Non-Contributing Resources, Old Redwood Highway Historic District	
Non-Contributing Resources	
Non-Contributing Resource Name	
Abandoned Coastal Segment	
Wilson Creek Segment	
Turnouts (119 of 124)	
Crescent Beach Overlook and Nickel Creek Trail Parking	
Big Tree Parking	
Paved shoulders on Alder Camp Road	
Paved shoulders on Newton B Drury Parkway	
Steel and CPDP culverts (107 of 114)	
Damnation Creek footbridge	
May Creek bridge	
View of ocean and Crescent City at Enderts Beach Road/ Nickel Creek parking	
Bronze memorial plaques (5)	
Wood memorial signs (23)	
Location marker posts (3)	
Wood post barrier (1)	
Fences and guardrail (5)	
Stone walls (2)	
Gates (4)	
Benches (2)	



Old Redwood Highway Historic District
Redwood National and State Parks

Redwood National and State Parks concurs with the finding of the Cultural Landscape Inventory that the Old Redwood Highway Historic District is eligible for listing in the National Register of Historic Places as a cultural landscape.

Digitally signed by STEVEN
MIETZ

Date: 2022.01.04 17:07:36 -08'00'

Steven Mietz, Superintendent, Redwood National Park

Date

1/5/2022

Victor Bjelajac, Superintendent, California State Parks,
North Coast Redwoods District

Date

Please return to :

Kevin McCardle
Historical Landscape Architect
Redwood National Park
121200 Highway 101
P.O. Box 7
Orick, CA 95555

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Inventory Unit Summary & Site Plan

The Cultural Resources Information System (CRIS)

CRIS is the National Park Service's database of cultural resources on its lands, consisting of archeological sites, historic structures, ethnographic resources, and cultural landscapes. The set of CRIS records for cultural landscapes is referred to as CRIS-CL. CRIS-CL records conform to a standardized data structure known as the Cultural Landscapes Inventory (CLI). The legislative, regulatory and policy directions for conducting and maintaining the CRIS are: Section 110 of the National Historic Preservation Act, NPS Management Policies (2006), Director's Order 28 (Cultural Resources) and Director's Order 28a (Archeology).

The Cultural Landscapes Inventory (CLI)

The CLI is the data structure within CRIS used to document and evaluate all potentially significant cultural landscapes in which NPS has, or plans to acquire, any enforceable legal interest. Each CRIS-CL record is certified complete when the landscape is determined to meet one of the following: Landscape individually meets the National Register of Historic Places criteria for evaluation; or, Landscape is a contributing element of a property that is eligible for the National Register; or, Landscapes does not meet the National Register criteria, but is managed as cultural resources because of law, policy or decisions reached through the park planning process. Cultural landscapes are historic sites, historic designed landscapes, historic vernacular landscapes, and historic ethnographic landscapes, but may also include more than one type. Those eligible for the National Register have significance in the nation's history on a national, state, or local level, as well as integrity or authenticity. The legislative, regulatory and policy directions for conducting and maintaining the CLI within CRIS are:

National Historic Preservation Act of 1966 (16 USC 470h-2(a)(1)). Each Federal agency shall establish a preservation program for the identification, evaluation, and nomination to the National Register of Historic Places...of historic properties....

Executive Order 13287: Preserve America, 2003. Sec. 3(a)...Each agency with real property management responsibilities shall prepare an assessment of the current status of its inventory of historic properties required by section 110(a)(2) of the NHPA...No later than September 30, 2004, each covered agency shall complete a report of the assessment and make it available to the Chairman of the Advisory Council on Historic Preservation and the Secretary of the Interior....

Executive Order 13287: Preserve America, 2003. Sec. 3(c) Each agency with real property management responsibilities shall, by September 30, 2005, and every third year thereafter, prepare a report on its progress in identifying...historic properties in its ownership and make the report available to the Council and the Secretary....

The Secretary of the Interior's Standards and Guidelines for Federal Agency Historic Preservation Programs Pursuant to the National Historic Preservation Act, 1998. Standard 2: An agency provides for the timely identification and evaluation of historic properties under agency jurisdiction or control and/or subject to effect by agency actions (Sec. 110 (a)(2)(A) Management Policies 2006. 5.1.3.1 Inventories: The Park Service will (1) maintain and expand the following inventories...about cultural resources in units of the national park system...Cultural Landscape Inventory of historic designed landscapes, historic vernacular landscapes, ...and historic sites....

Cultural Resource Management Guideline, 1997, Release No. 5, page 22 issued pursuant to Director's Order #28. As cultural resources are identified and evaluated, they should also be listed in the appropriate Service-wide inventories of cultural resources.

Scope of the CLI

The information contained within the CLI is gathered from existing secondary sources found in park libraries and archives and at NPS regional offices and centers, as well as through on-site reconnaissance of the existing landscape. The baseline information collected provides a comprehensive look at the historical development and significance of the landscape, placing it in context of the site's overall significance. Documentation and analysis of the existing landscape identifies character-defining characteristics and features and allows for an evaluation of the landscape's overall integrity and an assessment of the landscape's overall condition. The CLI also provides an illustrative site plan that indicates major features within the inventory unit. Unlike cultural landscape reports, the CLI does not provide management recommendations or treatment guidelines for the cultural landscape.

Inventory Unit Description:

The Old Redwood Highway Historic District consists of formerly designated highway segments totaling 25.6 miles, in two non-contiguous locations within Redwood National and State Parks (see Figures 1-7). Two segments of approximately 5 ½ miles are listed in the National Register of Historic Places. The segments of former highway have mixed conditions including paved roads and hiking trails in good condition to roads buried and undermined by landslide. The north end of the district begins at Enderts Beach Road on the national park boundary, south of the U.S. Highway 101 intersection. At the end of Enderts Beach Road, NPS built Crescent Beach Overlook and trail parking in the 1970s. The district continues from the parking lot south on the Coastal Trail Nickel Creek Section. The Old Redwood Highway listed in the National Register of Historic Places (National Register) begins where the former highway leaves the Coastal Trail at Nickel Creek and continues to the bluffs above the ocean coast along an abandoned roadway. This approximate 2-mile segment of abandoned road is buried and undermined by landslides, although aerial photographs reveal some small isolated sections of road remain in this area. The Old Redwood Highway joins the Coastal Trail Damnation Creek Section to the south in Del Norte Coast Redwood State Park and continues inland and south until it intersects with the current Redwood Highway (U.S. Highway 101). South of this intersection is a short, isolated segment outside the current within the park boundary at Wilson Creek, but it is not contributing because it has been modified as a turnout of the current highway, and as an access drive to a former hostel site. South of the Klamath River is the final segment listed in the National Register: Coastal Drive from the Klamath Beach access gate to the intersection with Alder Camp Road. Alder Camp Road connected the first bridge over the Klamath River to the coastal segment, was completed in 1926. The Coastal Drive segment that connected to the ferry landing was decommissioned. From the intersection of these roads the Old Redwood Highway continues south, as the Coastal Trail Tey-wo-lew Section, and then inland along Red Alder Road. The district continues south along Newton B. Drury Parkway until the May Creek Bridge just north of the current Redwood Highway (U.S. Highway 101).

The road is significant at the state level under Criterion A for its association to transportation and early highway construction in the state of California and Criterion C for its construction and design techniques, with a period of significance of 1919 to 1930. The original Redwood Highway was first designated Route 1 and conceived of in the late 19th century as a state road that would connect Sausalito to the remote redwood forests along the coast of California and on to Oregon. Construction began in 1909 at Sausalito and was California's first state-funded route. It took until 1920 to make a "passable" route to Eureka and until 1926 to overcome the final major barrier at the Klamath River when a bridge was built.¹ South of Del Norte County in what became Prairie Creek Redwoods State Park, the county road was still the "passable" route until 1928² when the final segment of the Old Redwood Highway was constructed and later paved in 1930.³

The highway was initially embraced by both commercial interests as a route for timber and commerce; and by conservationists who saw the highway as a means to expose more people to the beauty of the tall trees, and a means to preserve corridors of forests found along the new scenic highway. These dual interests became increasingly at odds as automobile technology rapidly developed in the 1920s, uniform highway standards were adopted, and roads increasingly needed to accommodate faster traffic and larger vehicles. California passed a highway transportation bill in 1952 intended to modernize the Redwood Highway to contemporary standards.

The Old Redwood Highway Historic District retains varying degrees of integrity. Enderts Beach Road remains a vehicular road with a high degree of integrity, showing few modifications beyond resurfacing

¹ HABS_HAER (24-28)

² Arcata Union, "Highway Clearing Starts at Orick," April 7, 1927.

³ CDPW May 1931, 33.

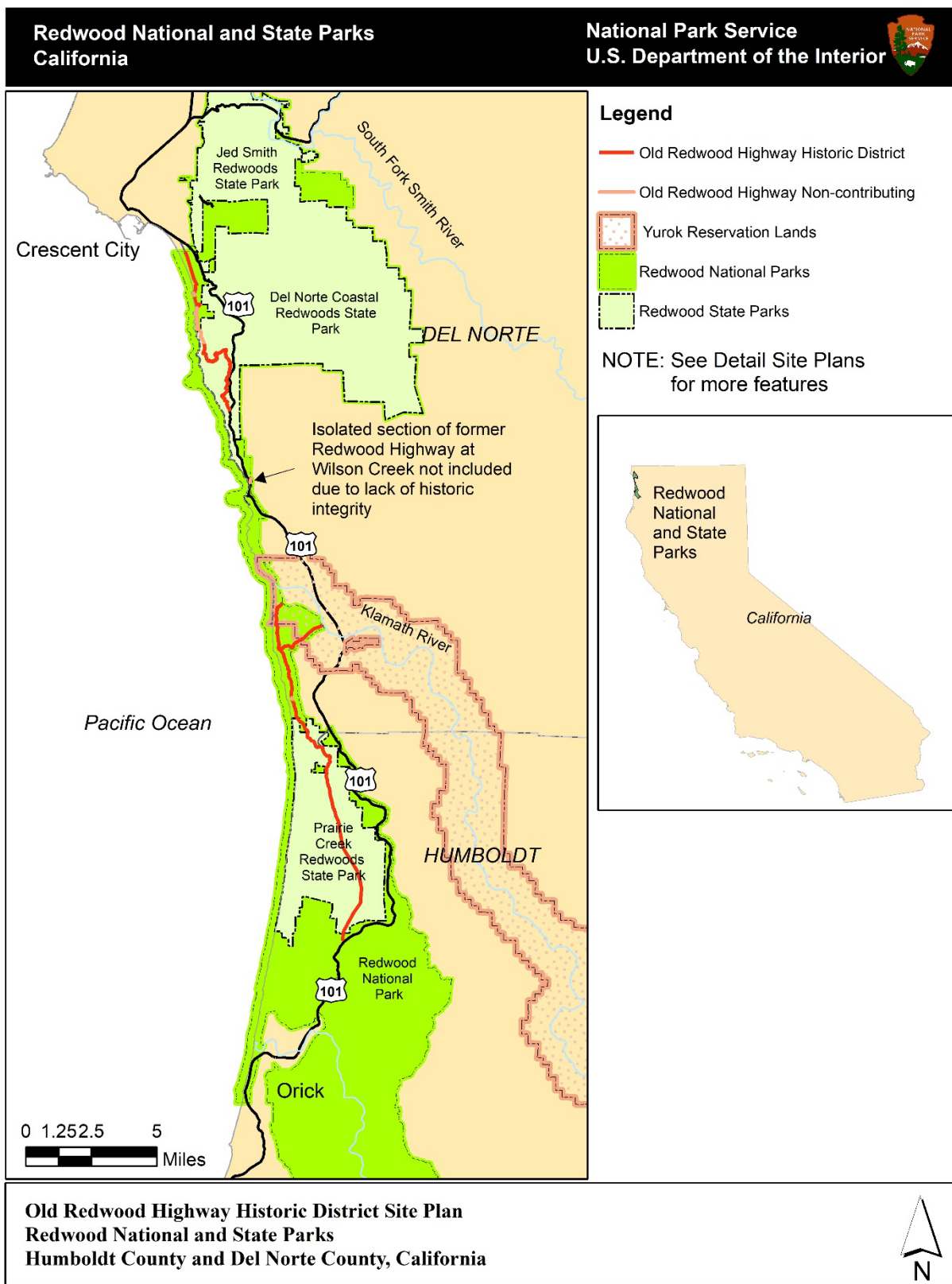
and additional culverts since its original construction in 1920. The district along the coast in Del Norte County south of Nickel Creek has been buried and undermined by landslides and has lost all integrity. The segment that is now the Coastal Trail Damnation Creek Section has seen the fewest changes of all and retains many of the original culverts, pavement, and some objects from when it was abandoned as a highway in 1934. Other segments such as Newton B. Drury Parkway and Alder Camp Road are used as vehicular roads, have been widened, but still retain the ability to convey the character of the historic scenic highway.

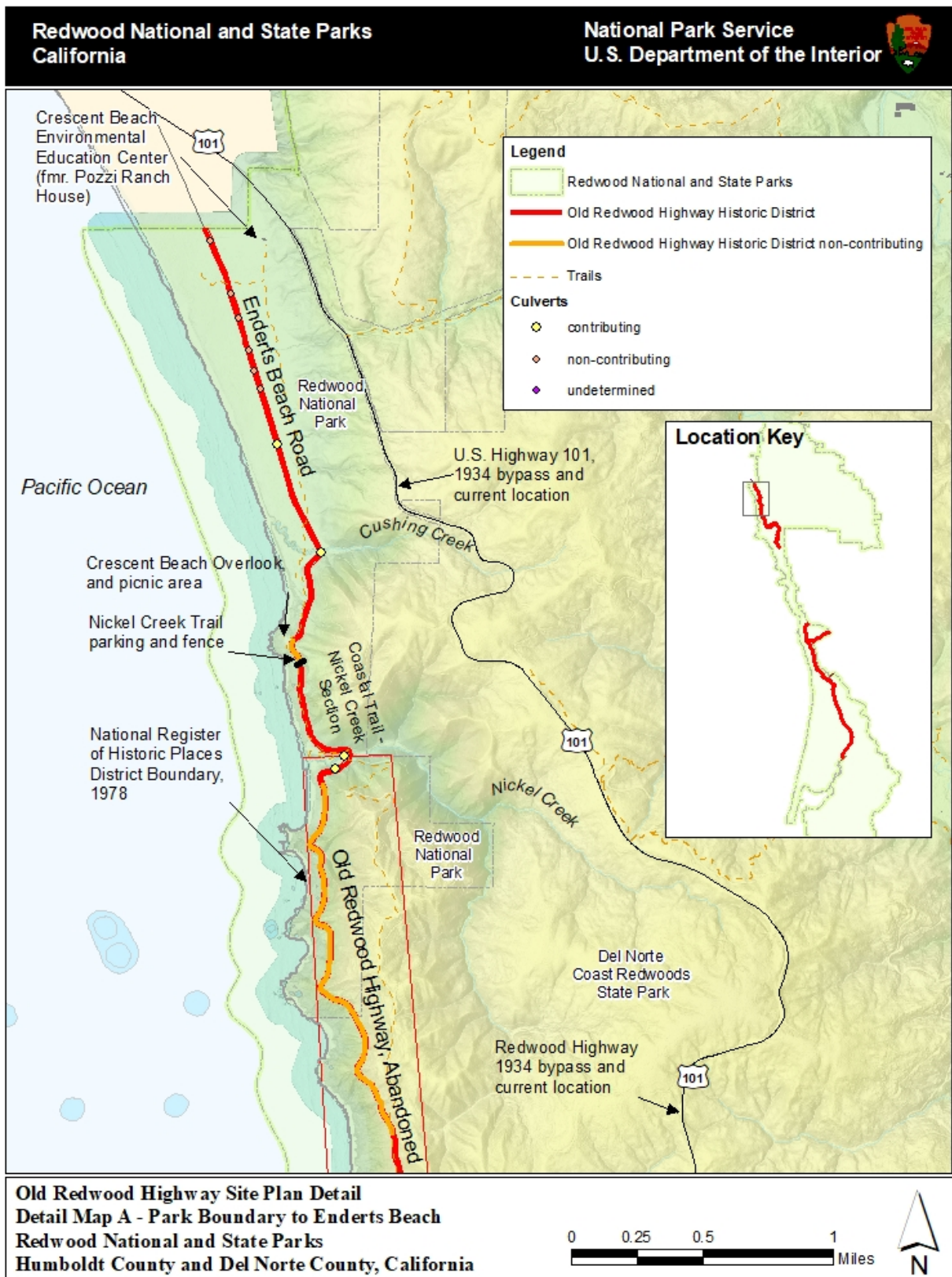
The Old Redwood Highway Historic District (Old Redwood Highway) was evaluated in eleven segments as the former highway travels between a wide variety of environments. The district's north boundary is at the national park boundary and Enderts Beach Road to Crescent Beach Overlook (see Figure 2) and is the first contributing segment. Crescent Beach Overlook and trail parking at the end of the road was heavily modified and no longer contributes to the historic district character. From here south to Nickel Creek, the Coastal Trail Nickel Creek Section is no longer a vehicular road, has been deteriorating and losing pavement, but otherwise still conveys its historic character. The Old Redwood Highway leaves the Coastal Trail immediately south of Nickel Creek (see Figure 2) and is where the Old Redwood Highway in the National Register begins. This approximately 2-mile abandoned section on the coastal bluffs has been buried and undermined by landslides and is not contributing (see Figures 2 and 3). Aerial photographs reveal small isolated sections of road remain but are surrounded by buried road and unstable geology. South of this, in Del Norte Coast Redwoods State Park, the Old Redwood Highway is now known as the Coastal Trail Damnation Creek Section and ends at the intersection with the existing U.S. Highway 101 (see Figure 3). This section has high integrity and retains some of the historic macadam surface, lane markings, culverts, and some objects but is slowly being encroached by vegetation and the vehicular bridge has been lost. Further south an isolated segment within the park boundary at Wilson Creek once lead to the 1920s bridge across Wilson Creek (outside national and state park property) and is non-contributing since it has been modified as a large turnout of the current highway, and as access to the drive of the former hostel site (see Figure 1). The short unpaved section beyond the turnout does not retain integrity on its own to convey the historic character of a former highway. The district starts again south of Klamath River on Coastal Drive at the Klamath Beach access gate (see Figure 4). Coastal Drive is the final segment listed in the National Register. It is a one-way vehicular road, unpaved, and does it not have historic culverts, but it is not clear if there were any during the period of significance. To the east is Alder Camp Road, also in use as a vehicular road, and although it has been the modified with a wider, more level road, it still can convey its historic character of a scenic highway winding through, and dominated by, the surrounding forest (see Figure 4). From the intersection of Coastal Drive and Alder Camp Road the former highway continues south along the Coastal Trail Tey-wo-lew Section, which has an eroded section that closed vehicle traffic on this segment, but is contributing outside of this eroded section (see Figure 4 and 5). This 350-foot eroded section at the southern end has been undermined and is no longer contributing. Elsewhere the Coastal Trail Tey-wo-lew Section still conveys the historic character with dramatic ocean views and one extant culvert, although several culverts have been replaced, others added, and the pavement has deteriorated. To the south, in Humboldt County, Red Alder Road was completed in 1930 and retains a high degree of integrity (see Figure 5). The district ends with Newton B. Drury Parkway at the May Creek Bridge (see Figures 5 - 7). This segment continues to be used as a vehicular road, although the pavement widths have increased and many of the culverts and objects have been replaced to modern standards, the road still retains sufficient integrity to convey the historic scenic road through the forest and meadows.

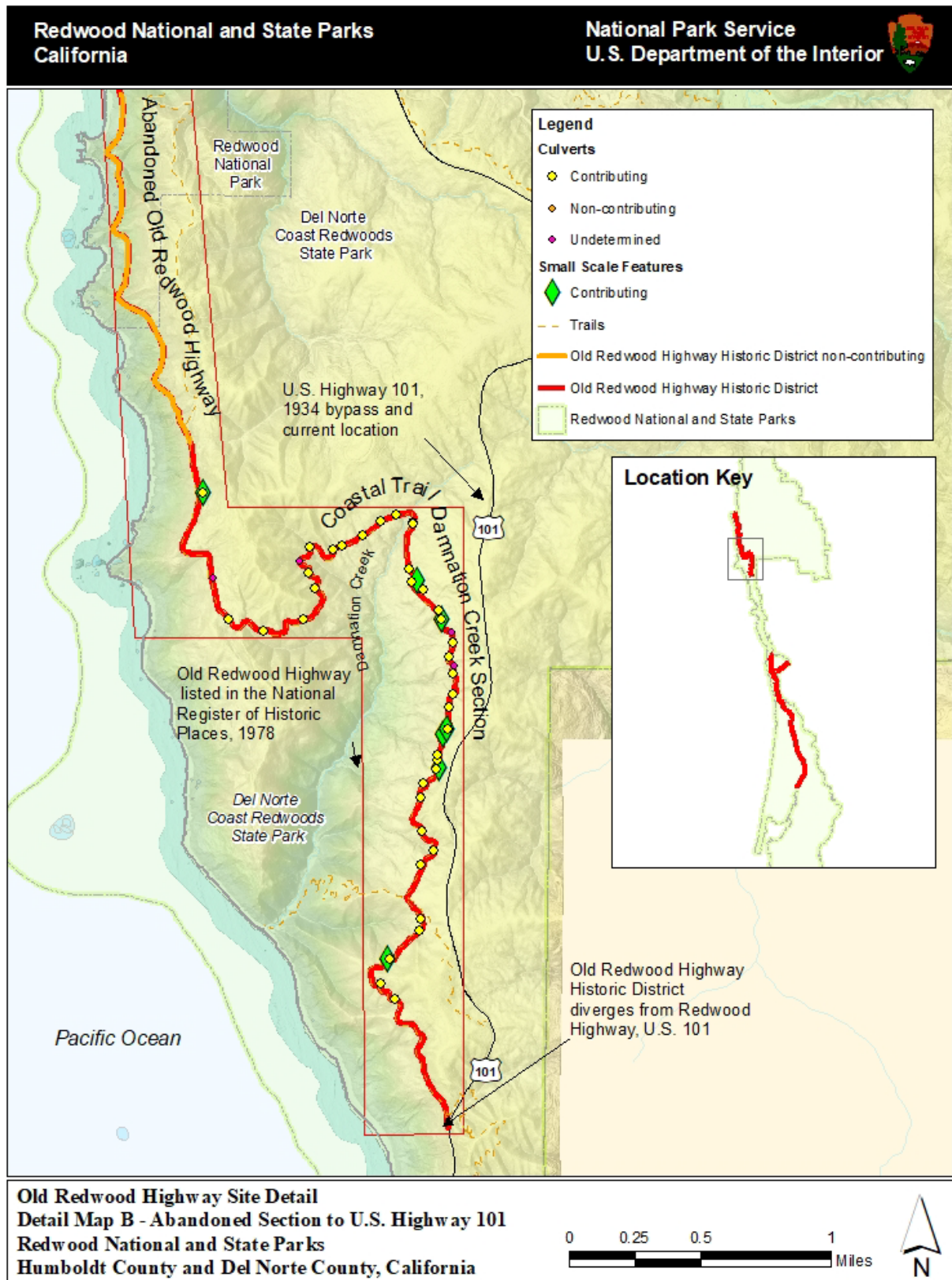
The present U.S. Highway 101 (Redwood Highway) from the junction of Enderts Beach Road to north of Wilsons Creek was constructed in 1934, but this segment of highway has been modified numerous times since its construction and substantially altered over the decades. The highway at Wilson Creek and False Klamath Cove was significantly modernized in the 1960s when the current bridge was built over Wilson Creek. These no longer retains integrity to the period of significance and do not contribute. South of the

Klamath River, U.S. Highway 101 was built between 1965 and 1992 and reflect modern highway construction.

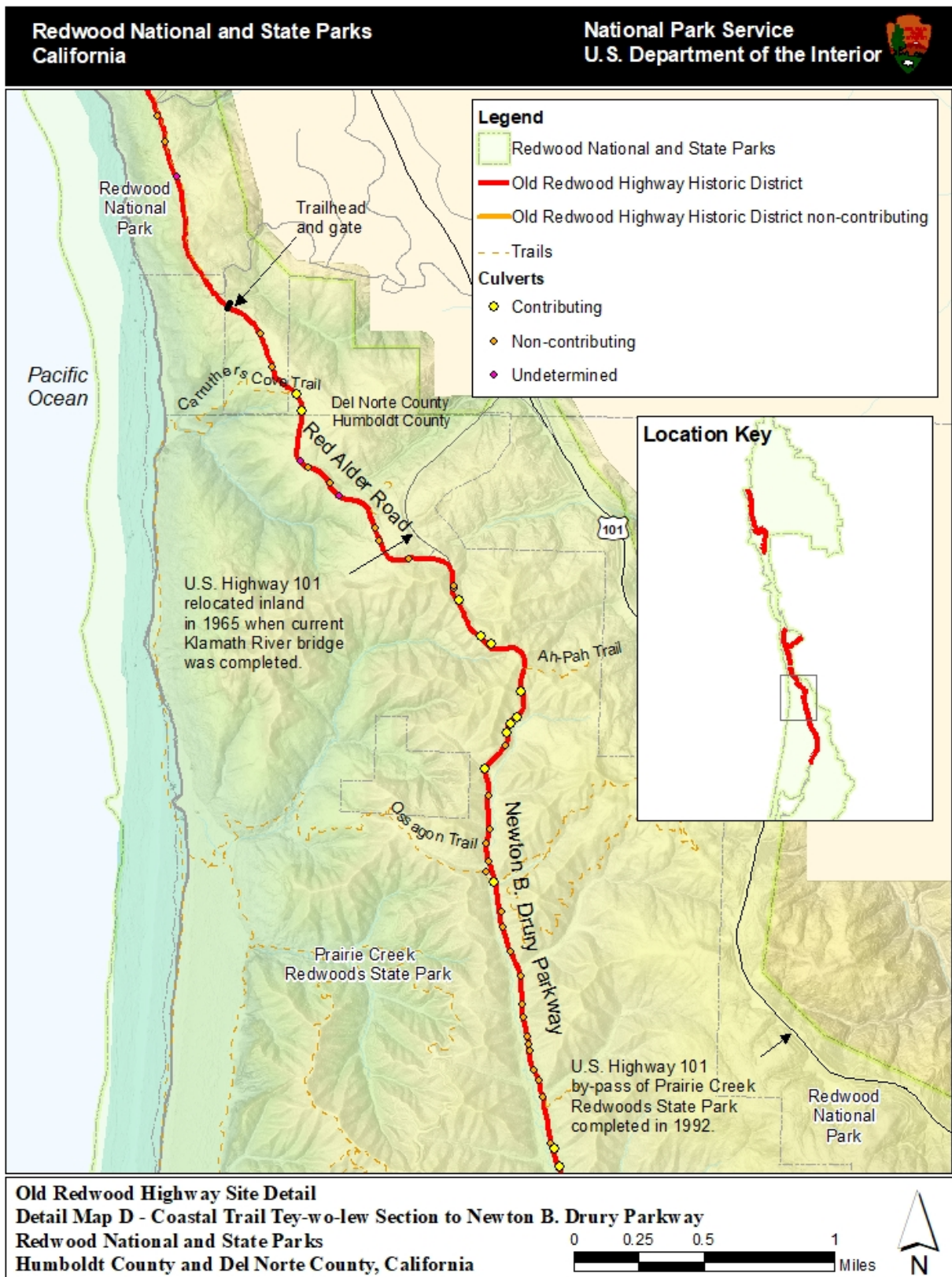
Site Plan

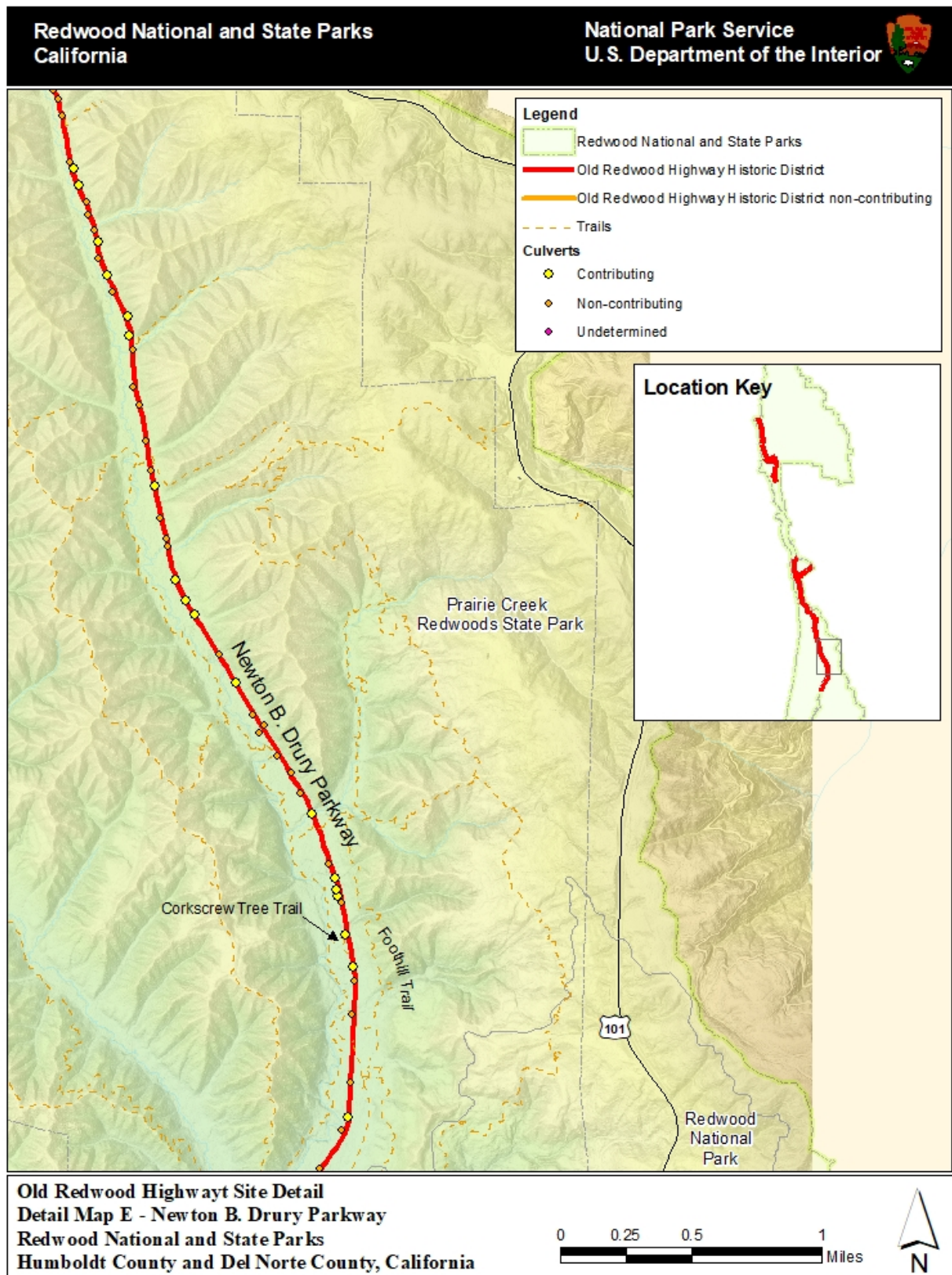


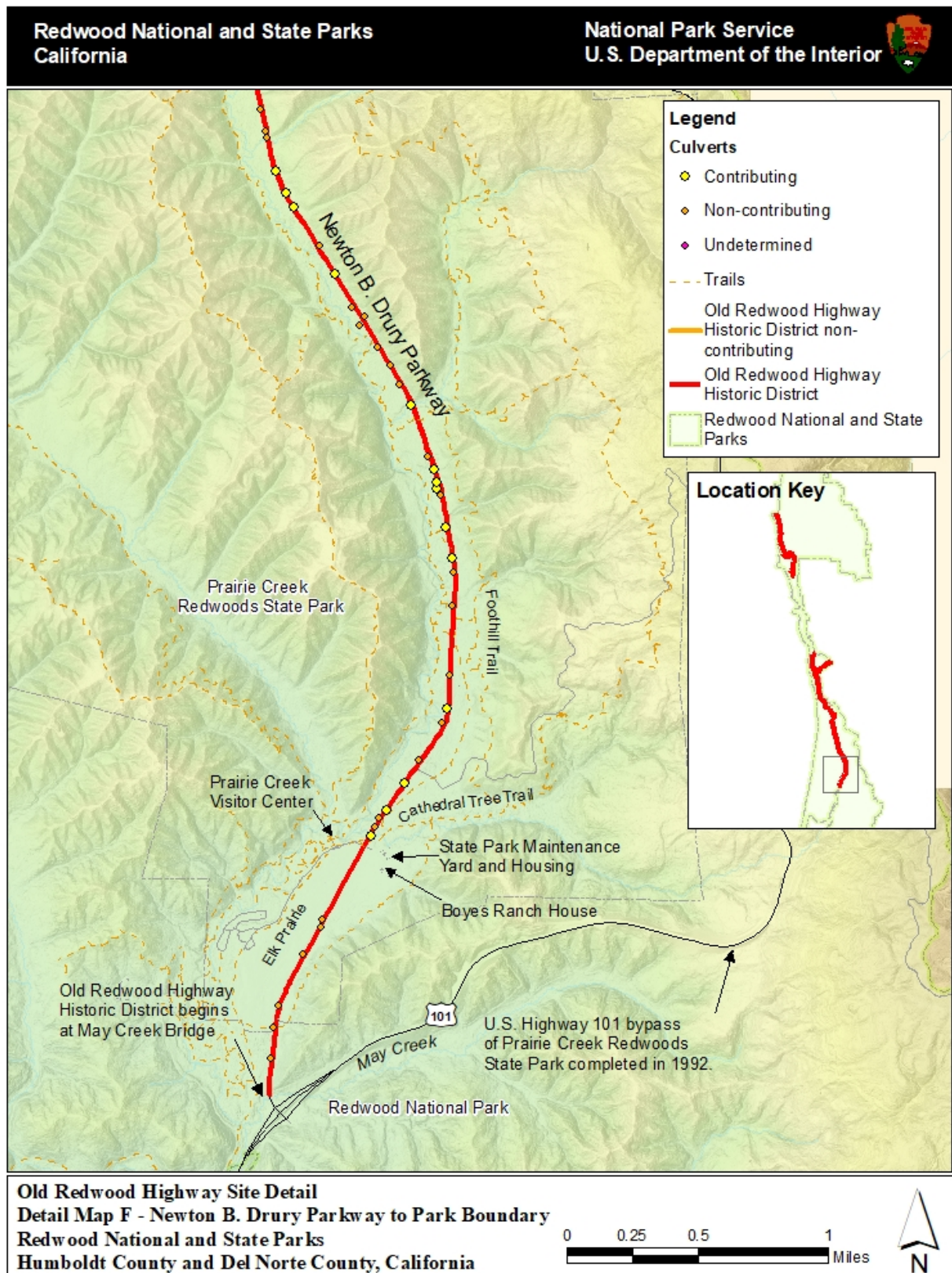












Inventory Unit, Property Level and CLI Numbers

Inventory Unit Name:	Old Redwood Highway Historic District
Inventory Unit Size:	307.9 acres
Property Level:	District
CLI Identification Number:	700007
Parent CLI Name:	none
Parent CLI Identification Number:	none

CLI Hierarchy Description

CLI Hierarchy Description:	There is no parent landscape.
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Park Information

Park Name and Alpha Code:	Redwood National Park (REDW)
Park Organization Code:	8480

Concurrence Status

Inventory Status:	Complete
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Completion Status Explanatory Narrative:

Fieldwork, historical research, and document drafts were undertaken beginning in 2012 by Vida Germano, Pacific West Regional Cultural Landscape Coordinator, and Bradley Pavlik, Pacific West Region Historical Landscape Architect. The historical research and history were completed in 2017 by Timothy Babalis, Environmental Historian, Pinnacles National Park. Additional fieldwork, historical research, and writing the document was completed by Kevin McCardle, Historical Landscape Architect at Redwood National Park, assisted by interns Molly Baptista, Emily Uemura, and Joni Emmons from 2015 to 2017. The document was completed by Kevin McCardle. The National and State Park superintendents concurred in July 2022. SHPO concurred on its eligibility in December 2021.

Concurrence Status:

Redwood National Park Superintendent Concurrence:	01/04/2022
State Park Region Superintendent Concurrence:	01/05/2022
National Register Eligibility:	12/30/2022
National Register Concurrence:	TBD

National Register Concurrence Narrative:

Two segments totaling approximately 5 ½ miles of the Old Redwood Highway within Redwood National and State Parks were listed in the National Register of Historic Places on December 17, 1979. The boundary of the National Register listed district is described as a 75 foot strip of 50 acres within a defined box drawn on the nomination map (see Figures 2, 3, and 4). It is listed as a structure of local significance in the categories of transportation and engineering, and a period of significance of 1919 to 1923.

Although not explicitly stated on the nomination form, it is significant under Criterion “A” - event or associated with a historic trend - and “C” - design or construction - which has properties significant as representatives of the manmade expression of culture or technology.

The total length of Old Redwood Highway documented within this CLI is 25.6 miles. The 20.1 miles of Old Redwood Highway Historic District not listed on the National Register has not been previously evaluated for National Register eligibility.

Geographic Information & Location Map

Inventory Unit Boundary Description:

Boundary Description

The Old Redwood Highway is a historic district consisting of the former highway totaling 25.6 miles, in two non-contiguous locations within Redwood National and State Parks. The district boundary is 50 feet to either side of the roadway centerline. Approximately 5 ½ miles of this district road has been listed in the National Register of Historic Places. The district begins at the north end on Enderts Beach Road at the Redwood National Park boundary, south of the U.S. Highway 101 intersection, and continues south to the Crescent Beach Overlook and the Coastal Trail Nickel Creek Section. The segment listed in the National Register begins where the Old Redwood Highway leaves the current Coastal Trail at Nickel Creek and continues to the bluffs above the ocean coast. This segment on the cliffs above the ocean to where it rejoins the Coastal Trail Damnation Creek Section to the south is abandoned and predominantly buried and undermined by landslides. The Old Redwood Highway joins the Coastal Trail Damnation Creek Section within Del Norte Coast Redwood State Park where it continues inland and south until it intersects with the current U.S. Highway 101 (Redwood Highway). The final segment included in the National Register is south of the Klamath River at Coastal Drive beginning at the Klamath Beach access gate to the intersection with Alder Camp Road. Alder Camp Road is part of the Old Redwood Highway Historic District and was constructed when the first bridge over the Klamath River was completed in 1926 and the Coastal Drive segment was then decommissioned. From the intersection of Alder Camp Road and Coastal Drive the Old Redwood Highway continues south on the bluffs above the coastline as the Coastal Trail Tey-wo-lew Section, and then inland along Red Alder Road. The Old Redwood Highway then continues south along Newton B. Drury Parkway until the May Creek Bridge just north of the current U.S. Highway 101 (Redwood Highway).

Boundary Justification

The boundary includes formerly designated sections of the Redwood Highway within the boundaries of Redwood National and State Parks. The 50-foot boundary to either side of the road centerline includes features such as turnouts, culverts, memorial plaques that note the preservation efforts of coastal redwood groves that give the road much of its current character.

The segments reflect highway design beginning with planning and land purchases in 1919. Highway construction and design rapidly evolved through the decade and the final segment of the former highway was constructed completed in 1930. Later changes reflect the increasing desire for efficient, commercial transportation in state highways after World War Two, a goal that was formalized by the state in 1952 through legislation.

GIS File Description:

State and Counties:

State: California
Counties: Humboldt and Del Norte

Size (Acres): 308 acres

Boundary UTMS:

Note: All points are NAD 83, Zone 10N, and differentially corrected

Source	Notes	Easting	Northing	ID
GPS	Northern start of district at park boundary	404349.0	4620399.1	1
GPS		405060.7	4618404.1	2

GPS	<i>Begin non-contributing segment</i>	404896.7	4617864.4	3
GPS	<i>End non-contributing segment</i>	404931.1	4617718.9	4
GPS		405231.7	4617156.6	5
GPS	<i>Begin non-contributing segment</i>	405076.9	4616970.1	6
GPS	<i>End non-contributing segment</i>	405505.6	4614819.0	7
GPS		405469.8	4614156.3	8
GPS		406866.8	4614386.4	9
GPS		406843.7	4612023.0	10
GPS	<i>End northern segment</i>	407091.7	4610605.9	11
GPS	<i>Begin segment at Coastal Drive</i>	410299.1	4598792.9	12
GPS	<i>Begin segmeny at Alder Camp Road</i>	412802.1	4597464.6	13
GPS	<i>Intersection</i>	410214.5	4595967.1	14
GPS	<i>Begin non-contributing segment</i>	410905.6	4593024.1	15
GPS	<i>End non-contributing segment</i>	410925.4	4592909.0	16
GPS		411274.7	4591738.3	17
GPS		412802.6	4589932.5	18
GPS	<i>Southern end of district at May Creek Bridge</i>	414036.9	4578096.3	19

Location Map:

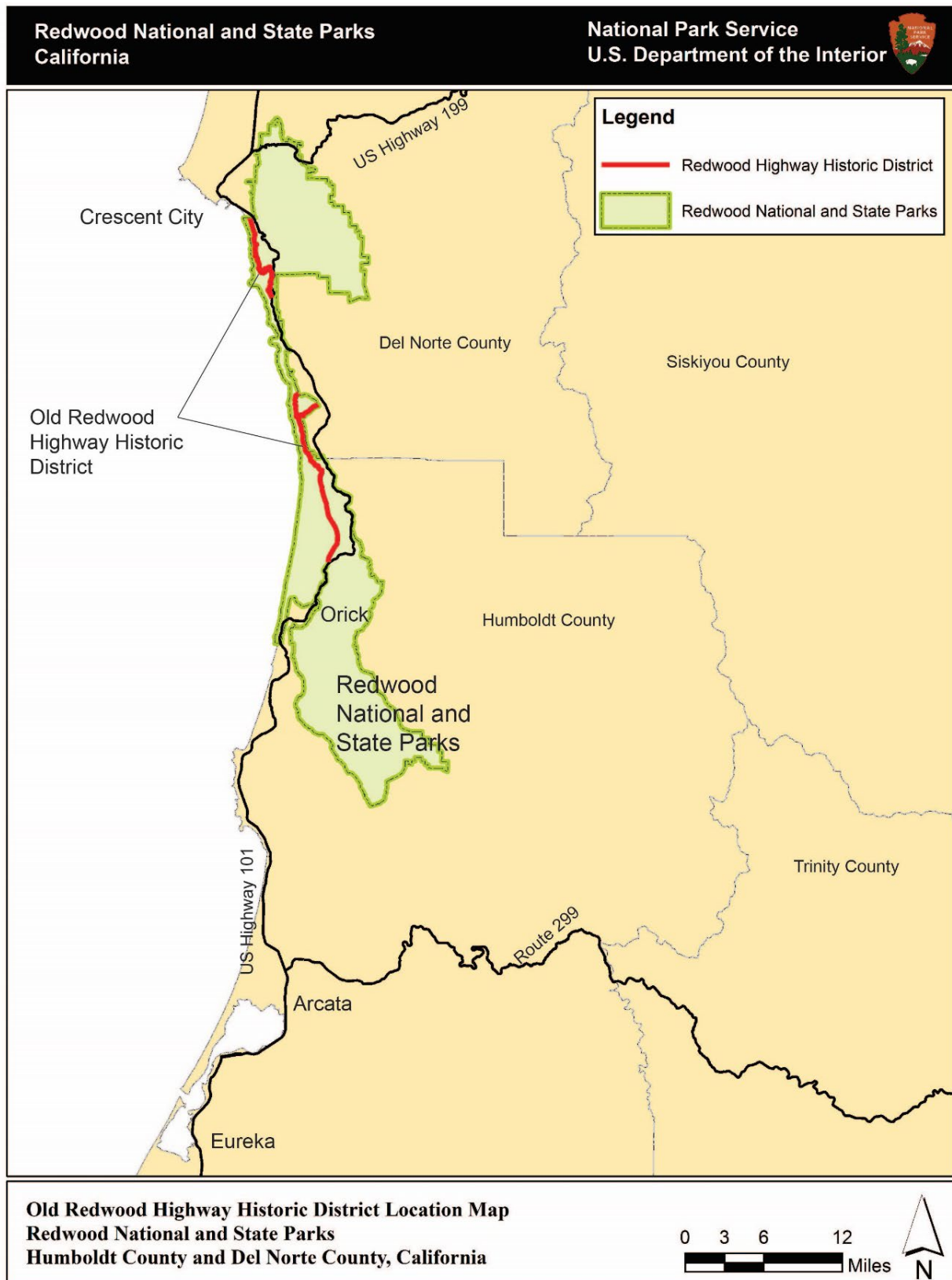


Figure 8. Location of the Old Redwood Highway Historic District (NPS 2018).

Management Information

General Management Information

Management Category: B: Should be Preserved and Maintained

Management Category Date: 01/04/2022

Management Category Explanatory Narrative:

The Old Redwood Highway meets the criteria for Category B – Should be Preserved and Maintained. A portion of the inventory unit is listed in the National Register under Criteria A and C. The inventory unit is compatible with the park's legislated significance.

NPS Legal Interest

Type of Interest: Fee Simple, Federal and State

Public Access

Type of Access: Other restrictions

Public Access Explanatory Narrative:

Access to the property has no restrictions and is accessible by vehicle along a few segments and by foot or bicycle on the remaining existing segments. Geologic instability has closed the coastal segment between Nickel Creek and where it joins the Coastal Trail Damnation Creek Section. This area is unsafe due to continued instability and landslide potential.

Adjacent Lands Information

Do Adjacent Lands Contribute? Yes

Adjacent Lands Explanatory Narrative:

While this Cultural Landscape Inventory only documents portions of the Old Redwood Highway that were abandoned as a highway and are owned and managed by Redwood National and State Parks (RNSP), the overall Redwood Highway began in San Francisco, California, and terminates in Grants Pass, Oregon. The overall Old Redwood Highway was documented through an Historic American Engineering Record report. There are also additional adjacent lands within RNSP that relate to the Old Redwood Highway Historic District through history or use.

Boyes Ranch

In 1905 William Boyes purchased a 320-acre farm with a dairy and orchard from Andrew Harris. It was noted as a popular stop along the county road, and the Boyes established a place that travelers could get a room or a meal. When the Old Redwood Highway, now Newton B Drury Parkway, was constructed it divided the ranch. Today, east of the Parkway are remnants of their orchard that includes walnuts, apples, and pears; and a craftsman-style house built by the Boyes about 1924. The meadow to the west was cultivated for grasses and grains.⁴ The house is currently used as park housing for state park employees. The ranch has not been formerly evaluated but is currently being documented in a separate CLI.

⁴ Hood and Roland. *Cultural Resources*. 1983. Pgs. CR94-CR95.

State Park Maintenance Yard and Housing

Directly behind of the Boyes House is a maintenance yard with small offices buildings, numerous sheds, employee housing, and garages. Behind and to the north of the Boyes House are three houses and garages, several outbuildings, and a water tank. One of the houses is currently used as offices and the garages have been converted into housing. Most of these buildings and structures were built between 1948 and 1950 with some added later, notably seasonal housing to the east of the maintenance yard. These buildings and landscape have not been formally evaluated recently but are currently being documented in a separate CLI.⁵

CCC Camp

Across the parkway from the Boyes house was a camp for CCC Company 1904 from 1933 to 1936. The camp had barracks, shops, a post office, and recreational fields. The most prominent extant building of the CCC tenure is the rustic Superintendent's House, now the Visitors Center. Much of the material used was salvaged redwood trees removed for the Redwood Highway in late 1928 and later cleaned-up by the CCCs.⁶ The CCC company developed visitor facilities including trails, fences, and campgrounds in newly acquired state lands along the north coast. They cleared away fallen trees and debris from the previous construction of the Redwood Highway, as well as removing an auto camp and barn within Elk Prairie.⁷ The camp and CCC facilities have not been formerly evaluated but are currently being documented in a separate CLI. The fences along the Parkway in Elk Prairie are styled after the CCC constructions in the same locations but are modern. The benches at this location are also styled after benches the CCC produced.

World War Two Radar Station

West of Coastal Drive is the World War Two Radar Station. This site was listed in the National Register of Historic Places in 1978.⁸ Designated as Station B-71 on November 6, 1942, it was the northernmost California station in a network of 72 proposed stations stretching from the Canadian border to Mexico, 65 of which were built. The Klamath station was converted to emergency rescue service in 1944 and was one of only 22 radar stations on the Pacific Coast that remained operational until the end of the war. On the site remains the Power Building and Operations Building built of cement block but clad with wood siding meant to disguise the buildings as farm structures.

Trails leading from the Old Redwood Highway

There are several trails that link to the old highway. Many of the trails generally follow Native American routes, some follow old roads to mining operations along Gold Bluffs Beach, some follow logging access roads. Some of these are linked together and new trails created for hiking and recreation by the State Parks and NPS.

Prairie Creek Redwoods State Park

Cathedral Trail

The initial trail heading inland from Elk Prairie follows the historic Ah-Pah Trail from the former highway until the current trail continues north as the Rhododendron Trail, possibly near the parking area. The historic trail and Native American route, went east to the Klamath River and a village site referred to as Surper on 1948 Metsker maps, and then north to C.W. Ward's Ranch, a hunting and fishing destination.⁹

⁵ Baxter, Scott. *DPR 523 site records*.

⁶ Hood and Roland. *Cultural Resources*. 1983. Pgs. CR95-CR96.

⁷ Peterson. *DPR site record CCC Camp*.

⁸ NPS. *CLI for Station B-71 World War Two Radar Station*, 2010.

⁹ Bearss, 138

Foothill Trail

Beginning on the east side of the parkway near the Visitors Center the Foothill Trail travels north and roughly parallels the parkway to Brown Creek. This portion of the trail follows the 1894 Wagon Road built by the county and was eventually displaced by the Redwood Highway in 1928.¹⁰

Corkscrew Tree Trail

Approximately one mile north of the Visitors Center on Newton B Drury Parkway, a short 100-foot trail leads to a tree with a twisting growth pattern called the “Corkscrew Tree.” This tree is seen on old postcards and the trail leading to it likely dates to the creation of the highway, possibly earlier. It is currently part of Prairie Creek Trail that roughly parallels the creek to the west of the parkway.

Ossagon Trail

This trail follows a former road that lead to mining operations on Gold Bluffs Beach as well as the former Huggins Farm and home site.¹¹

Carruthers Cove Trail

About one mile north from the Parkway on Red Alder Road a one-mile trail drops about 500 feet to the beach at Carruthers Cove. This trail lead to cabins and mining operations on the north end of Gold Bluffs Beach. It likely follows a route described in early mining accounts and referred to as the Trinidad to Klamath Trail, or Coastal Trail, used before the 1894 Wagon Road.¹²

Ah Pah Interpretive Trail

The initial section of trail follows a road that appears on 1938 Metsker maps that historically traveled east and followed Ah-Pah Creek. This was likely an access road to timber stands given most of the landowners near the road were timber companies.

Grove Trail

Hope Creek Trail

Little Creek Trail

Moorman Pond Trail

Prairie Creek Trail

Rhododendron Trail

South Fork Trail

Del Norte Coast Redwoods State Park

Damnation Creek Trail

This two-mile trail leads from Highway 101, across the Old Redwood Highway, and down about 1000 feet to the ocean beach following a historic route inland from the beach.¹³

Redwood National Park

Flint Ridge Trail

The parking area and the western segment of the trail were part of the former site of the Hamilton Hotel and Crivelli Ranch. What remained of the structures were demolished by NPS in the 1970s and the parking area expanded in the 1980s.¹⁴

¹⁰ Hood and Roland, CR-132

¹¹ Soulliere, 27

¹² Bearss, 134

¹³ Hood and Roland, CR-100

¹⁴ Baker and Roscoe, 1981

*Coastal Trail Reroute
Crescent Beach Overlook Trail
Flint Ridge Trail*

Contributing FMSS Assets

Note: features within state park lands are not typically entered into FMSS

Contributing feature	FMSS location	FMSS asset
Enderts Beach Road	3456	
Enderts Beach culvert	3456	493471
Enderts Beach Cushing Creek culvert	3456	493473
Coastal Trail - Nickel Creek Section	3424	
Coastal Trail - Nickel Creek Section 12-foot culvert		not listed
Abandoned section culvert at Nickel Creek		not listed
Coastal Drive	3450	
Alder Camp Road	3443	
Alder Camp Road culvert	3443	140305
Alder Camp Road culvert	3443	140306
Alder Camp Road culvert	3443	140313
Douglas Memorial Bridge abutment		not listed
Coastal Trail - Tey-wo-lew Section	243366	
Coastal Trail - Tey-wo-lew Section culvert	243366	134695
Coastal Trail - Tey-wo-lew Section guard posts		not listed
Red Alder Road	3447	
Red Alder Road culvert	3447	291589
Red Alder Road culvert	3447	291591

National Register Information

Existing National Register Status

National Register Landscape Documentation: Entered – Inadequately documented

National Register Explanatory Narrative:

Two segments, totaling approximately 5 ½ miles, of the Old Redwood Highway within Redwood National and State Parks were listed in the National Register of Historic Places on December 17, 1979. It is listed as a structure of local significance in the categories of transportation and engineering, and a period of significance of 1919 to 1923. Although not explicitly stated on the nomination form, it is significant under Criterion “A” - event or associated with a historic trend - and “C” - design or construction - which has properties significant as representatives of the manmade expression of culture or technology.

The CLI builds upon the nomination to describe the contributing landscape characteristics and features that contribute to the National Register property.

National Register Eligibility

National Register Concurrence:	Eligible – Keeper
Contributing/Individual:	Individual
National Register Classification:	District
Significance Level:	State
Significance Criteria:	A – Associated with events significant to broad patterns of our history C - Design or construction
Criteria Considerations:	None
Period of Significance:	1919-1930
Historic Context Theme:	Transportation by Land and Air (Transportation and Engineering)
Subtheme:	Planned Roads Touring Roads, and Parkways
Historic Context Theme:	Recreation
Subtheme:	Tourism
Historic Context Theme:	Creating Social Institutions and Movements
Subtheme:	Environmental Movement

Area of Significance

Area of Significance Category:	Landscape Architecture Engineering
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NRIS Information:

Alpha Code/NRIS Name (Number) 79000253

National Historic Landmark Information

National Historic Landmark Status: No

World Heritage Site Information

World Heritage Site Status: Yes
World Heritage Site Date: 9/5/1980
World Heritage Category: Natural

Statement of Significance

Summary

The significance of the Redwood Highway is closely related to the automobile and the meaning it had for American culture during an era of rapid development and evolution. The portion of the Redwood Highway singled out for documentation in this inventory—the Old Redwood Highway—is associated with an early stage when automobiles were first entering popular usage in the United States. It derives its unique significance from the leisurely experience of scenic beauty that was afforded the early automobile user and is reflected in the Old Redwood Highway's path through the dramatic landscape of the coastal redwoods and rugged northern California coast. The experience of auto tourism was fundamentally altered in the second half of the twentieth century when highway designs substituted speed and efficiency for the intimate immersion in the surrounding environment. Extant segments of the Old Redwood Highway preserve the feelings and associations of this early period of motoring and recall a time when the automobile was still valued as a means for appreciating natural scenery and a potential instrument of nature conservation.

National Register Significance Criteria:

Criterion A

Contributing segments of the Old Redwood Highway are significant under Criterion A for their association with events that have contributed to the broad patterns of U.S. history within the state and local context. The Old Redwood Highway embodies an era when the limitations of early automobile technology (and highway engineering) allowed, and even required, a leisurely and intimate experience of the redwood forest and surrounding landscape. During the first few decades of the twentieth century, when automobiles were entering popular usage, the new technology offered a unique way of experiencing the natural beauty of scenic landscapes such as northern California's redwood forests. As one historian has observed, the automobile rendered formerly distant and remote landscapes accessible to the auto tourist through the benefits of modern technology but did so in a manner that preserved a premodern way of experiencing them. In contrast to the railroads, the predominant mode of efficient long-distance travel at the end of the nineteenth century, "cars returned a human scale to the machine, a sense of independence and intimacy to the traveler, and a sense of natural flow to travel time."¹⁵

Many of the characteristics that defined early automobile travel are reflected in the Old Redwood

¹⁵ Gabrielle Barnett, "Drive-by Viewing: Visual Consciousness and Forest Preservation in the Automobile Age," *Technology and Culture* 45.1 (2004): 42; and Warren J. Belasco, *Americans on the Road: From Autocamp to Motel, 1910-1945* (Cambridge, Mass.: MIT Press, 1979), p. 20.

Highway. The original highway immersed the driver in a scenic experience, alternately traveling through dense redwood groves and along open coastal bluffs. Large trees were left abutting travel lanes and tight curves that followed the topography often limited the speed of motorists, resulting in an experience that lent itself to the appreciation of nature and natural beauty, making the auto tourist a logical ally of conservationists and an advocate for the preservation of the redwood forests. Many of the early leaders in redwood conservation, such as the founders of the Save the Redwoods League, were themselves auto enthusiasts. Seeing an affinity between motoring—in its early form—and a love of nature, they fitted their conservation strategy to the interests of motorists, emphasizing preservation of roadside easements and scenic vistas. Even the redwood state parks, which these same conservationists were instrumental in creating, were planned and laid out in relation to the highway they adjoined (see Figure 25).

By the second half of the twentieth century, the intimate experience of early auto tourism was lost as automobiles evolved to provide greater and greater speed. The Old Redwood Highway, like highways everywhere, was proposed to be realigned, widened, and otherwise re-engineered to accommodate faster, more efficient vehicles. In 1952, the State Highway Commission determined to upgrade much of the Redwood Highway to modern freeway standards, a process that was to be implemented by stages over the next four decades. Those portions of the Old Redwood Highway that were abandoned over the course of these improvements or relegated to other purposes now preserve a unique period in the evolution of automobile travel.

Criterion C

Contributing segments of the Old Redwood Highway are significant under Criterion C for their association with construction and design within the state and local context. The Old Redwood Highway demonstrates the evolution of design and construction of early highway construction as priorities shifted from a scenic destination to efficient transportation. The earlier roadways meander through the redwood trees, with many giant trees left adjacent to the travel lane, and along the coastal bluffs. Creating roads on the scenic coastal bluffs highlighted the dramatic scenery of northern coastal California but were not always successful. The coastal section in Del Norte County had to be rerouted inland less than fifteen years after constructed because the it had proven to be more unstable than originally thought and difficult to maintain. Other coastal sections remain and continue to be used. There are minimal constructed features such as retaining walls, or architectural adornment along the road, and minimal small-scale features were used. The most architectural elements are the concrete culverts that are typically not visible from the roadway.

National Register Period of Significance: 1919 - 1930

The historic significance of the Old Redwood Highway, as determined by this study, extends from 1919 to 1930. This period begins in the year that Del Norte County acquired easements for the proposed highway, marking the first important step taken in the design of the road within the study area. The county easements would determine the alignment of the future highway where it deviated from the existing county wagon road. Actual construction of the new highway within the study area would begin sometime in 1920. The period of significance ends in 1930 when the final segment, what became Newton B Drury Parkway, was paved.

A new era in transportation emerged after World War Two when the State Highway Commission proposed to widen much of the Redwood Highway and transform the system into a modern freeway. This was in response to dramatic post-war increases in auto traffic. Plans would be implemented over the next four decades and were expressed, within the study area, by the design of the 1965 realignment following the loss of the Douglas Memorial Bridge, and in the 1992 bypass around Prairie Creek Redwoods State Park.

Chronology & Physical History

Cultural Landscape Type and Use

Cultural Landscape Type:	Designed
Current and Historic Use/Function	
Primary Historic Function–Major Category:	Transportation
Primary Historic Function–Category:	Road
Primary Historic Function:	Automobile
Primary Current Function–Major Category:	Transportation
Primary Current Function–Category:	Road
Primary Current Use:	Automobile
Primary Current Function–Major Category:	Transportation
Primary Current Function–Category:	Pedestrian
Primary Current Use:	Hiking Trail

Current and Historic Names

Redwood Highway	Historic
California Route 1	Historic
U.S. Highway 101	Historic
Old Redwood Highway	Current
Enderts Beach Road	Current
Coastal Trail Nickel Creek Section	Current
Coastal Trail Damnation Creek Section	Current
Coastal Drive	Current
Alder Camp Road	Current
Coastal Trail Tey-wo-lew Section	Current
Red Alder Road	Current
Newton B. Drury Parkway	Current

Ethnographic Associated Groups

Ethnographic Study Conducted:	Yes (restricted)
Ethnographic Associated Groups:	Yurok and Tolowa
Association Historic, Current or Both:	Both Current and Historic

Chronology

Year Begin	Year End	Event	Annotation
1851	1851	Settled	Klamath City was briefly established at the mouth of the Klamath River.
1853	1853	Settled	Crescent City was established.
1854	1854	Established	The first railroad in Humboldt County was in operation.
1858	1858	Built	Puncheon roads in the Humboldt County and Del Norte County area were constructed.
1885	1885	Developed	The first practical automobiles were developed in Europe by Karl Benz and Gottlieb Daimler.
1887	1887	Built	The Howland Hill Road/ Gasquet Toll Road completed from Crescent City's harbor to Sailors Diggings, Oregon.
1887	1894	Built	Del Norte and Humboldt counties constructed a wagon road generally following existing trails. The road extends as far south as Trinidad and eventually extended to Eureka, replacing schooners on the Pacific Ocean, which were the primary mode of transportation of goods in the area.
1895	1895	Altered	The county contracted the river ferry service at Klamath River, which replaced Yurok tribal members with European Americans.
1895	1895	Established	The California legislature established a State Bureau of Highways to study the potential for a comprehensive state highway system.
1896	1896	Planned	The State Bureau of Highways recommended a highway extending from Sausalito, on the north shore of San Francisco Bay, to the Oregon border.
1900	1900	Developed	Approximately 8,000 registered automobiles existed in the United States.
1908	1908	Developed	Ford introduced the Model T as a car for a mass market.
1910	1910	Developed	Approximately 500,000 registered automobiles existed in the United States.
1910	1910	Developed	California voters approved a bond for \$18 million with the first State Highway Act to begin state road construction projects, including Route 1 (The Redwood Highway).
1912	1912	Built	Southern portions of the Redwood Highway were under construction.
1915	1915	Developed	California voters approved a second bond for highway construction for \$15 million.
1916	1916	Developed	The Federal-Aid Road Act of 1916 established 50/50 federal-state matching share.
1917	1918	Developed	On April 6, 1917 the United States entered World War I. The war concluded on November 11, 1918
1917	1917	Planned	The highway route survey was completed.
1917	1917	Visited	Save the Redwoods League organizing members first visited the redwood groves along segments of the newly constructed Redwood Highway.

Year Begin	Year End	Event	Annotation
1918	1918	Paved	Southern portions of the Redwood Highway were paved from Sausalito to Healdsburg in Sonoma County, and several isolated segments were completed or underway as far north as Arcata in Humboldt County.
1918	1918	Established	Save the Redwoods League was founded.
1919	1919	Developed	California voters approved a third bond for highway construction for \$40 million.
1919	1919	Purchased	Del Norte County Board of Supervisors began securing rights-of-way from Crescent City south to Wilson Creek.
1919	1919	Purchase	Save the Redwoods League purchased the first redwood groves along the South Fork of the Eel River, which would become part of Humboldt Redwoods State Park.
1920	1920	Developed	Approximately 8,000,000 registered automobiles exist in the United States.
1923	1923	Land Transfer	The family of Joseph Russ donate the 160-acre Joseph and Zipporah Russ Grove north of Orick, which led to the creation of Prairie Creek Redwoods State Park.
1923	1923	Developed	California first introduced a two-cent per gallon gasoline tax.
1923	1923	Built	A bridge over Wilson Creek at False Klamath Cove was completed by DeMartin.
1923	1923	Built	Redwood Highway was passable through northern Humboldt and Del Norte County utilizing portions of the county wagon roads, but the highway was not yet completed.
1923	1925	Destroyed	Several hundred feet of highway on the coastal bluffs seven miles south of Crescent City and south of Nickel Creek were destroyed by landslides.
1924	1924	Land Transfer	George Schwartz purchased and donated to the State of California 157 acres of redwood forest along the coast, which led to the creation of Del Norte Coast Redwoods State Park.
1925	1925	Established	The Bureau of Public Roads and the American Association of State Highway and Transportation Officials (AASHTO) adopted a nationwide standard for numbering and signing highways.
1926	1926	Built	Douglas Memorial Bridge over the Klamath River was completed.
1926	1926	Built	Beginning in 1926, approximately 30 miles of Redwood Highway was improved or built in Humboldt and Del Norte Counties. Improvements include widening roadways, constructing pullouts, and enlarging curve radii.
1927	1927	Established	The California State Parks Commission was created.
1927	1928	Improved	The southern portion of the highway from the southern Del Norte County line to Richardson Creek, a total of 3.5 miles, was graded and surfaced (CHPW 1927 Dec, p 31). The work included clearing right of way and constructing culverts (CHPW 1927 Feb Mar, p 36).

Year Begin	Year End	Event	Annotation
1928	1928	Improved	The highway located on the cliff south of Crescent City was widened, and some sharp curves were removed (CHPW 1927 Feb Mar, p 36). The newly widened alignment from Crescent City fifteen miles to the south was surfaced and oiled (CHPW 1928 May Jun, p 27).
1928	1928	Improved	From Orick to 8.1 miles north, grading and surfacing was completed, and two bridges were constructed on the highway. From Klamath to the south 6.7 miles, grading and surfacing work was undertaken (CHPW 1928 May June 28).
1928	1928	Improved	From Orick to the Del Norte County line, fifteen miles of highway was widened from 24 to 30 feet that was surfaced with crushed gravel for a 20-foot travel way. Over 65 acres of forest was cleared, including the removal of 1900 trees, and blasting of down logs and stumps during the six-month construction. At the northern end of this segment, underground drainage required the installation of 4,000 feet of six-inch tile drain (CHPW 1928 Nov. Dec. 16-17).
1929	1929	Planned	Fredrick Law Olmsted, Jr.'s State Park Survey of California was released in 1929. In the survey, recommendations were made to expand the extent of protected redwood groves in Prairie Creek Redwoods State Park and Del Norte Coast Redwoods Park, among other locations along the coast (HAER, 43).
1929	1929	Land Transfer	Frank Stout donated 44 acres of redwood forest to the State of California, which eventually became Stout Grove of Jedediah Smith Redwoods State Park.
1930	1930	Improved	From Orick to Del Norte County line bituminous asphalt is applied to the highway (CHPW May 1931 33).
1930	1930	Developed	Approximately 23,000,000 registered automobiles existed in the United States.
1931	1931	Planned	California contracted with Olmsted Brothers to investigate route alternatives north of Wilson Creek to bypass unstable coastal bluff route.
1933	1936	Built	A CCC Camp was established in Elk Prairie. The CCC crew cleared stumps and logs left behind by the highway construction, constructed split rail fencing along the highway, and built trails and campgrounds.
1934	1934	Built	The 9.9-mile bypass of the unstable coastal section north of Wilson Creek was completed.
1941	1945	Developed	The United States entered World War II on December 7, 1941 and fighting concluded with the Japanese surrender August 15, 1945.
1952	1952	Planned	The California State Legislature directed the Highway Commission to study the feasibility of upgrading the Redwood Highway to a four-lane, high-speed freeway acknowledging rapidly increasing traffic was becoming both a safety hazard and an inconvenience for motorists.

Year Begin	Year End	Event	Annotation
1954	1954	Planned	The State Parks Commission, under the leadership of Newton Drury, reached an agreement with the Highway Commission that no further highway improvements would occur within Humboldt Redwoods State Park, and planned to build a modern freeway proceeded, bypassing the redwood groves.
1964	1964	Destroyed	December flooding on the Klamath River destroyed the Douglas Memorial Bridge and much of the town of Klamath.
1965	1965	Built	A replacement bridge over the Klamath River as built approximately one mile upstream along with four miles of highway to the south, bypassing the coastal route south of the Klamath River.
1968	1968	Established	Redwood National Park was created.
1978	1978	Established	The Redwood Expansion Act directed the Department of the Interior to acquire the necessary lands for an eastern bypass of Prairie Creek Redwoods State Park and to donate these lands to California.
1984	1992	Built	A 12-mile bypass of Prairie Creek Redwoods State Park was constructed.
2009	2009	Rehabilitated	Alder Camp Road was rehabilitated by Federal Highways, in which most culverts were replaced, the road pavement was replaced, and a parking area was constructed on the north end of the road.
2011	2011	Altered	The Coastal Trail Tey-wo-lew Section of the Old Redwood Highway within Redwood National was permanently closed to vehicles due to continuing landslides.

Physical History

Transportation Precedents

The Native peoples of the redwood country in present Del Norte and northern Humboldt counties relied on footpaths to move about the land. Major rivers, such as the Klamath, were their highways, which they navigated by canoe. The European Americans who first began arriving in significant numbers around 1850 in pursuit of precious metals followed and expanded these footpaths. Supplies were brought by sea to coastal ports such as Trinidad or Crescent City and carried overland to interior mining camps along many of the same trails that the Native Americans had long since established, though the European Americans utilized horses and pack animals. Some of the earliest mining trails originated at Trinidad, which was an important supply depot for the prospectors. One, which was in use by summer of 1850, led north along the coast as far as Big Lagoon, then turned inland, crossing the first low ridge and descending to Redwood Creek at Tall Trees Grove. From here the trail climbed the Bald Hills and continued east to the Klamath River where the principal mining camp was located at Orleans Bar. Another branch of this Trinidad trail continued north from Big Lagoon along the coast and to the mouth of the Klamath River, where the small community of Klamath City briefly flourished after 1851. Above the Klamath River mouth, European Americans followed the Native American trails north at least as far as present-day Crescent City. Much of the original trail simply followed the coastline and was accessible only at low tide. After the establishment of Crescent City in 1853, the route was gradually improved with portions of new trail constructed farther inland between Nickel Creek and Wilson Creek at False Klamath Cove. South of Wilson Creek, the trail continued along the high coastal bluffs to Requa. With some variation, this was the general route later taken by the county wagon road and, following that, the Old Redwood Highway.¹⁶ Another important early route was the Cold Spring Mountain Trail, which led east from Crescent City over the interior mountains to the newly opened mining districts of the Illinois Valley in Oregon Territory. An improved trail led over Howland Hill and remains a direct precedent for the northernmost segment of the Redwood Highway. Present-day Highway 199, and part of the original Redwood Highway, roughly parallels or follows this route.¹⁷

Large quantities of burdensome goods and supplies were conveyed over these trails in pack trains, some numbering as many as 50 animals. The slow and arduous journey made the need for better roads apparent from an early date. By 1855, logging was also becoming an important industry in the redwood country and soon replaced mining as the principal economic activity of the region. Logging created an even greater demand for improved means of transportation, one response to which was the construction of railroads. Several were built over the next few decades, but all of these were short lines, designed to carry timber from nearby logging operations in the interior to coastal centers at Crescent City and Humboldt Bay, where logs were milled and prepared for export by sea. The difficult terrain of the region prevented development of a more extensive railroad network (a line connecting the region with San Francisco would not be completed until 1914). Ocean-going vessels instead provided the main link to the outside world, while local transportation remained largely dependent on pack trains and wagons.¹⁸

Within a decade of settlement, pack trains were giving way to more efficient freight wagons (and stages for passenger service) as European Americans began widening the most heavily used trails. One of the earliest of these improved roads was the Crescent City Plank Road. Completed in 1858, it replaced the Cold Spring Mountain Trail, connecting Crescent City with the gold mining districts of the Illinois Valley and Grants Pass to the east. It was known as a plank road because wooden planks, or puncheons, were

¹⁶ Edwin C. Bearss, "Chapter IX.A" in, *History Basic Data: Redwood National Park, Del Norte and Humboldt Counties, California* (Washington, D.C.: National Park Service, Div. of History, 1969); and Diane Hawk, *Touring the Old Redwood Highway: Del Norte County* (Piercy, Calif.: Hawk Mountaintop Publ., 2006), p. 11.

¹⁷ Bearss, *History Basic Data*, Chp. IX.A.5.

¹⁸ John Robinson, "The Redwood Highway: Part I, Early History of Transportation in the Northern Coastal Counties," *California Highways and Public Works* 43, nos. 5-6 (May-June 1964): 2-11.

placed crosswise to reinforce soft areas of the roadbed. This technique provided a dependably hard surface during the lengthy wet season and prevented wagon wheels from sinking into deep ruts but traveling across puncheons was slow and uncomfortable. The Gasquet Toll Road, completed by Frenchman Horace Gasquet in 1887, provided still better access to the Illinois Valley. His route led over Howland Hill (present Howland Hill Road) to the junction of the Middle Fork Smith River, and from there along the North Fork to the head of the watershed.¹⁹

The same year that Gasquet opened his toll road, Del Norte County began work on a coastal road that would connect Crescent City to Trinidad, and thence to Eureka and points south. In addition to providing an overland connection for Crescent City, the proposed road would also provide much-needed access for European Americans who lived along the coast but had no other means of bringing in supplies, or exporting goods, except by pack animal along the existing trail. Lewis DeMartin, who had been farming on Wilson Creek at False Klamath Cove since 1877, was among those European Americans who stood to benefit from the road and made generous contributions toward its construction, even building a bridge across Wilson Creek (this was the first of three bridges to span the creek).²⁰

The difficulty of the proposed route, as well as a shortage of funds in the county budget, delayed construction for several years, and it was not until 1894 that the county wagon road was finally completed. Much of it followed existing trails, which were simply widened, with puncheons added to accommodate heavy wagons. Grading began at the Alexander ranch, a point several miles south of Crescent City where the coastal bluff first begins to rise above the beach. From here the road continued south to Cushing Creek, then climbed White Knob (also known as Ragged Ass Hill), passed above the headwaters of Nickel Creek, and descended Damnation Ridge to Wilson Creek at False Klamath Cove. From there it turned east to High Prairie Creek and then south to the mouth of the Klamath River at Requa. The route closely approximated the old Klamath Trail until it crossed Wilson Creek. South of there, the old trail continued along the high coastal bluffs to Requa—an alignment preserved by the present-day Coastal Trail—while the county road ran inland.²¹

By late summer of that same year, the wagon road below the Klamath River was also completed as far as Trinidad. Here, too, the county road closely approximated the old trail, following the coastline south of the Klamath mouth before turning inland at Carruthers Cove and passing through the redwoods along Prairie Creek. After skirting the western edge of Elk Prairie, the road continued south along the approximate route of present Highway 101. Del Norte County considered building a bridge across the Klamath River at that time but quickly abandoned the idea as too costly. Instead, travelers continued to rely on Yurok tribal members to ferry them across the river mouth until late 1895, when Del Norte County contracted with two European Americans to operate a cable ferry. This would remain the only way for travelers to cross the lower Klamath for the next thirty years.²²

The Redwood Highway

In 1895, as the county road was seeing its first automobile traffic, the California legislature established a State Bureau of Highways to study the potential for a comprehensive state highway system. The Bureau would later become the State Division of Highways. Among the Bureau's early recommendations, appearing in a report issued the following year, was a highway extending from north from Sausalito, on the north shore of San Francisco Bay, to the Oregon border. This would eventually become the Redwood Highway.²³ Work on the proposed state highways would not get under way for more than a decade until

¹⁹ Bearss, *History Basic Data*, Ch. IX.B.1-2.

²⁰ Bearss, *History Basic Data*, Ch. IX.B.3.

²¹ Bearss, *History Basic Data*, Ch. IX.B.3.

²² Bearss, *History Basic Data*, Ch. IX.C.1.

²³ Kenneth C. Adams, "Start of Highway System," *California Highways and Public Works—Centennial Edition* (September 9, 1950): 71-80.

voters approved a bond for \$18 million in 1910 with the first State Highway Act. Although this was intended to provide full funding for the Redwood Highway—among other projects—the state was able to sell only a fraction of the bonds issued and requested that counties make up the difference. Few were able to subscribe to more than a small percentage, however, and Del Norte County, with its sparse population, was not able to purchase any. While work started on other state highways with the initial bond receipts, only the southern portions of the Redwood Highway were under construction by 1912. In the far north, where environmental challenges, and therefore costs, were greatest, little would be done for nearly a decade.²⁴

As it became apparent that the first highway bond act was inadequate to meet the state's needs, California voters approved a second bond in 1915 for \$15 million, and in 1919 a third bond for \$40 million. By then, automobile use was becoming so widespread that future construction could be funded through a tax on gasoline, and additional bond acts proved unnecessary. California first introduced a two-cent per gallon tax in 1923.²⁵

Despite interruptions resulting from World War I, progress continued on the southern portions of the Redwood Highway, and by 1918 the route was paved from Sausalito to Healdsburg in Sonoma County, with several isolated segments completed or underway as far north as Arcata in Humboldt County. A passable road was in place from Sausalito to Eureka by 1920.²⁶

Although construction would not begin for another two years on the far northern sections of the Redwood Highway, by 1917 the route had been surveyed, and in October of that year the Del Norte County Board of Supervisors began securing rights-of-way from Crescent City south to Wilson Creek. Portions of the resulting highway deviated significantly from the existing road alignment, suggesting that the surveyors were responsible for introducing a novel element to the new road's design.

Between Crescent City and Cushing Creek, the Redwood Highway paralleled the old county road on the beach. But south of Cushing Creek, the Redwood Highway clung to the high ocean bluffs for three miles rather than following the county road through the forest near the top of the ridge. The open cliffs, with their coastal scrub vegetation, provided motorists a spectacular view of the Pacific before the highway turned inland and plunged into the deep shadows of the redwood forest. The new highway then skirted the basin of Damnation Creek, descending Damnation Ridge to rejoin the county road at Last Chance Grade and continue south to False Klamath Cove. Wilson Creek was crossed several hundred yards east of False Klamath Cove on a modern reinforced concrete bridge located nearly adjacent to the original structure built by DeMartin to carry the old county road. This new bridge was completed by December of 1923.²⁷ South of Wilson Creek, the Redwood Highway made only minor deviations from the old county road (see Figure 14).²⁸

By the end of 1923, the Redwood Highway had been made passable through northern Humboldt and Del Norte Counties.²⁹ This included the connection between Crescent City and Grants Pass in Oregon, which

²⁴ Sara Amy Leach, and Brian Grogan, *Redwood National & State Parks Roads: HAER No. Ca-269* (Washington, DC: U.S. Dept. of the Interior, National Park Service, 2001), pp. 17, 20.

²⁵ Leach, *HAER*, p. 17; R.M. Morton, "Where We are Drifting in Highway Construction," *California Highways* 1, no. 8 (August 1924): 3-4; and John Robinson, "The Redwood Highway: Part II, Building the Road," *California Highways and Public Works* 43, nos. 7-8 (July-August 1964): 26. Oregon was the first state to introduce a gasoline tax in 1919.

²⁶ Robinson, "Redwood Highway: Part II," p. 29.

²⁷ The 1923 bridge is a short distance upstream of the current bridge. Remnants of the 1923 bridge remain but are outside of the RNSP boundary; "Divisions Tell of 1923 Accomplishments," *California Highways* 1, no. 1 (January, 1924): 11. This was the second of three bridges to span Wilson Creek.

²⁸ Bearss, Chp. IX.B.4

²⁹ Bearss, Chp. IX.B.4

was designated U.S. 199 that year. Although most of this route followed existing roads, such as the Gasquet Toll Road, the older alignments were graded and improved to a width of approximately 21 feet and an average grade of one per cent. A low stone parapet was constructed along portions of the highway adjoining the precipitous Smith River canyon.³⁰ These improvements were carried out with cooperation and financial assistance from the U.S. Forest Service, which managed the Siskiyou National Forest through which much of the highway segment passed (U.S. 199 was included in the Forest Highway System in 1923). Following completion of the Smith River sections, highway officials exuberantly declared that the Redwood Highway "has been uncorked by the elimination of the dreaded grade over Gasquet mountain. In the place of this monotonous climb there has been substituted an inspiring highway along Smith River, which is yet to be discovered by large numbers of motorists" (see Figure 15).³¹

One remaining impediment to travel on the northern portions of the Redwood Highway was the Klamath River, which still had to be crossed by cable ferry as late as 1926. Recognizing the inconvenience of this mode of crossing, which was both slow and undependable, the state legislature approved funding that year for a major bridge across the Klamath River. The local state representative Dr. Gustave H. Douglas introduced the legislation, but died in 1923, and the bridge is named in his honor.³² The U.S. Army Corps of Engineers issued a permit to erect the structure that year.³³ Initially budgeted at \$225,000, the Douglas Memorial Bridge ultimately cost nearly twice that amount. Steel was first considered for structure but lead engineer Stewart Mitchell ultimately decided on concrete.³⁴ The finished design consisted of five 210 foot open-spandrel arches with flanking approaches, for a total length of 1,147 feet. The bridge crossed at 51 feet above the water line, with curb-to-curb travel lanes 21 feet wide. It would be the first large reinforced-concrete bridge in California. In a gesture that seemed equal parts pride and whimsy, engineers erected four cast concrete grizzly bears, the state animal, atop peditments at either end of the bridge (see Figure 16).³⁵

The dedication of the Douglas Memorial Bridge on 17 May 1926 was a major event, attended by an estimated 3,500 persons, including California Governor Friend Richardson and Oregon Governor Walter Pierce.³⁶ Although the bridge itself was completed, the crossing would not be open for travel until the highway approaches had been realigned. The Douglas Memorial Bridge was located about three miles east of the mouth of the Klamath River where the original highway (and the old county road) met the ferry crossing. On the north bank of the river, Requa was bypassed altogether by the new approach to the south and east. The small town of Klamath would grow up around the highway at the north bridge abutment, which catered to recreational motorists that included auto camps, markets, and restaurants (see Figure 17).³⁷

³⁰ "In Smith River Canyon," [cover photo], *California Highways* 3, no. 5 (May 1926): 1.

³¹ "Forest Project to Open Smith River to Motorists," *California Highways* 2, no. 1 (January 1925): 11.

³² Bearss, 150

³³ "Divisions Tell of 1923 Accomplishments," *California Highways* 1, no. 1 (January 1924): 11.

³⁴ Stewart Mitchell had formerly worked with the Oregon highway department before being appointed resident engineer on this project. Assistant Engineer on the project was John C. Wilson. ["Bridge Department Notes," *California Highways* 1, no. 7 (July 1924): 14; and, "Bridge Department Notes," *California Highways* 1, no. 12 (November 1924): 13.] The contractor hired to do construction was F. Rolandi of San Francisco.

³⁵ Leach, *HAER*, p. 28.

³⁶ The bridge was dedicated to the memory of Dr. G.H. Douglas, former assemblyman from California's 1st district. Douglas was instrumental in seeing the bridge realized, introducing the bill to fund the project. ["Great Klamath River Bridge, Memorial to Assemblyman Douglas, to Break Barrier on Redwood Highway and End Isolation of Del Norte County," *California Highways* 3, no. 5 (May 1926): 8-9, 15.]

³⁷ Hawk, *Old Redwood Highway: Del Norte County*, pp. 11-19.

Work had begun on this highway alignment as early as 1924 in anticipation of the proposed bridge and was carried out by about 150 convict laborers based at a camp located above Requa.³⁸ By the time the Douglas Memorial Bridge had opened, this alignment was completed, but work on the southern approach would not be finished for another five months. It had been contracted out to a San Francisco-based firm which was still busily grading and surfacing two miles of new road up Richardson Creek and west to High Bluff, where the road would rejoin the existing highway and continue south along the coast. This alignment finally opened on 29 October 1926.³⁹ The former highway segment north of High Bluff to the ferry landing on the river's mouth was subsequently abandoned for highway purposes but continued to be used for local traffic and was later extended up the south shore of the river by Klamath Beach Road. On the north side of the river, the former approach to the ferry crossing, now abandoned for highway purposes, continued to be used for local access to the small community at Requa. The old ferry was abandoned as soon as the Douglas Memorial Bridge opened for vehicles.

The Motorized Revolution

Road and highway development have been a perennial concern of Californians since the establishment of the state in 1850. Good roads were needed to support economic development irrespective of the mode of travel, although the nature and design of roads would vary depending on the type of vehicle using them. The bicyclists, in fact, were important in creating the "Good Roads" movement in the 1880s and 1890s, petitioning governments to improve roads.⁴⁰ The first state highway proposal of 1895 was meant only to link together existing wagon roads in a comprehensive network, "traversing the great belts of natural wealth which our State possesses, connecting all large centers of population, reaching the county seat of every county and tapping the lines of county roads so as to utilize them to the fullest extent."⁴¹ The newly-established Bureau of Highways presumably intended to make bad roads better as it completed this system, but not to change the fundamental design of the roads themselves, which would remain wagon roads. By the time the state highway system was funded nearly fifteen years later, wagons were being replaced by automobiles. These new vehicles, potentially much faster and more efficient than animal-drawn wagons, were still primitive enough that wagon roads seemed adequate to carry them, but the rapidly improving technology would soon demand, not only better roads and highways, but entirely new designs.

The automobile took hold of American life with surprising rapidity and quickly transformed nearly every aspect of it.⁴² As historian John Rae has observed, this automotive revolution was the product of two separate but interrelated technologies: the self-propelled vehicle, and the technique of mass production. The first practical automobiles were developed in Europe as early as 1885 by Karl Benz and Gottlieb

³⁸ After completing this realignment, convicts from the Requa camp would be transferred to a new location on the Smith River to assist with improvements to U.S. 199. [*California Highways* 1, no. 5 (May 1924): 13; and "Forest Project to Open Smith River to Motorists," *California Highways* 2, no. 1 (January 1925): 11.] California had successfully used convict labor on road building projects since 1915, when the state's Convict Act was passed. Convicts proved especially valuable during World War I, when military enlistment made standard labor sources scarce. ["Ten Months of Convict Pay Law Reviewed: State Leads in Use of Prison Labor on Roads," *California Highways* 1, no. 6 (June 1924): 3-7, 9; and Robinson, "Redwood Highway: Part II," p. 28.]

³⁹ *California Highways* 3, no. 12 (December 1926): 14. Road contractor R.W. Rohl had only begun work in February of that year. [*California Highways* 3, no. 2 (February 1926): 12.]

⁴⁰ Kaszynski, William. *The American Highway*. P. 19.

⁴¹ Kenneth C. Adams, "Start of Highway System," *California Highways and Public Works—Centennial Edition* (September 9, 1950): 71.

⁴² The broader implications of the automobile on American culture is not the subject of this essay but has generated a substantial body of literature. Some representative treatments include: David Lanier Lewis, and Laurence Goldstein, eds., *The Automobile and American Culture* (Ann Arbor: University of Michigan Press, 1983); James J. Flink, *America Adopts the Automobile, 1895-1910* (Cambridge, Mass.: MIT Press, 1970); James J. Flink, *The Automobile Age* (Cambridge, Mass.: MIT Press, 1988); and, more recently, Cotten Seiler, *Republic of Drivers: A Cultural History of Automobility in America* (Chicago: University of Chicago Press, 2008).

Daimler. In the United States, the Duryea brothers' earliest model did not appear until 1893. The lag is partly explained by the isolation of American auto makers, which prevented them from taking advantage of European precedents, but this isolation also benefited Americans by allowing them to pursue independent design and production strategies. While European automobiles remained highly-crafted luxury items for the wealthy, American producers focused on a mass market, soon pioneering cost-saving technologies such as the interchangeability of parts, introduced by Henry Leland for his Cadillac in 1902, and the stationary assembly line, first used by Ransom Olds to produce his "Curved Dash" in 1901. The most innovative and successful model of all American automobiles was Henry Ford's Model T, which appeared in 1908. Not only was it relatively cheap—about \$850—it combined rugged simplicity, high wheel clearance, and ease of repair, all necessary adaptations for the deeply-rutted wagon roads it would have to navigate in the American countryside. In 1913, the Ford Motor Company introduced a stationary assembly line at its new Highland Park factory, greatly advancing the technology Ransom Olds had developed twelve years earlier and making it possible to manufacture a Model T from start to finish in 93 minutes. By 1925, a completed automobile was rolling off the Ford assembly line every ten seconds.⁴³ The cost of the Model T fell by more than half. Combined with the option to finance by installments—another Ford innovation—mass production quickly made the automobile accessible to most Americans regardless of income. The Los Angeles *Examiner* observed in 1914 that, "the day is here when the smallest tradesman, builder, skilled mechanic can own an automobile economically."⁴⁴ The result was a nearly exponential rate of growth in automobile ownership over the next few decades, with Ford's Model T dominating the market.

In 1900, when automobiles first began appearing on American roads, there were approximately 8,000 registered vehicles, representing about one automobile for every 10,000 Americans (the first automobile to be registered in California was recorded on 5 May 1905 by John D. Spreckels, son of sugar baron Claus Spreckels).⁴⁵ In 1910, following the reduction of cost resulting from the Model T, the number of registered vehicles in the United States rose to nearly half a million, or about one automobile for every 200 Americans. With mass production over the next few decades, the numbers rose dramatically. Nineteen-twenty saw just over 8 million registered automobiles, or one for every 13 Americans. In 1930, there were nearly 23 million automobiles on the road, or one for every 5.3 Americans. In California, where the automobile had an even stronger hold, the ratio was closer to one in three.⁴⁶ The 1920s experienced the most dramatic surge of automobile ownership in U.S. history, with an increase of nearly 300 percent in just ten years. The consequences of this rapid proliferation of the new technology were nothing short of revolutionary. A commission appointed by President Herbert Hoover in 1929 to study recent social trends in American life acknowledged its overwhelming significance: "It is probable that no invention of such far reaching importance was ever diffused with such rapidity or so quickly exerted influences that ramified through the national culture, transforming even habits of thought and language."⁴⁷

⁴³ On Ransom Olds, see George S. May, R.E. *Olds: Auto Industry Pioneer* (Grand Rapids, Mich.: Eerdmans, 1977). The definitive account of Henry Ford is given in three volumes by Allan Nevins and Frank Ernest Hill, *Ford* (New York: Scribner, 1954-63). Especially relevant to this discussion is the second volume, *Expansion and Challenge, 1915-1933*.

⁴⁴ Quoted in Robert M. Fogelson, *Fragmented Metropolis: Los Angeles, 1850-1930* (Berkeley: University of California Press, 1967), p. 164.

⁴⁵ Marshall A. Page, "The Growth of Motoring in California," *California Highways and Public Works* 7, no. 10 (October 1929): 2-4, 23.

⁴⁶ John B. Rae, *The Road and the Car in American Life* (Cambridge, Mass.: MIT Press, 1971), p. 50; and James C. Williams, *Energy and the Making of Modern California* (Akron, Ohio: University of Akron Press, 1997), pp. 152-154.

⁴⁷ Malcolm M. Willey and Stuart A. Rice, "The Agencies of Communication," in *Recent Social Trends in the United States: Report of the President's Research Committee on Social Trends* (New York: McGraw-Hill, 1933), p. 172.

In Europe, where the private automobile remained a luxury item far longer than in the United States, the greater impact was made by buses and motor trucks. These vehicles could reach places not accessible by railroads and connected formerly isolated villages and rural areas with metropolitan centers, but they largely replicated the sort of destination-oriented service provided by the railroad but on a smaller and more flexible scale.⁴⁸ In the United States, mass production of automobiles created a radically different situation. From the beginning, private automobiles constituted the principal type of vehicle sold, accounting for 85 to 90 per cent of the total. This figure remained relatively constant over the next fifty years. Low cost was only one part of the reason for the automobile's popularity. Just as important were the characteristics that made driving an automobile uniquely attractive—above all, the intoxicating sense of personal freedom and autonomy it offered. The same Presidential commission that acknowledged the automobile's social significance went on to explain its popularity: "In no inconsiderable degree the rapid popular acceptance of the new vehicle centered in the fact that it gave to the owner a control over his movements that the older agencies denied. Close at hand and ready for instant use, it carried its owner from door to destination by routes he himself selected, and on schedules of his own making."⁴⁹

Even where other forms of transportation, such as the railroad, were faster and more reliable, Americans preferred the automobile by large numbers. Several scholars have noted that this enthusiasm for the new technology was often expressed in direct contrast to the railroad, the preeminent symbol of modern, industrial efficiency, suggesting a still deeper significance. Automobiles were seen by Americans as "refreshingly regressive," a nostalgic return to a healthier, more personal time, but without the inconvenience. While railroads were ugly behemoths of complex machinery, bound to iron rails and rigid schedules dictated by distant corporations, automobiles were small, simple, and entirely at the disposal of their individual owners. Automobiles even appeared cleaner than steam locomotives (the effects of carbon monoxide-induced smog were not yet apparent). For a great many Americans in the early twentieth century, the automobile seemed to provide an antidote for the deadening anonymity of an industrialized society. The irony is that automobiles were among the most advanced products of industrialization.⁵⁰

Americans at the turn of the twentieth century were highly ambivalent about the country's industrial growth in the decades since the Civil War. On the one hand, they were proud of the nation's extraordinary accomplishments, but they were also reeling from the comparatively new experiences of mass culture, urban crowding, and industrial noise and pollution. Between 1880 and 1920, a back-to-nature movement flourished in reaction to this modern malaise.⁵¹ Largely the prerogative of those wealthy enough to afford the leisure, proponents believed nature could provide relief from urban anxieties, often through vigorous outdoor activities (one expression of this therapeutic interest in nature was the creation of the National Park Service in 1916). Coming amid this reactionary movement, the automobile was quickly adopted by nature enthusiasts and impressed into the service of outdoor recreation. The primitive condition of automotive technology in the teens and twenties guaranteed a strenuous and challenging experience for the early motorist, with a great deal of time spent out-of-doors,

⁴⁸ Rae, *Road and the Car*, pp. 49-51.

⁴⁹ Willey and Rice, "Agencies of Communication," p. 177.

⁵⁰ Warren James Belasco, *Americans on the Road: From Autocamp to Motel, 1910-1945* (Cambridge, Mass.: MIT Press, 1979), pp. 19-39; and Paul S. Sutter, *Driven Wild: How the Fight Against Automobiles Launched the Modern Wilderness Movement* (Seattle: University of Washington Press, 2002), pp. 19-53. For treatment of this theme in an urban context, see Scott L. Bottles, *Los Angeles and the Automobile: The Making of the Modern City* (Berkeley: University of California Press, 1987), pp. 52-91.

⁵¹ On American responses to industrial modernism, see T.J. Jackson Lears, *No Place of Grace: Antimodernism and the Transformation of American Culture, 1880-1920* (New York: Pantheon, 1981); and Peter J. Schmitt, *Back to Nature: The Arcadian Myth in Urban America* (New York: Oxford University Press, 1969). A broader discussion of these themes in American history is given by Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (New York: Oxford University Press, 1964).

which was all part of the attraction.⁵² As many as half of America's private automobiles were being used for auto camping by the mid-twenties, a figure that represented from 10 to 15 per cent of the population.⁵³

Highway development in the United States lagged substantially behind development of the automobile. This meant that most roads available to the first generation of motorists were not designed for high speed travel and many remained unimproved even by pre-automotive standards. This was especially true in rural areas where nature tourists and auto campers gravitated. The poor condition of these roads did much to reinforce the early motorist's sense that driving was a strenuous outdoor activity. Low-standard roads required motorists to travel slowly and make frequent stops, ensuring an intimate experience of the landscape and providing plenty of opportunities for socializing with other motorists or nearby residents, whether they wanted to or not. This forced immersion in the local environment became an integral part of the early motoring experience and was often valued by auto tourists (though undoubtedly less attractive to commercial drivers). Even as automobiles became capable of faster speeds in the succeeding decades, road improvements rarely kept up. National policy prioritized secondary roads over trunk highways, largely for political reasons to satisfy local constituencies. This emphasis intensified during the Depression as the government focused on providing unemployment assistance to small communities. In most places, the lack of an adequate system of high-speed arterials would not be addressed until after World War II with the introduction of modern freeways.⁵⁴

The handful of decades between the popular introduction of the automobile around World War I and the widespread improvement of highways after World War II mark a unique period for the experience of motoring in the United States. During these interwar years, most of the nation's roads permitted only low speed travel, either because they remained unimproved or because they were not yet designed for higher speeds. These limitations preserved the original experience of motoring at a leisurely pace, with all the associations that were attached to this mode of travel, long after the automobile was capable of greater speed. The automobile always held the potential for efficient high-speed transit, but until freeways made this possible, motorists were compelled to meander slowly along winding country roads, which kept them more or less intimately connected to the landscapes through which they traveled. As highways became freeways, however, the experience of motoring was fundamentally changed. Even for the vacationer, the automobile was reduced to being simply a means of getting from one place to another as quickly as possible. Ironically, this was precisely the sort of destination-oriented efficiency that early motorists had found so objectionable in the railroad several decades earlier.⁵⁵

Protecting Scenery and Promoting Conservation

The redwoods of northern California were a scenic attraction for early motorists almost as soon as there was a rudimentary road to make them accessible. As the Redwood Highway gradually opened the northern California coast in the years following World War I, enthusiasm among auto tourists increased. In the initial stages, the Redwood Highway was not expressly labeled a scenic highway, there were not enough highways to make any such meaningful distinctions, the aesthetic and recreational interests of its promoters and potential users made state and county officials aware of scenic value and of the importance of conserving it so far as possible. State engineers demonstrated this awareness in several ways, including their choice of alignments and by their efforts to preserve old growth redwoods along the highway corridor. Both would necessitate cooperation with county officials and private landowners, often where significant economic values were at stake. Redwood lumber was a profitable commodity, and much of the Redwood Highway would pass through commercially valuable groves of old growth trees.

⁵² Belasco, *Americans on the Road*, pp. 30-35.

⁵³ Sutter, *Driven Wild*, p. 30.

⁵⁴ Rae, *Road and the Car*, pp. 73-83.

⁵⁵ Sutter, *Driven Wild*, p. 38; and Belasco, *American on the Road*, pp. 90-92.

One of the most notable concessions that state engineers made to scenery was the novel alignment they adopted for a portion of the highway south of Crescent City. As already noted, the Redwood Highway through Del Norte and northern Humboldt counties generally followed the existing county road. This represented the most practical choice and reduced the amount of work to be done, since the road only needed to be improved to highway standards (which in the early 1920s were not much above the standards of a wagon road). But the new highway made a substantial deviation from the existing road between Cushing Creek and Damnation Ridge, veering out onto the coastal bluffs in order to provide sweeping views of the Pacific Ocean. This alignment did nothing to improve the efficiency of travel or to secure a more stable roadbed. In fact, it would prove so unstable that the coastal alignment here had to be abandoned within a little more than a decade. The appeal of this otherwise impractical choice lay in the dramatic contrast that a traveler experienced—if driving north—upon leaving the confined space of the shadowy redwood forest and emerging suddenly into the open sunlight, with unobstructed views of the ocean's vastness. A similarly dramatic experience was provided the southbound traveler, who plunged into forest shadows after enjoying panoramic vistas from the high coastal bluffs.

State engineers demonstrated another aesthetic choice in their reluctance to allow cutting of old growth redwoods along the highway corridor. As historian Edward Bearss explains, "the counties had to acquire land for the right-of-way. Heretofore, they had been in the habit of purchasing the right-of-way, logging it, and then turning it over to the State Highway Commission. The State Commission now refused to go along with this practice, and the County Boards of Supervisors were required to turn over to the State an unlogged right-of-way. In building the Redwood Highway through Del Norte and Humboldt Counties only those redwoods interfering with construction were felled."⁵⁶ But the reason for preserving trees along the highway was not completely due to conservation. Like the decision to align the Redwood Highway along coastal bluffs, it was motivated by a desire to enhance the motorist's aesthetic experience. Driving through intact stands of old growth forest was more satisfying than driving among slash and stumps. The essentially scenic nature of these principles is shown by the extent of the resources preserved. This often comprised a narrow margin along either side of the highway, sufficient to protect the viewing enjoyment of passing motorists but little else. Although the State Highway Commission attempted to increase its unlogged easement to 100 feet on either side of the road—unsuccessfully—this would have made little difference to the ecological integrity of the redwood forest.

While highway engineers made gestures toward aesthetic principles in the location and design of the Redwood Highway, early conservationists saw another potential in the scenic value of the new road. They believed that it could inspire broader support for the preservation of the redwood forests which were threatened by logging. In 1917, Madison Grant, Henry Osborne, and John Merriam drove north from San Francisco into the redwood country along the rudimentary, and still-unfinished, Redwood Highway. They were amazed by the massive old growth trees—larger and more beautiful than anything arboreal they had ever seen—and appalled by the devastation of the loggers who were cutting them down. Their experience would inspire the men to found the Save the Redwoods League two years later with the intention of preserving as much of the remaining old growth trees as they could.⁵⁷ The fact that these men first encountered the redwoods, and conceived their plans to save them, from the seat of an automobile was itself significant. Not only did it illustrate the affinity of the early motorist with nature enthusiasm, the even foreshadowed the conservation strategy these men would subsequently adopt. Knowing that motorists, by and large, shared a similar regard for nature as themselves, Grant and his companions would address much of their early campaign to save the redwoods toward the motoring community. The Old Redwood Highway had an equally important role in these larger purposes, since it was by means of the highway that the League founders had reached this remote country and discovered

⁵⁶ Bearss, Chp. IX.B.4.

⁵⁷ Susan R. Schrepfer, *The Fight to Save the Redwoods: A History of Environmental Reform, 1917-1978* (Madison: University of Wisconsin Press, 1983), pp. 3-17.

the trees. They reasoned that others would support their cause if they too could experience the redwoods as they had, firsthand, and this was an opportunity that the highway through the redwoods provided.⁵⁸

As indicated by its founding charter, the Save the Redwoods League was established with primarily two purposes in mind: to protect the redwood groves along state highways—principally, the Redwood Highway—and to establish a redwoods national park.⁵⁹ It set about achieving the first goal by raising money from private donors and buying individual groves of trees. The second goal was meant to provide a structure for managing the properties it thus acquired. Even though Stephen Mather, the first director of the National Park Service, was a founding member and major benefactor of the Save the Redwoods League, the national park idea gained little traction for over four decades. Instead, the League would gradually come to favor a state system for managing the protected redwood groves, a preference that would result in the creation of the California State Parks in 1927 through the direct efforts of League members.⁶⁰

One of the reasons that the League's initial goal to establish a national park languished was its early success in acquiring redwood groves through private support. As a result, Federal involvement seemed increasingly unnecessary, especially given that there was little precedent for the Federal Government acquiring private lands for public parks.⁶¹ The League was able to cultivate many wealthy donors through personal connections, since most League members were themselves men of wealth and privilege. At the same time, the Save the Redwoods League successfully cultivated popular support through innovative marketing techniques, as evidenced by their hiring of the advertising firm of Drury Brothers (Newton and Aubrey Drury), who made effective use of direct mailings as well as descriptive articles and photography placed in popular magazines.⁶² The League's first private land acquisition was made in 1919 with donations from wealthy League members William Kent and Stephen Mather for portions of what would later become Humboldt Redwoods State Park on the south fork of the Eel River. Over the years, the League would continue to acquire individual redwood groves with private funds. As incentive, the donor's name would be inscribed on a sign placed before the sponsored grove. More than a thousand groves were eventually protected in this manner throughout the state, and the practice continues today.⁶³ In addition to acquisitions in fee simple, early League efforts also involved lobbying to persuade existing property owners, and potential owners, to protect redwood groves. These efforts included petitioning the California Highway Commission to obtain wider roadside easements for scenic buffers and cooperating with the Commission to halt the practice of allowing easements to be logged prior to their conveyance.⁶⁴

The League's early memorial groves were typically located along the highway. This allowed the donor's name to be displayed conspicuously for passing motorists, but it was also consistent with the League's

⁵⁸ Leach, *HAER*, 29-43.

⁵⁹ According to Madison Grant, the League's original purposes were as follows: (1) To purchase Redwood groves by private subscriptions and by county bond issues; (2) To secure a state bond issue to buy the finest Redwood groves along state highways; (3) To establish through Federal aid a National Redwoods Park; (4) To obtain through state and county aid the protection of timber along the scenic highways now in course of construction throughout California; and (5) To encourage the state to purchase cut-over Redwood areas for reforestation by natural means, or by replanting where repeated fires have made sprout reproduction impossible. [Madison Grant, "Saving the Redwoods," *The National Geographic Magazine* 37, no. 6 (June 1920): 533.] Amy Leach observes that these objectives were also mirrored in two of the League's early working groups, "a Committee on Redwoods National Park and a Committee on Highway Redwood Reservation." [Leach, *HAER*, p. 32]

⁶⁰ *HAER*, 39-43.

⁶¹ Leach, *HAER*, p. 39; and Mark David Spence, *Watershed Park: Administrative History, Redwood National and State Parks* (Seattle, Wash.: National Park Service, 2011), p. 55.

⁶² Leach, *HAER*, pp. 32-33.

⁶³ Save the Redwoods League announced its thousandth memorial grove in 2007.

[<http://www.savetheredwoods.org/about-us/mission-history/league-milestones> (accessed 19 June 2017)].

⁶⁴ Leach, *HAER*, pp. 29-33.

original focus on scenic preservation and was an inevitable result of the League's early dependence on a motoring constituency. Though effective for raising support, it would later prove to be a weakness in the League's conservation strategy. This emphasis on roadside scenery was implicit even in the League's early efforts to promote a national park, as shown by the observations of Charles Punchard, the NPS landscape engineer who accompanied a League reconnaissance of the northern redwoods in 1919: "If cooperation [of private land owners] can be secured at this time," Punchard wrote in his report, "it will be a step toward the preservation of the growths along the highways, which are so important in their attractiveness, popularity, and maintenance. Shaded highways are always the most pleasant to drive upon and therefore the most popular while the annoyance of blowing dust is lessened considerably because of their ability to hold moisture longer than highways exposed to the sun at all time."⁶⁵ With statements such as this, it can be difficult to tell whether early conservationists valued the highway as a means of appreciating (and protecting) the redwoods, or whether they valued the redwoods as attractive scenery to embellish the highway. At this early stage of automobile development, when motorists still traveled at modest speeds and the Redwood Highway was a winding one-lane road in places, there was little reason to see any contradiction between highway construction and redwood conservation, even if conservation was limited to a narrow strip of scenery beside the road. Not until the second half of the century, when the demand for higher speeds resulted in larger, more complex freeways did it become apparent that road development was itself a threat to conservationist values.⁶⁶

Even in its primitive condition, however, the Redwood Highway presented a challenging contradiction for the Save the Redwoods League. While the highway supported scenic tourism, creating a popular base of support for redwoods conservation, it also supported commercial interests that were incompatible with conservationist values. A glaring example of this was logging, which the road facilitated by providing access for tree fallers and lumber mills. As Madison Grant observed as early as 1919, "the route of this highway made the timber accessible and the immediate result was the establishment of small lumber camps that are destroying the trees along its edge. Not only are the trees along the road cut down, but the highway itself in many cases has been injured. It is hard to find more disastrous bungling even in road construction."⁶⁷ This was the first indication that highway development might prove an ambivalent ally in the conservation of the redwoods. But Grant still saw loggers as the principal problem, noting that the highway was also being injured by the depredations of the lumbermen.⁶⁸ The League's initial response to the threat posed by further logging was to redouble its conservation efforts along the highway corridor, where the most vulnerable groves were located.⁶⁹ These groves were easily visible to potential donors who were able to witness their amazing beauty—and potential destruction—firsthand from the comfort of their automobiles. This strategy proved very effective at raising attention and money to support the League, but it did little to protect the redwood forest beyond the highway (see Figure 19 and 20).

By 1925, if not earlier, the League began to recognize the need to protect larger units of redwood forest even as it continued to dedicate roadside memorial groves. That year it supported legislation to establish a state parks system. The League cooperated closely with other conservation organizations and the automobile clubs to promote a parks bill. Although initially vetoed by Governor Friend Richardson, who

⁶⁵ Charles P. Punchard, Jr., "Report on a Proposed Redwood Park in California," 20 September 1919. Quoted in Leach, *HAER*, pp. 35-36. These comments also reflect the prevailing landscape aesthetic of the National Park Service at that time, which was largely consistent with that of Save the Redwoods League.

⁶⁶ This realignment of values is treated extensively by Paul Sutter in *Driven Wild*.

⁶⁷ Madison Grant, "Saving the Redwoods: An Account of the Movement During 1919 to Preserve the Redwoods of California," *New York Zoological Society Bulletin* (September 1919): 99.

⁶⁸ Historian Susan Schrepfer notes that Grant's views were more extreme than the majority of his colleagues. Most League members, who were themselves businessmen, were reluctant to attack the logging industry outright, preferring to cooperate with industry leaders to achieve mutually acceptable goals. More often than not, this meant purchasing redwood groves at fair market price. [Schrepfer, *Fight to Save the Redwoods*, pp. 26-28.]

⁶⁹ As Amy Leach observes, "The SRL focused its 'attention primarily on the immediate crises,' which meant sites where lumber was being harvested at that time." [Leach, *HAER*, p. 34.]

opposed any measure that might bring increased taxes, the proposal was resubmitted the following year under a more progressive administration and approved in April of 1927 by a unanimous vote of the legislature. One of the first acts of the newly created State Parks Commission was to contract a state-wide survey of potential park units. This was conducted under the supervision of renowned landscape architect Frederick Law Olmsted, Jr. and completed at the end of 1928. The coastal redwood forests figured prominently in Olmsted's recommendations, which included both preservation of roadside scenery (through control of development and acquisition of easements) as well as development of more expansive protected areas beyond the highway itself. The latter would be achieved with the establishment of the redwood state parks.⁷⁰

Even as Olmsted was completing his survey of recommended park units, the state legislature presented voters with a bond act to fund park acquisition. The League helped organize an aggressive advertising campaign to support this measure, complete with a movie short produced by Hollywood's Mary Pickford Company. It was the largest publicity effort up to that time in California and resulted in overwhelming approval of the bond by a nearly three-to-one margin. With the help of these public funds, which were used to match private donations, the Save the Redwoods League was able to establish the nuclei of four redwood state parks in northern California. These were gradually expanded over the subsequent decades with additional land purchases and donations.⁷¹ While the redwood state parks were far more than roadside scenery, they remained anchored to the highway that passed through them and were, in an important way, products of it. Olmsted had noted in his 1928 report that one major category of state parks should exist in relation to the highways they adjoined and provide interesting places for motorists to stop and enjoy "the qualities that give them special value, scenic, recreational, historic, scientific or otherwise."⁷² Stephen Mather, the first director of the National Park Service and a member of the Save the Redwoods League, was specific about the secondary role of state parks, arguing that they should act like stepping stones for motorists en route to final destinations in a National Park. In his annual report for 1920, Mather had encouraged both the League and the state to develop scenic attractions along the Redwood Highway, including redwood state parks, to serve as adjuncts to the National Park Service's Redwood National Park which was being proposed for the far northern end of the highway in Del Norte County.⁷³

Incompatible Values

Before the final sections of the Redwood Highway were completed in 1930, previously completed sections needed repair. The unstable geology of the coastal bluffs, especially in Del Norte County, combined with typically long, wet winters and ocean currents resulted in landslides and slumping of the roadbed. In early 1925, several hundred feet of highway on the coastal bluffs south of Nickel Creek slid into the ocean. Traffic had to be routed onto the old county road at the top of the ridge while mud and debris was cleared away and the road bed restored.⁷⁴ Incidents like this would be repeated almost every winter, especially along the coastal segments of the highway, requiring frequent and costly maintenance.

Repair of storm damage may have been the most common task for road crews working on the new highway, but this was by no means the only work that was undertaken in the years following its completion. Engineers were also upgrading and improving portions of the road almost from the very beginning. The early 1920s road had been hastily built, especially in the northernmost counties, and was often little better than the wagon road it had replaced (in many places, it still *was* the wagon road). Much of the Redwood Highway was only one lane, averaging about 16 feet in width, and had numerous sharp

⁷⁰ Schrepfer, *Fight to Save the Redwoods*, pp. 29-36; Leach, *HAER*, pp. 41-43; and Frederick Law Olmsted, Jr., *Report of State Parks Survey of California* (Sacramento, Calif.: California State Parks Commission, 1928).

⁷¹ Schrepfer, *Fight to Save the Redwoods*, pp. 36-37.

⁷² Olmsted, *State Parks Survey*, p. 32.

⁷³ Schrepfer, *Fight to Save the Redwoods*, p. 18; and Sutter, *Driven Wild*, p. 37.

⁷⁴ "What the Divisions Are Doing," *California Highways* 2, no. 2 (February 1925), p. 12.

curves with a radius of 100 feet or less. Most of it remained unpaved. As autos became more common, and travel speeds increased, the Highway Department felt under constant pressure to improve the quality of the road to allow safer and more efficient travel for motorists. As early as 1926, major improvements were being done in the northern counties,

The old road, inadequate for the rapidly increasing traffic of the redwood country, has been extensively improved under the new policy of State maintenance, which was authorized by the last legislature. [Along thirty miles of highway in northern Humboldt and Del Norte counties] more than 100 blind curves, formerly too narrow for machines to pass, have been widened to 20 and 30 feet. Additional turnouts to the number of more than 100 have been built so that for a considerable portion of the distance a two-way road has been provided.⁷⁵

By 1928, most of the road in this northern section had been surfaced—presumably with gravel and oil, but asphalt was becoming more widely adopted. Only 3.5 miles, from the southerly Del Norte County line to the head of Richardson Creek, remained to be completed. This was done that summer. North of Wilson Creek, widening of the highway at sharp turns also continued.⁷⁶

One of the largest road improvements yet undertaken on the northern Redwood Highway commenced that year along a fifteen mile stretch between Orick and the Del Norte County line. The existing 24-foot road was widened to 30 feet, the alignment straightened, and a hard surface applied. Drain tiles were installed along the side of the road to carry off excess water and prevent the road base from becoming saturated. Much of this work occurred along the present Newton B Drury Parkway within the old growth redwoods in Prairie Creek Redwoods State Park. In order to accommodate the wider, straighter road, approximately 1,900 trees had to be cut and removed over an area comprising 65 acres. Some of these trees were as large as 14 feet in diameter. Stumps were blasted out with powder. The work took six months and was completed by the end of that year (see Figure 21).⁷⁷

For attentive conservationists, these road improvements were an ominous indication of the direction that the Redwood Highway, and highway design standards, were evolving as faster automobiles demanded straighter, wider roads. The willingness and ability of engineers to sacrifice trees to improve highway efficiency demonstrated the future fundamental incompatibility of highway building and conservationism.

Over the next decade, repeated failures of the coastal highway south of Crescent City convinced the Highway Department that a new alignment had to be found. In 1931, the Department contracted with Olmsted Brothers, the firm of landscape architect Frederick Law Olmsted, Jr., which proposed several alternatives to the existing route along the coastal bluffs. These ranged from a shoreside alignment that followed tidewater on an artificial revetment, to the original county road along the ridgeline. Three alternatives were also proposed that approximated the existing alignment with local variations to improve the stability of the roadbed. In the end, the safest alternative—the upper alignment near the old county road—was chosen, and in 1934 work commenced on building a new highway that bypassed the most

⁷⁵ "What the Divisions Are Doing," *California Highways* 3, no. 7 (July 1926), p. 12. See also Ira G. Thomas, "Logs Provide Cheap Guard Rail and Drainage Control," *California Highways* 2, no. 5 (May 1925), p. 8, who observes that "increasing traffic is demanding wider and less tortuous roads, and it is evident this portion of the highway must be reconstructed before paving is considered."

⁷⁶ "Progress Reports from the Field," *California Highways and Public Works* (December 1927), p. 31; "Progress Reports from the Field," *California Highways and Public Works* (February-March 1928), p. 36; and "State Highway Work in the Counties," *California Highways and Public Works* (May-June 1928), p. 27.

⁷⁷ M.H. Hubbs, "Highway Through Heavy Redwood Timber in Humboldt County Completed," *California Highways and Public Works* (November-December 1928), pp. 16-17.

slide-prone sections of the coastal bluffs. This work was completed by summer of that year (see Figure 22).⁷⁸

While the Highway Department's decision to contract with Olmsted suggests that the department still valued the scenic character of the highway, the project itself was driven by more practical considerations. This reality was appreciated by the Olmsted Brothers, whose proposals prioritized stability over aesthetics. Thus, the preferred alternative was not the one that offered the best views—this had already been attempted with the ca. 1920 alignment—but the one that promised the greatest resiliency in the face of natural instability in the coastal bluff environment. Not surprisingly, this was also the alignment that had been adopted by the builders of the county wagon road, who had had no reason to consider any values but ease of construction and reliability of use. In short, strictly scenic values prevailed along this segment of the highway only during the initial period of construction in about 1920—or 1917, if the date of the original survey is considered. With the highway's realignment in 1934, the necessity of more practical considerations took precedence. The irony is that this realignment was instigated by a firm that was better known for its promotion of landscape aesthetics.

Subsequent development of the Redwood Highway would prioritize the values of efficiency and reliability that had become manifest by 1934 (if not earlier), but economic depression and war delayed any major improvements to the highway for more than two decades. This allowed the original experience of low speed motoring to persist along much of the Old Redwood Highway Historic District by virtue of the primitive condition of the highway itself (see Figure 23).

In the years following the war, faster automobiles, larger trucks, and growing usage placed strains on the capacity of many of the nation's trunk roads, including the Redwood Highway, and created demands for wider, straighter alignments to accommodate higher speeds and denser traffic. From Sausalito to Grants Pass, much of the Redwood Highway was realigned and re-engineered over the subsequent decades in response to these changing imperatives. Although scenery was still discussed by highway engineers, and promoted in tourist literature by local chambers of commerce, the scenic experience had ceased to be the guiding principal that informed new road design and maintenance.⁷⁹ Instead of providing a means for immersing the visitor in the forest environment, as it had Madison Grant and his companions in 1917, the highway became little more than a means for getting motorists efficiently from one point to another. Conservationists, like Save the Redwoods League, who had once seen road development as a tool for achieving preservationist goals, now came to appreciate the dubious value of roads. On the one hand, roads helped broaden the base of support for conservationism, but at the same time they facilitated the destruction of the forests that conservationists valued. The significance of this realization only deepened as the purpose of road development became less about bringing people to the redwoods and more about conveying them as quickly as possible through them.

Later Development

In 1952, the California State Legislature adopted Senate Concurrent Resolution 16, which acknowledged that rapidly increasing traffic on the Redwood Highway was becoming both a safety hazard and an inconvenience for motorists. In response, the Legislature directed the Highway Commission to study the

⁷⁸ "Many Major Projects in Year's Work," *California Highways and Public Works* (January 1934), p. 15; "\$20,944,729 in Major Highway Contracts Let in Ten Months," *California Highways and Public Works* (July 1934), p. 11; and Olmsted Brothers Landscape Architects, "Sketch Map Showing Alternative Locations Proposed for the State Highway between Wilson Creek & Crescent City," October 1932. [Coll. of Redwood National and State Parks, Archives, Orick, Calif.]

⁷⁹ The Highway Department was aware that much of the post-war increase in traffic was represented by auto recreationists, who still valued scenery, however attenuated it had become. Highway engineers tried to accommodate these interests wherever possible but clearly gave priority to speed and efficiency. [John Robinson, "The Redwood Highway: Part III, Bringing It up to Modern Standards," *California Highways and Public Works* 43, nos. 9-10 (September-October 1964), pp. 14-16.]

feasibility of upgrading the highway to a four-lane, high-speed freeway. The Commission's report, which was completed later that year, concluded that more than half of the highway should be improved as soon as possible, while noting that the entire road from San Francisco to the Oregon border would eventually have to be upgraded as well.

These recommendations elicited strong but conflicting responses from the interested public. On the one hand, north county business interests were ardent supporters of highway improvements, seeing a direct financial benefit to their interests. Not long before the Highway Commission's report appeared, the *Humboldt Times* had carried front-page headlines announcing, "We Need Roads!" On the other hand, conservation groups such as Save the Redwoods League were hesitant to endorse such a proposal, aware that highway improvements would come at the expense of thousands of old growth redwoods that would have to be cut down to make way for road widening. Although these groups had once regarded roads as an instrument of conservation, they were now fully aware that highways posed more of a threat than an opportunity.

In 1953, companion bills were introduced in the State Legislature granting easements within Humboldt Redwoods State Park in southern Humboldt County for a two-lane road. (Much of the highway through this park was still only 16 feet wide.) This attracted considerable attention and confirmed conservationists' fears that the redwood groves were threatened by highway improvements. Early the following year, the State Parks Commission, under the leadership of Newton Drury, reached an agreement with the Highway Commission that no further highway improvements would occur within the Humboldt Redwoods State Park, but if plans to build a modern freeway proceeded, a new route would have to be established bypassing the redwood groves. The existing road would then become a scenic parkway, maintained for slow-speed, local travel. This bypass idea was initially opposed by business owners, who feared that it would discourage tourism, but the proposal was eventually implemented, and construction began on the first four-mile segment in 1957. Eventually, 31.5 miles of the former Redwood Highway were circumvented and re-designated a scenic parkway. It became known as the "Avenue of the Giants" in reference to the massive old growth redwoods through which the parkway meandered.⁸⁰ Despite initial resistance from the local business community, the Avenue of the Giants bypass proved to be an acceptable resolution of the conflicting demands for highway modernization, redwood conservation, and tourism. The same solution would later be proposed for other redwood stands, such as Prairie Creek Redwoods State Park.

On December 27, 1964, the Highway Department was confronted with a major disaster when torrential winter rains caused the Klamath River to flood, destroying the Douglas Memorial Bridge and sweeping away the small town of Klamath (the same winter storms also swept acres of mud and debris from upstream clear-cuts, severely damaging redwood groves on the flats below in several locations around the region -this devastation would underscore efforts to establish a Redwood National Park four years later.)⁸¹ Travel over the Klamath River was somewhat restored by January 8 with ferry service provided by an engineering company from the Fourth Infantry Division out of Fort Lewis, Washington. Piles were driven and makeshift spans erected on scaffolding across the missing arch by March 14 to restore traffic across the bridge.⁸² Planning for a replacement for the Douglas Memorial Bridge had begun back in 1958, and construction on the new route and reinforced concrete bridge a short distance upstream had already begun prior to the collapse of the bridge (see Figure 29).⁸³

In order to reach this new bridge, the highway approaches had to be realigned. On the north bank of the river, this involved relatively little new construction, with the road now continuing straight at Hoppaw

⁸⁰ Robinson, "Redwood Highway: Part III," pp. 16-21.

⁸¹ Schrepfer, *Fight to Save the Redwoods*, p. 112.

⁸² Robinson "Redwood Highway – Rebuilding," pp. 18-22.

⁸³ Department of Public Works, 1958

Creek rather than turning sharply west. South of the river, four miles of new highway were constructed along an alternative alignment that followed Waukell Creek upstream to the northern border of Prairie Creek Redwoods State Park. Here it met the existing highway near the headwaters of McGarvey Creek. The older alignment to the coast is now Alder Camp Road, Coastal Trail Tey-wo-lew Section, and Red Alder Road. This older alignment, which climbed Richardson Creek from the bridge site to High Bluff and then continued south along the coast to Carruthers Cove, was abandoned for all but local use.⁸⁴ The new highway segments were built to modern high-speed standards with four lanes of travel.

Even as engineers were completing the new highway south of the Klamath River, alternative routes for a bypass around Prairie Creek Redwoods State Park were being considered. Although widening and improving the existing route through the park was the cheapest alternative, the Highway Department did not recommend this option because of the adverse effect it would have on park values. Two alternatives that were favored by commercial interests and local users followed a westerly route along the coastline from Ossagon Creek south, one alternative running on the beach and the other along the bluffs just above it. While both alignments would avoid most of the old growth redwood forest, they would adversely affect other scenic resources, such as Fern Canyon, and were opposed by conservation groups. These groups supported an inland alternative that would follow the ridge east of Prairie Creek. This route would be costly, however, because of the private timber lands that would have to be acquired, and it was not favored by the Highway Department.⁸⁵

As no agreement could be reached over the contentious alternatives proposed for the Prairie Creek Redwoods State Park bypass, the project languished for more than a decade. The impasse was finally broken when Public Law 95-250—the Redwood Expansion Act—was passed in 1978.⁸⁶ A clause in this act directed the Department of the Interior to acquire the necessary lands for an eastern bypass and to donate these lands to California if the state designated this route prior to 1 October 1984. The Federal Government was willing to accept this burden in order to protect redwood groves that were expected to become part of the recently-expanded Redwood National Park.⁸⁷ With land acquisition costs no longer an obstacle in the state's decision, the eastern bypass was chosen, and construction began in July of 1984. The 12-mile bypass left the existing highway at McGarvey Creek on the north side of the state park and followed the ridge east of Prairie Creek as far as May Creek, where it descended back to the valley floor and rejoined the old highway just south of Elk Prairie. The new alignment was built to modern freeway standards and took eight years to complete, opening in the fall of 1992. The Old Redwood Highway through Prairie Creek Redwoods State Park was designated the Newton B. Drury Parkway and managed for local access to trailheads and other park facilities. Most of the parkway retained the character and physical dimensions of its 1928 construction, averaging 30 feet in width and meandering between massive redwood trees with little or no shoulder (see Figure 24).

Approximately one mile of road at the northern end of the parkway, between Red Alder Road and the Highway 101 interchange, widens anomalously. This is an orphaned section of the 1965 freeway that connected with the post-flood Klamath River crossing. It was isolated by the new Highway 101 bypass,

⁸⁴ The new alignment up Waukell Creek was already under construction in 1964 prior to the loss of the Douglas Memorial Bridge, suggesting that the Highway Department already intended to abandon the coastal segment of the old Redwood Highway between Carruthers Cove and High Bluff. [Robinson, "Redwood Highway: Part III," p. 22]

⁸⁵ Leach, *HAER*, pp. 89-90; and U.S. Dept. of Transportation, *Final Environmental Impact Statement: U.S. 101 Bypass, Prairie Creek Redwoods State Park, Humboldt and Del Norte Counties, California* (Sacramento, Calif.: Federal Highway Administration, 1983), pp. 5-6.

⁸⁶ Public Law 95-250, March 27, 1978 (92 Stat. 165).

⁸⁷ Until NPS Director Whalen abandoned the idea in a surprise announcement the following year, the three northern redwood state parks were expected to be conveyed to the National Park Service and subsumed in Redwood National Park. This expectation gave the Department of the Interior a direct interest in mitigating or avoiding potential adverse effects to Prairie Creek Redwoods State Park. [Spence, *Watershed Park*, pp. 173-178, and 330.]

which departs from the 1965 alignment just before the latter turns sharply west toward the border of the state park.⁸⁸

⁸⁸ Dept. of Transportation, *Final Environmental Impact Statement*, pp. 5-6; and Spence, *Watershed Park*, pp. 235-237.

Physical History Graphics



Figure 9. *View of the Redwood Highway in 1917 showing quality and character of the road in its earliest phase of development. The road has been graded to approximately 16 to 21 feet wide and has been surfaced with macadam. Note the absence of shoulders, bringing the road margins right up to the surrounding trees allowed highway engineers to avoid falling more trees than was necessary, but it also increased the drama for motorists by emphasizing the great size of the redwoods pressing so close upon the highway. This section of the Redwood Highway is in Humboldt County south of the study area, probably on Bull Flat near the south fork of the Eel River. [Illustration from Madison Grant, "Saving the Redwoods: An Account of the Movement During 1919 to Preserve the Redwoods of California," [New York] Zoological Society Bulletin 22, no. 5 (1919): 117; photograph by the Freeman Art Co., Arcata, Calif.]*



Figure 10. *View of coastal section of Old Redwood Highway looking south from a point just south of Cushing Creek. Photograph dates from the mid-to-late 1920s. The road has been graded to approximately 16 feet in width and surfaced with macadam. This section of the road would change very little over the subsequent decades, the most significant modification being the application of an asphalt surface. (Compare Image #13.)* [Humboldt State University Library, Special Collections, Tim McKay Coll., 2007.02.2083.]



Figure 11. *View looking south of Old Redwood Highway on high coastal bluffs shortly before the road turns inland to descend into the redwood forest. The contrast between the open bluffs and dark forest was heightened by the sudden, dramatic transition. This photograph appears to date from the 1930s. Guard rails and asphalt surfacing have been applied.* [Humboldt State University Library, Special Collections, Tim McKay Coll., 2007.02.2078.]



Figure 12. *View of the Old Redwood Highway in Del Norte Coast Redwoods, probably near Damnation Creek. This section of the highway seems little better than a wagon road, with no more than 16 feet of width and no apparent macadam or other surface improvement. The quality and character of the present Coastal Trail Damnation Creek Section is nearly unchanged from these historic conditions. (Compare Figure 10.) [Humboldt State University Library, Special Collections, Tim McKay Coll., 2007.02.2070.]*



Figure 13. *Present day view of Coastal Trail Damnation Creek Section in Del Norte Coast Redwoods State Park. This trail follows the Old Redwood Highway and has changed very little from historic conditions, as illustrated by comparison with Image #9 above, showing the general vicinity. [Photograph by Timothy Babalis, NPS, 2017.]*



Figure 14. *View of Old Redwood Highway at Wilson Beach along the northern side of False Klamath Cove (ca. 1924). Although this location is within the boundaries of Redwood National and State Parks, the historic highway has been obliterated by construction of the modern highway in the latter half of the twentieth century.* [Humboldt State University Library, Special Collections, Tim McKay Coll., 2007.02.2057.]



Figure 15. *Hand-tinted postcard from ca. 1940 showing U.S. 199 along the Smith River canyon just below the ridge at the California border. This portion of the Redwood Highway was completed in 1923. Although much of the present highway still conveys the character of these historic conditions, it outside the study area.* [Humboldt State University Library, Special Collections, Humboldt Co. Coll.]

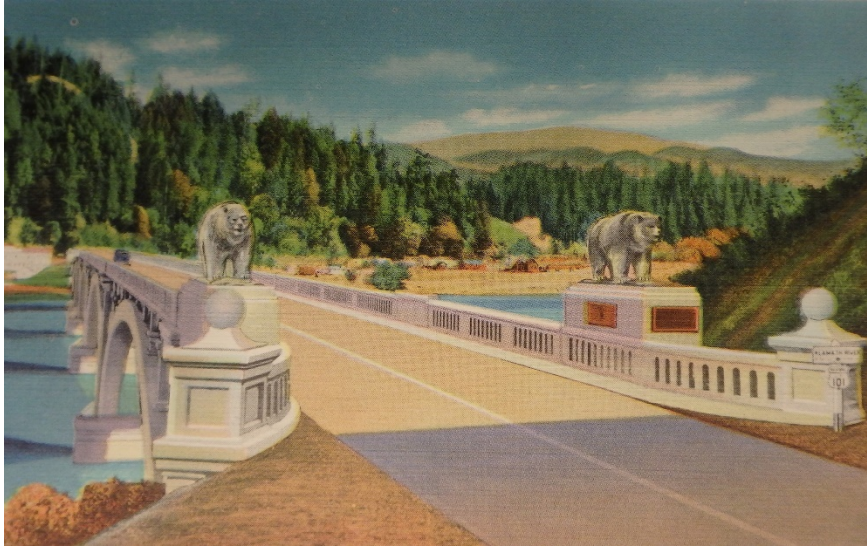


Figure 16. *Hand-tinted postcard of the Douglas Memorial Bridge from about 1940. View is looking north toward the town of Klamath from the south shore of the river. The formed concrete grizzly bears are clearly visible on their pedestals. Another pair stood at the north end of the bridge facing Klamath. The deck of the bridge was 21 feet wide from curb to curb, designed to accommodate the width of the original Old Redwood Highway but too narrow to accommodate later improvements. Even if the Douglas Memorial Bridge had not been destroyed by floods, a replacement bridge and bypass had already begun as the Redwood Highway was being upgraded to more modern freeway standards in the second half of the century. [Humboldt State University Library, Special Collections, Humboldt Co. Coll.]*



Figure 17. *View looking north into the town of Klamath from the Douglas Memorial Bridge, probably in the mid-to-late 1930s. Klamath was largely a product of the Redwood Highway, thriving on the business of recreational motorists, for whom the town offered a variety of services from hotels and auto camps to restaurants, gasoline pumps, and garages. Klamath was washed away by the flood of 1964, the same flood that destroyed the Douglas Memorial Bridge. The present town of Klamath is located about two miles farther upstream to the east. [Humboldt State University Library, Special Collections, Tim McKay Coll., 2007.02.1943.]*



Figure 18. Postcard of the ferry and landing on the Klamath River in Requa. The title refers to the “Redwood Highway” so the photograph was likely taken after 1920, but prior to the construction of the Douglas Memorial Bridge in 1926. Note the ferry is attached to an overhead cable. [Humboldt State University Library, Special Collections, Tim McKay Coll., 2007.02.1923.]

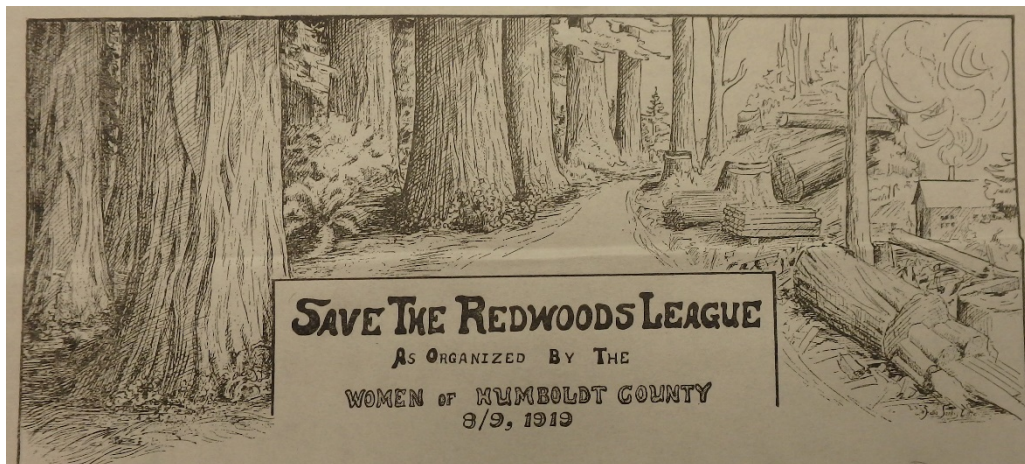


Figure 19. Drypoint letterhead from women's chapter of the Save the Redwoods League (Design dates from 1919 but continued to be used on official correspondence into the next decade). The drawing clearly shows the contrast between preservation of the redwoods and industrial exploitation. The two alternatives are separated by the Redwood Highway. Although the designer of the letterhead may have intended the highway to appear as the line or barrier that holds the lumbermen back and preserves the pristine forest, the highway can just as readily be interpreted as the avenue that opens up the forest to logging, as in fact it proved to be. The ambiguity of the image epitomizes the dubious role played by the highway in the history of redwood conservation. [Humboldt State University Library, Special Collections, Save the Redwoods League-Humboldt Co. Coll.]



Figure 20. *A scene of actual logging along the Redwood Highway in 1917. Pictured is one of numerous small-scale sawmills operated by independent loggers along the highway corridor. The highway made it economically possible to exploit many new areas of the interior forest for the first time. Much of this industry produced only grapevine stakes and shingles from the old-growth timber.* [Illustration from Madison Grant, "Saving the Redwoods: An Account of the Movement During 1919 to Preserve the Redwoods of California," [New York] Zoological Society Bulletin 22, no. 5 (1919): 117; photograph by the Freeman Art Co., Arcata, Calif.]



Figure 21. *Four-part sequence showing upgrading of Old Redwood Highway through Prairie Creek Redwoods State Park in 1928. Photograph 1—in the upper left corner—shows the original road, likely the county wagon road (ca. 1924). Photograph 4—in the lower right corner—shows the finished highway. The highway has been widened to approximately 30 feet and the surface later macadamized. This section of road, which is now part of the Newton B Drury Scenic Parkway appears to have changed very little since this 1928 construction. The most significant modification has been the addition of asphalt surfacing on the shoulders. (See Image #15.)* [Illustration from M.H. Hubbs, "Highway Through Heavy Redwood Timber in Humboldt County Completed," California Highways and Public Works (November-December 1928), p. 16.]



Figure 22. View in Del Norte Coast Redwoods State Park along a portion of the 1934 Redwood Highway realignment. The highway has been constructed to a similar standard as the 1928 improvements in Prairie Creek Redwoods State Park, with a grade width of approximately 30 feet and a macadam surface (See Image #12). [Humboldt State University Library, Special Collections, Tim McKay Coll., 2007.02.2060.]



Figure 23. View of coastal section of Old Redwood Highway, possibly south of Crescent Beach Overlook and north of Nickel Creek. The photograph probably dates from the 1930s. The only apparent improvements to the original road are the asphalt surface and the wooden guardrail. Compare Figure 10 from the 1920s. [Humboldt State University Library, Special Collections, Tim McKay Coll., 2007.02.2084.]



Figure 24. Views of the Old Redwood Highway through Prairie Creek Redwoods State Park (present Newton B Drury Scenic Parkway). Photograph on the right probably dates from the 1930s, the photograph on the right was taken in 2015 in the general vicinity. The only significant change from the improvements made in 1928 is the addition asphalt surfacing. The present Newton B Drury Scenic Parkway still conveys many of the same characteristics from this period of significance. [Humboldt State University Library, Special Collections, Tim McKay Coll., 2007.02.1898.] and [photograph by Kevin McCardle 2018].

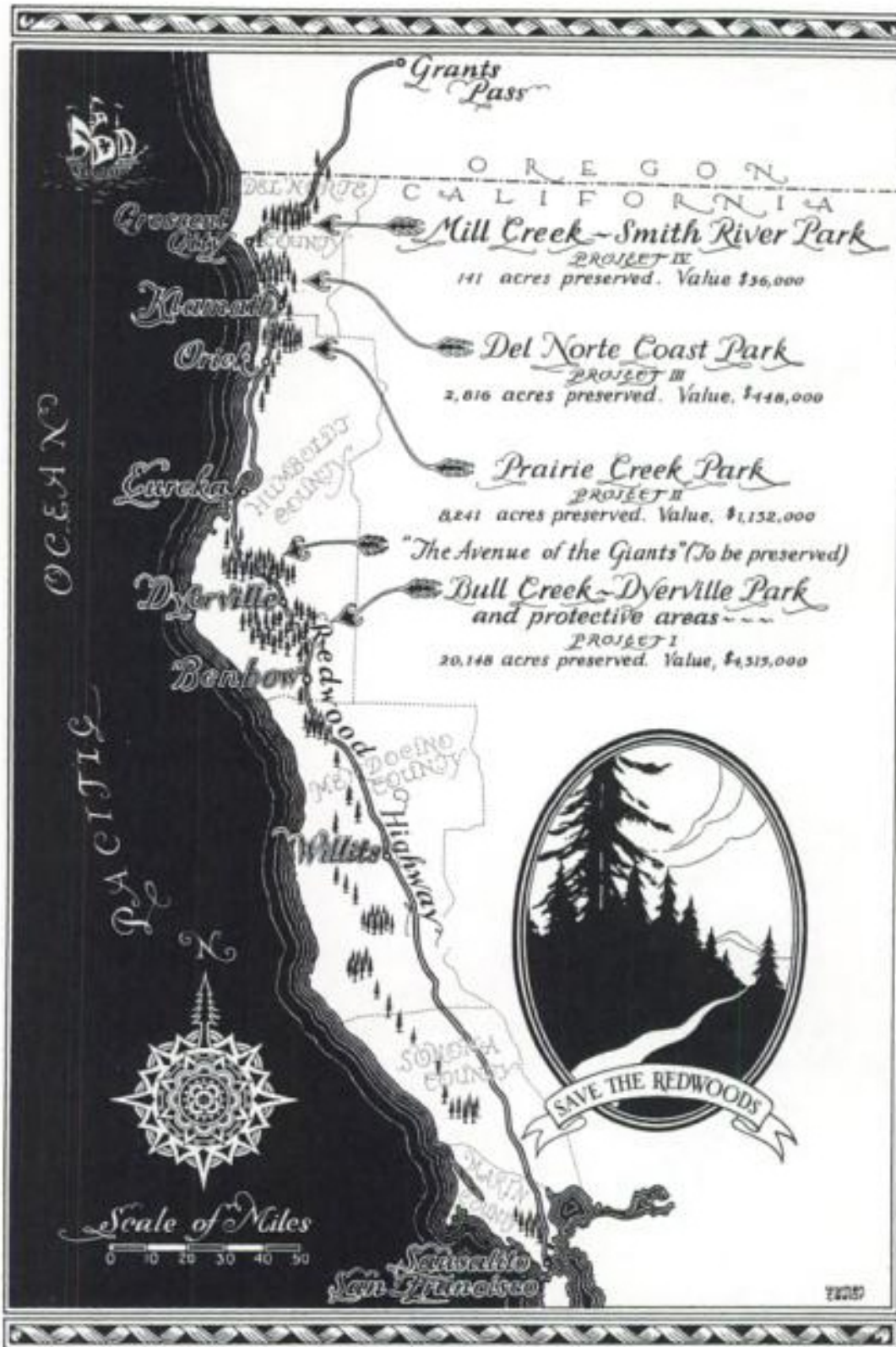


Figure 25. Save the Redwoods League illustrated map showing the location of the four forests identified for preservation (n.d.) (Mark, 2005: 139).

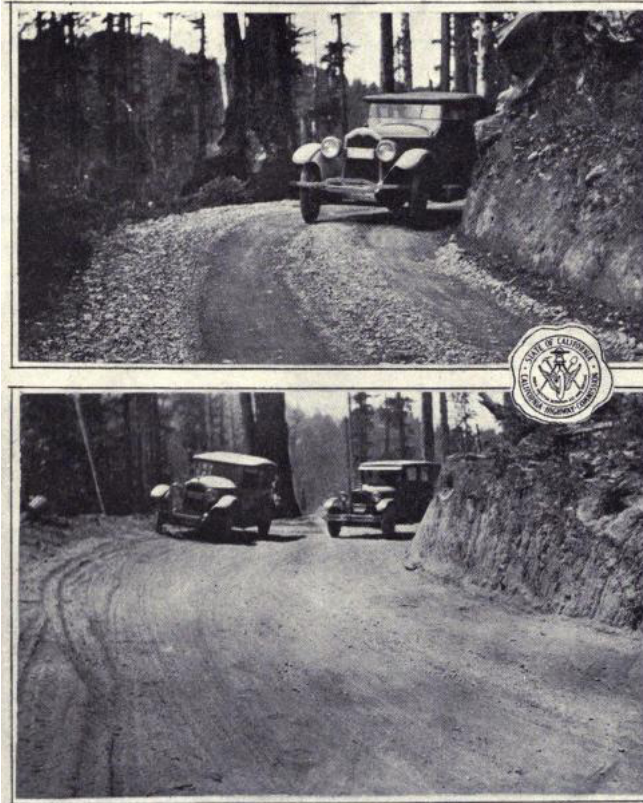


Figure 26. *Typical curve widening undertaken in the 1920s along the Redwood Highway (CHPW 1926).*



Figure 27. *Typical character of the Redwood Highway in the 1940s (CHPW 1945).*



Figure 28. *The Redwood Empire Association's Indian Marathon from San Francisco to Grants Pass ran in 1927 and again in 1928 to promote the opening of the Redwood Highway. The original photo caption is: "Redwood Empire Redwood Marathon. Photograph shows Elmer Whipple, Hopi Indian, running along the greatest scenic highway in the world through gigantic redwood trees en route to Grants Pass, Oregon. He is one of the runners in the 482-mile Redwood Empire Indian Marathon which started from San Francisco." (International Newsreel Photo 6/21/28).*



Figure 29. *The Fourth Infantry engineers ferried vehicles across the Klamath River for two months after floods took out a span of the Douglas Memorial Bridge pictured behind (east) of the ferry. Piers for the replacement (and current) bridge are in the background. The 1965 bypass and new bridge began construction before the flood. A temporary span across the destroyed bridge section was erected about two and a half months after the flood and the current bridge was completed later that year (Eureka Newspapers, Inc. from California Highways and Public Works 1965).*

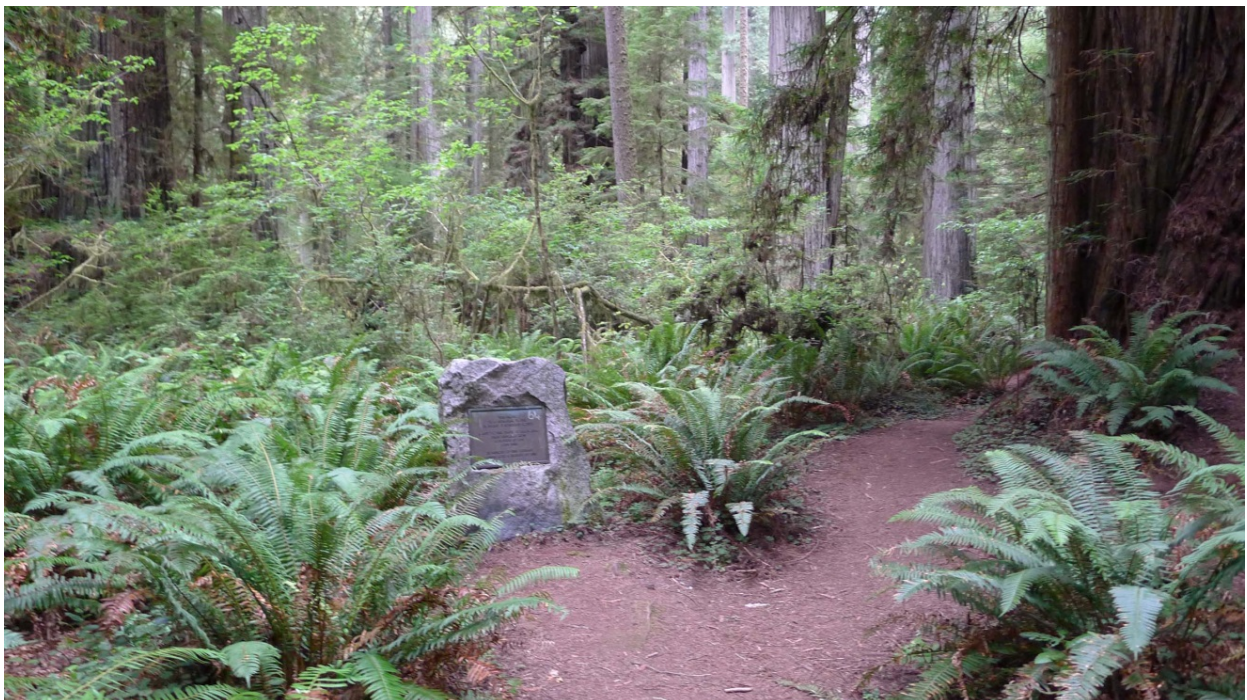


Figure 30. *Parkway trails constructed by CCC in 1930s, with monuments from 1920s-1960s (PWR Cultural Resources 2013).*

Analysis & Evaluation of Integrity

Analysis and Evaluation of Integrity Narrative Summary:

The Redwood Highway was originally conceived in the late 19th century as a means of bringing people to see the scenic wonders of the majestic coastal redwood forests and rocky northern California coastline. The integrity of the Old Redwood Highway Historic District varies with some segments retaining all seven aspects of integrity, but all contributing sections retaining sufficient integrity to convey the historic highway.

Natural System and Features

The design of the Old Redwood Highway was predominantly influenced by the location of the redwood groves and the natural topography of the valleys and coastal bluffs. The large amount of yearly rainfall combined with the unstable soils and coastal waves has a dramatic effect on the maintenance required to maintain a highway. The Old Redwood Highway demonstrates the early efforts of conservationists to preserve and minimize the old-growth redwood removal required to construct the highway. There was also an effort on minimizing cut and fill by following the natural topography.

Spatial Organization

The drama of driving on a road enclosed by giant trees is contrasted by the openness on steep hillsides hundreds of feet above the ocean coast. Within forests, redwoods were retained up to the edge of the pavement. The distant views to the horizon over the Pacific Ocean are still evident on the coastal segments. Although the Old Redwood Highway was originally constructed within a decade, this was a period of rapid evolution in automobiles and highway construction and this is also reflected on the various segments. The earliest former highway in the north half of the district is narrower, with frequent tight turns that wind among the giant redwood trees. The southern portions were built only a few years later but are typically wider and straighter.

Land Use

Historic land uses have not been significantly altered from the original intent and use of the road beyond loss of through vehicular traffic, and commercial traffic. A two-mile segment along the coast in Del Norte County has been buried and no longer utilized. Visitors can still drive, bike, or walk along all remaining segments and enjoy the scenes of coastal redwood trees and the rough California coastline.

Vegetation

The giant coastal redwood trees found along the California coast were the inspiration to create a highway along the coast and gave the Redwood Highway its moniker. A broad right-of-way intended to preserve coastal redwoods along the route. When created environmentalists hoped the highway would bring motorists into the forest and inspire conservationism. The highway provided Save the Redwoods League an opportunity to raise money and purchase, or receive donations of, particularly scenic and large groves of redwoods, and then donate them to the State of California. The memorial groves found in state parks along the highway are the legacy of how the state parks began.

Circulation

The Redwood Highway began in the early days of automobile highway construction and national design standards such as uniform curves and lane widths did not exist. The Old Redwood Highway demonstrates early, and evolving, highway construction focused on leisurely driving through a scenic environment, with less emphasis on efficient travel. The design of the road across the historic district therefore reflects the landscape it is in rather than a consistent design standard. In addition, vehicle and construction technology rapidly evolved over the the 1920s when the Old Redwood Highway was constructed. The narrow, winding lanes of the Damnation Creek Section in Del Norte Coast Redwood State Park, when compared to the wider, straighter lanes of Newton B Drury Parkway, reflect not only the

slightly earlier construction time, but also its position in a coastal redwood forest on the steep slopes above Damnation Creek compared to Newton B Drury Parkway in an inland coastal redwood forest on the more level ground alongside Prairie Creek.

Buildings and Structures

Crossing steams and drainages in the steep and rolling terrain were more frequently traversed with culverts and fill rather than bridges. Three types of contributing culverts are found: concrete box culverts, large concrete culverts, and steel-pipe with a concrete retaining wall type. The latter are found mainly in the Coastal Trail Damnation Creek Section in Del Norte Coast Redwood State Park. There were few bridges originally, and all have been replaced.

Views and Vistas

Continuous views and vistas of the trees, the ocean, and rocky shoreline are key characteristics the Old Redwood Highway. The juxtaposition of the two environments at key points create drama that highlight the unique landscape of northern coastal California. The points where the old highway emerges from the dark forest and onto the coastal bluff are particularly key points. Although lost in some areas due to landslide and vegetation encroachment, historic views and vistas are evident along the Old Redwood Highway Historic District.

Small Scale Features

The contributing small-scale features in the historic district are three bronze memorial plaques signifying the dedication of the surrounding redwood forest. Although there are many other small-scale features found in the district, they postdate the period of significance.

Archeological Sites

Archeology sites along the Old Redwood Highway include: Native American trails and early European American transportation routes that intersect or overlap the Old Redwood Highway; sites of former stores, tourist cabins and other business that supported travel and tourism along the old highway; the radar station troop living quarters; and the remaining abutment of the Douglas Memorial bridge.

Integrity

Integrity is the ability of a property to convey its significance. The evaluation of integrity can be a subjective judgment, but it must always be grounded in an understanding of a property's physical features and how they relate to its significance. There are seven aspects or qualities that, in various combinations, define integrity. The seven aspects are: Location, Design, Setting, Materials, Workmanship, Feeling, and Association.⁸⁹

To retain historic integrity a property will always possess several, and usually most, of the aspects. The retention of specific aspects of integrity is paramount for a property to convey its significance. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant.⁹⁰

The integrity of the Old Redwood Highway within Redwood National and State Parks varies, but the contributing sections retain sufficient integrity from the period of significance to convey the historic character of the former highway. Some segments retain all seven aspects of integrity and all contributing segments retain location, setting, feeling, association, and much of the design. Some of the district has been altered but still retain sufficient integrity to convey the character and feeling of the historic road. Other segments have been buried or undermined to no longer contribute (see Figure 31). An example of the range are the two segments of approximately 5-miles from Nickel Creek south to the intersection with

⁸⁹ NPS Bulletin *How to Apply the National Register Criteria for Evaluation*, 2000, Section 7

⁹⁰ Ibid

the current Highway 101. These segments were abandoned as a highway in 1934, a little more than a decade after it was completed (see Figure 32 and 33). The northern 2-miles section on the coastal bluffs have been buried and undermined in landslides, although aerial photographs reveal some small isolated sections of road remain in this area. The next 3 miles is currently part of the Coastal Trail Damnation Creek Section, and the historic macadam surface and lane markings are still visible along some of the segment, but it is slowly being covered in encroaching vegetation.

This narrative will discuss segments individually by location from north to south.

Enderts Beach Road

The first segment begins at the park boundary, just south of the intersection of U.S. Highway 101 and ends at the Crescent Beach Overlook and Nickel Creek trailhead parking lot (see Figure 2). Enderts Beach Road became part of Redwood National Park in 1968 and continues to be used by vehicles. The road is on a straight, level causeway across a slough and former farm fields, a few feet above sea level, and roughly parallel to the beach. It then reaches about 500 feet above sea level after it passes through a coastal forest. It was originally built in 1920 as part of the highway that was bypassed in 1934 when the coastal sections to the south proved too unstable and difficult to maintain. The road remains much as it was during the period of significance. The pavement has the same twenty-one-foot width as first built. There are two original large concrete culverts, one with a date stamp of 1920. The farm fields and motorist cabins that were along this route are gone, and the fields are now fallow and covered in blackberry, but the views of the ocean remain. Several culverts have been added over the years.

This segment retains integrity in location, setting, feeling, association, design, materials, and workmanship. The road has been repaved and modern signs added, however, these are minor alterations and this segment has a high degree of integrity and is a contributing segment.

Crescent Beach Overlook and Enderts Beach Trail Parking

Where Enderts Beach Road emerges onto the coastal bluff is the Crescent Beach Overlook and Nickel Creek trailhead parking lot (see Figure 2). These were built by the NPS beginning in 1972 and completed sometime in the mid-1970s. The road appears to have been lowered, shifted to the east, the area to the west where the picnic grounds are now, built up, and a stone retaining wall constructed between the road and the picnic grounds. Parking areas for the picnic grounds and the trail were also added, and a fence constructed at the edge of the parking, closing the road south to visitor vehicles (Peterson 2014). The fence along the cliff edge was removed and a more substantial barrier built in 2015. A comfort station was added in the southwest corner of the trailhead parking in 2019. This area has been significantly altered and does not reflect the historic character of the Old Redwood Highway. It is not a contributing segment.

Coastal Trail Nickel Creek Section

The Coastal Trail Nickel Creek Section to Nickel Creek (see Figure 2) is currently a trail for about ½ mile from the fence in the trailhead parking lot south to Nickel Creek. It was closed to public vehicle traffic sometime after 1972. Much of the road sits on a terrace cut into the rocky cliff above the ocean. This segment shows some of the instability of the coastal section and occasionally closes due to rockfall above the trail. It is also becoming narrower with occasional loss of the terrace to landslide into the ocean. This section retains some pavement, but it is in poor condition.

With the loss of road width and pavement, materials and workmanship are less apparent. However, this segment retains integrity in location, setting, feeling, association, design and is still contributing to the Old Redwood Highway Historic District.

Abandoned Road South of Nickel Creek

The Old Redwood Highway Historic District splits from the Coastal Trail Nickel Creek Section south of

Nickel Creek (see Figures 2 and 3). The abandoned and overgrown road climbs toward the coast and is buried in rockfall soon after reaching the bluff above the ocean (see Figure 33). This segment begins the Old Redwood Highway listed in the National Register in 1979 to the intersection with U.S. Highway 101 farther south, and Coastal Drive south of the Klamath River. Much of the listed former highway on the coast has been buried in rock, but aerial photographs reveal short remnants still exist. This abandoned and unstable 2-mile-long section also proved too dangerous to be used as a trail and was bypassed with a new trail segment inland. Due to the hazards and instability, this segment was not ground surveyed, so it is not known what features may still exist.

Most of this segment is buried and it no longer retains its ability to convey its historic use as a road. It is likely any remaining features will continue to be lost as landslides continue in the future. Although this section is included within the National Register nomination, except for the short, unburied segment from the Coastal Trail Nickel Creek Section to the coast, this segment is non-contributing to the Old Redwood Highway.

Coastal Trail Damnation Creek Section

This segment begins where the former highway joins the Coastal Trail Damnation Creek Section on the coastal bluffs and turns into the coastal redwood forest and onto the intersection with U.S. Highway 101 (see Figure 3). Del Norte Coast Redwood State Park existed when the Old Redwood Highway was constructed, and it has the most integrity of any other segments. Some small elements have been lost, but little has been altered. Within the state park forest vegetation has encroached onto the edges of the road, but the pavement is still intact on much of this segment. Some lane markings are even still visible. There are small-scale contributing features including stone and bronze grove memorials along the former highway. Wooden mile marker posts were found but not in the original location. Many of the culverts are original concrete and steel, with a few steel culverts added. The setting within an old-growth redwood forest and a short segment above the ocean is still as it was when the road was first constructed.

This segment retains integrity in location, setting, feeling, association, design, materials, and workmanship and is contributing to the Old Redwood Highway Historic District.

Wilson Creek

South of Del Norte Coast Redwood State Park at False Klamath Cove and Wilson Creek is an isolated segment within the park boundary (see Figure 1). The first highway bridge across Wilson Creek was built in 1923. Remnants of the bridge still exist but are outside the park boundary. This is a very narrow area of the national park and the boundary of the park is only a few hundred feet from the ocean. The old highway within park boundaries is mostly displaced by the current highway and the DeMartin Bridge across Wilson Creek built in the 1960s. There is a large gravel turnout where the old highway turned inland to the former bridge. A drive from the turnout to the former hostel site further obscures the location of the old highway. The short unpaved section beyond the large turnout to the park boundary does not retain integrity on its own to convey the historic character of a former highway. It is not a contributing segment.

Coastal Drive

South of the Klamath River is the southern segment listed in the National Register of Historic Places. The unpaved road is along bluffs above the ocean from the beach access gate south to the junction of Alder Camp Road and Coastal Trail Tey-wo-lew Section (see Figure 4). This segment originally led to the ferry across the Klamath River until 1926 when the Douglas Memorial Bridge was built, and the highway was diverted along what is now Alder Camp Road. Coastal Drive was likely never paved and remains a gravel surface. The ocean views dominate the setting, with the road near the edge of cliffs, 400 feet above the ocean. Culverts have been added and trees have encroached, limiting ocean views in some locations, however, there are still many locations along this segment that still have dramatic views out across the ocean. This segment still retains much of its historic character as a narrow gravel road

overlooking the ocean and continues to contribute to the historic district.

Alder Camp Road

Alder Camp Road (see Figure 4) was a highway from 1927, when the first bridge was completed, to 1965, when the Douglas Memorial Bridge was completed about two miles up-river. The road was most recently altered in 2009 when the road was repaved, slightly flattened, some curbs added, many of the culverts replaced, and a small parking lot built at the north end. However, some of the original concrete culverts still exist. The road follows the horizontal alignment of the 1927 road and still retains the setting and feeling of driving through a coastal forest as well as the location and association, and this segment contributes to the Old Redwood Highway Historic District.

Coastal Trail Tey-wo-lew Section

This 3-mile segment (see Figures 4 and 5) begins at the Alder Camp Road vehicle gate and continues south on bluffs above the coast to the vehicle gate at the end of Red Alder Road. It was part of U.S. Highway 101 until 1965 when the current Klamath Bridge was built, and the highway rerouted inland.

The segment retains some pavement with the same 22-foot width as on Red Alder Road, although it is generally in poor condition. This section has dramatic views from the cliffs high above the ocean until it moves inland into the Alder forests just north of Red Alder Road. Where this dramatic transition occurs from the forest to the vast open views high above the ocean is a key characteristic of the Old Redwood Highway. The segment retains integrity of location, feeling, setting, and the design for the layout of the road from the forests to the vast panoramas of the ocean. With the loss of road pavement, materials and workmanship are less apparent. Apart from the small segment that has eroded, this segment retains integrity in location, setting, feeling, association, design and contributes to the Old Redwood Highway Historic District.

This segment was open to vehicles until 2011 when an approximately 350-foot segment about $\frac{3}{4}$ of a mile north of Red Alder Road slumped about 15 feet down. The erosion continues and has reduced the road width to approximately 10 feet but remains passable to hikers and bicycles. This 350-foot section has lost integrity as a historic road and is non-contributing.

Red Alder Road

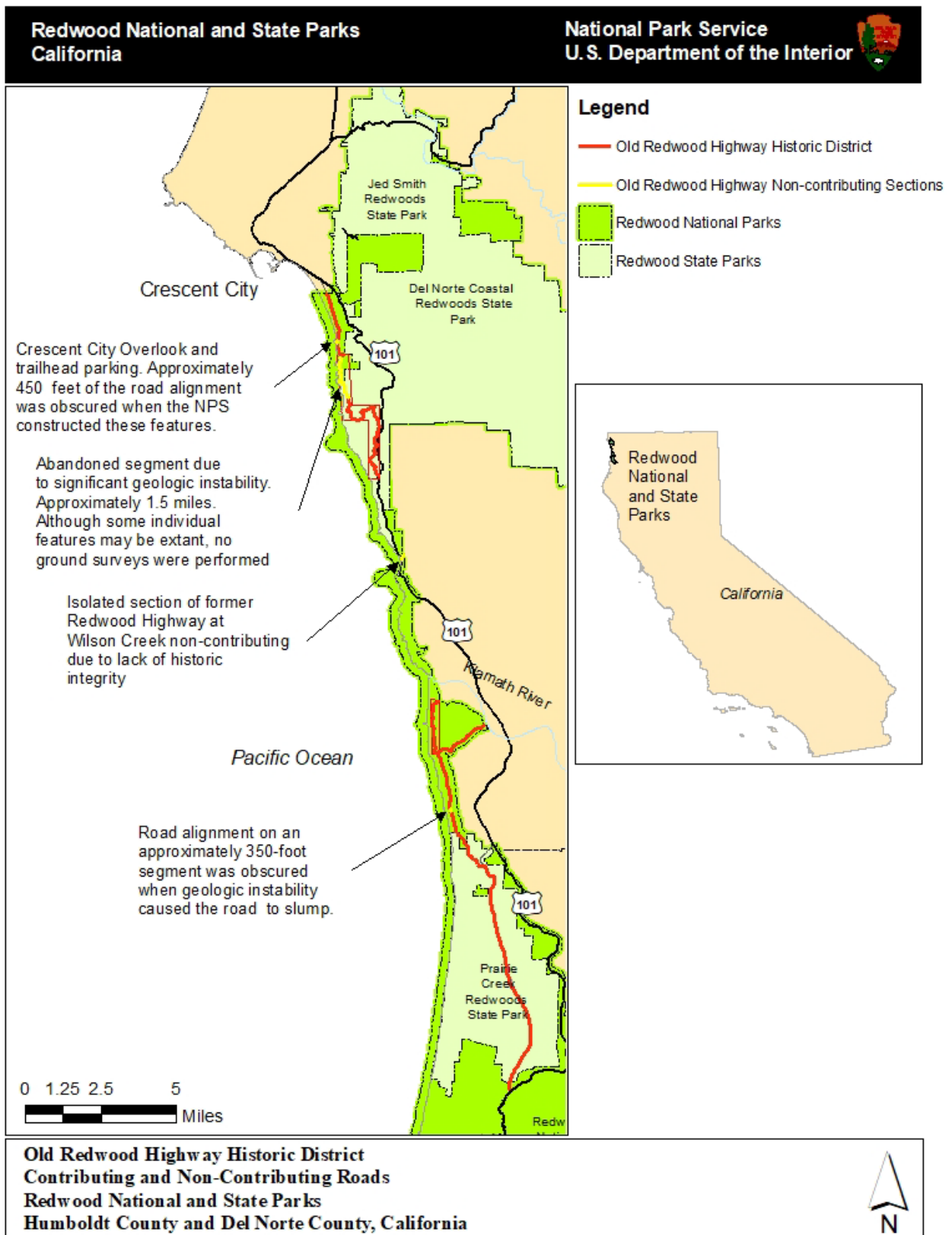
This segment (see Figure 5) begins at the vehicle gate at the end of Coastal Trail Tey-wo-lew Section within Redwood National Park and continues west and south, ending at Newton B. Drury Parkway within Prairie Creek Redwoods State Park. The current road is owned by Humboldt County from the national park boundary to Newton B. Drury Parkway, but maintained by NPS and CDPR. It was designated U.S. Highway 101 until 1965 and continues to be open for vehicles. Near the ocean, alder trees are more common, and the sound of ocean waves begin to be heard. The redwood forests become denser inland. The current 22-foot width of the pavement is about one foot wider than it was in the 1920s and turnouts and shoulders are not paved. Culverts have been added and some have been replaced. Original memorial grove plaques remain, but other wood memorial grove signs are modern replacements or additions. The road travels through the redwood and coastal alder forests and still conveys the feeling, setting, design, materials and association of the historic road and is contributing to the Old Redwood Highway Historic District.

Newton B. Drury Parkway

This segment of the Old Redwood Highway Historic District (see Figures 5, 6, and 7) begins at Red Alder Road and continues south to the May Creek Bridge south of Prairie Creek Redwoods State Park. It was U.S. Highway 101 until 1992, more recent than any other segment, when a bypass was built to the east and the road was designated Newton B. Drury Parkway. Its construction roughly coincided with creation as a state park. The preservation of the groves of redwoods along this segment began in 1923 when Mrs. Joseph Zipporah Russ donated a 160-acre tract of redwood forest, north of Elk Meadow. The road rolls

south through the redwood forest roughly parallel to Prairie Creek with ridges to the east and west, until the road enters Elk Prairie on a straight causeway above the open meadow.

Although the most modern in appearance, the alignment have not changed as evidenced by the redwood trees at the edge of road and extant concrete culverts from the 1928. The settings and feeling remain. It was an intentional scenic experience driving through the dark redwood forest under a soaring tree canopy with massive trunks at the edge of the roadway and into the open meadow. The road was not dramatically widened, but traffic lanes increased from 10 to 11 feet and pavement added for turnouts along some of the segment, adding up to an additional 30 feet in locations. The road through Elk Meadow had paved shoulders for parking adding 20 feet. These changes, however, are paving over previous graveled or dirt turnouts and is not a significant change. Some historic concrete box culverts remain, many culverts have been added or replaced, but these are often not visible from the road, or from nearby trails. The specific asphalt formula used has likely changed, as elsewhere, to a smoother and more uniform surface than 1930, but it is the same general material. Of the seven aspects of integrity, this segment retains its design, location, setting, feeling and association and is contributing to the Old Redwood Highway Historic District.



Landscape Characteristics

Natural Systems and Features

Natural systems and features are defined as natural aspects that have influenced the development and physical form of the landscape. Among other aspects, it can include climate, geology, hydrology, soils, and native vegetation. The old-growth coast redwood forest distribution and location influenced the development of the highway, while large amounts of precipitation, ocean waves, stable and unstable soils affected the design and ultimate lifespan as a highway.

Geomorphology

The Old Redwood Highway traverses very different types of landscapes - the coast and interior valleys. This landscape has been shaped by tectonic forces, heavy precipitation, and varying soils.⁹¹ Redwood National and State Parks includes 42 miles of coast, while alluvial valleys are located at the Klamath River and Redwood Creek. Further inland, the park is bordered by the Coast Ranges that trend north/northwest. From the coast to the inland mountain range, the elevation varies, and rises to more than 3,000 feet above sea level. The coast is a dynamic location where the North American and Gorda Plate plates of the Earth's crust form an offshore subduction zone. The coastal bluffs are a Franciscan formation that includes steep slopes of up to fifty percent and are predominantly colluvium sandstone and mudstone.⁹²

The geology along the coast changes from north to south. From Enderts Beach to False Klamath Cove is Franciscan sandstone which very competent rock. The sea cliffs in this area are very steep and constantly modified by ocean waves and undercut the slopes causing debris slides. South of False Klamath Cove to Ossagon Creek at the north end of Newton B Drury Parkway, the coastline is underlain by Franciscan melange which is highly sheared sandstone and siltstone with large resistant blocks. These areas form hummocky terrain with slumping, and landslides. Near the coast the ocean waves are constantly modifying the unprotected shoreline, further destabilizing the area.⁹³

These natural systems have had a direct influence on the development of the highway. The initial alignment was chosen along the coastal bluffs for the dramatic views, but also meant dense redwood forest would not have had to be removed to construct the highway. The geology and climate, however, create an unstable location on the coastal bluffs resulting in frequent small and large landslides after rainstorms. Much of the coastal routes required major maintenance each winter to remove loose soil and boulders from the highway, while the highway alignments within the level and relatively stable soils within the redwood forest remained largely intact (see Figures 32 and 33).

Vegetation

Coastal redwood occurs in a narrow area of the northern California coast on coastal hills and valleys extending from the southwest corner of Oregon and terminating in the south in Monterey County. It is estimated that the extent of the coast redwood was originally about 1,970,000 acres. By 1965 had been reduced to approximately 300,000 acres, due primarily to logging and agriculture, as well as urban and suburban land use.⁹⁴ Today, nearly ninety-six percent of the old-growth redwood has been logged, although the northern extent of the forest still contains significant stands of coast redwood. The coast redwood is the tallest known trees in the world and grows in dense groves of other coastal redwood. The trees average 200 feet tall and sixteen to twenty feet wide at breast height. The tallest known tree to be measured was nearly 380 feet high and twenty feet wide at breast height. The trees bark tannin allows the

⁹¹ NPS General Management Plan, 9

⁹² REDW GIS Soils

⁹³ Smith, 8

⁹⁴ North Coast Redwood Master Plan, 12

trees to be extremely resistant to fire, decay, and insect infestation and the average age for coast redwood is between 500-700 years⁹⁵ and dated up to 2,400 years old.⁹⁶

The old highway also passes through prairies within the forested valleys, and the coastal bluffs which support a coastal scrub, alder and spruce forests, and coastal prairie. The coastal vegetation is highly tolerant of wind and sea salt spray, unlike the coast redwood. Coastal forests are a mix of Sitka spruce, alder, salmonberry, and sword fern, and often western hemlock and western red cedar (see Figures 34, 35, 36, and 37). Interspersed with coastal forests are areas of scrub, including dense shrubs of half a meter to two meters tall that can tolerate rocky soils and steep hillsides. Coastal prairies are composed of dense perennial grasses and herbs that are less than a meter tall, which thrive in the coastal fog.⁹⁷

The former highway was constructed along an alignment in the forests where little cut and fill was done. The natural topography was closely followed because there was less need for broad, consistent curves in addition to the labor-intensive construction and the technological limitations of large-scale excavations. Along the coastal bluffs it was cut and fill construction, but it did not require removing large trees. The rights-of-way were typically 100 feet but up to 300 feet, with the intent of preserving old growth redwood along the highway (see Figure 37).

By the 1950s, when multi-lane freeways were proposed requiring the removal of a significant numbers of redwoods, bypasses were the ultimate solution to preserve the old growth redwoods within Humboldt Redwoods State Park, and later Prairie Creek Redwoods State Park.

Climate

The local temperate coastal climate is generally 40-65 degrees year-round with an occasional freeze. Rainfall ranges from 60 to 140 inches per year, with most of it falling during the winter months from November through April. The relatively large amount of rain posed challenges in maintaining the old highway along coastal bluffs, creeks, and streams, as major landslides, minor slumps, and flooding occur often during periods of heavy rain. In addition, ocean waves, particularly in winter, can modify and undercut the hillsides.⁹⁸ These factors were mitigated, as portions of the highway affected by major reoccurring landslides were rerouted inland, and large culverts, subterranean drain tiles, and drainage ditches were added to mitigate the wet conditions.

Summary

The Old Redwood Highway's design was predominantly influenced by the location of the redwood groves and the natural topography of the valleys and coastal bluffs. The highway demonstrates the early efforts of conservationists to preserve the redwoods through the design of the highway that minimized the old-growth redwood removal required to construct the highway as well as an emphasis on minimized cut and fill by following the natural topography. The large amount of yearly rainfall combined with the unstable soils of the coastal geology had a dramatic effect on the amount of maintenance required to maintain the highway.

⁹⁵ North Coast Redwood Master Plan, 14

⁹⁶ Sillett, Steve correspondence

⁹⁷ NPS REDW GIS Vegetation

⁹⁸ Ozaki, Vicki correspondence

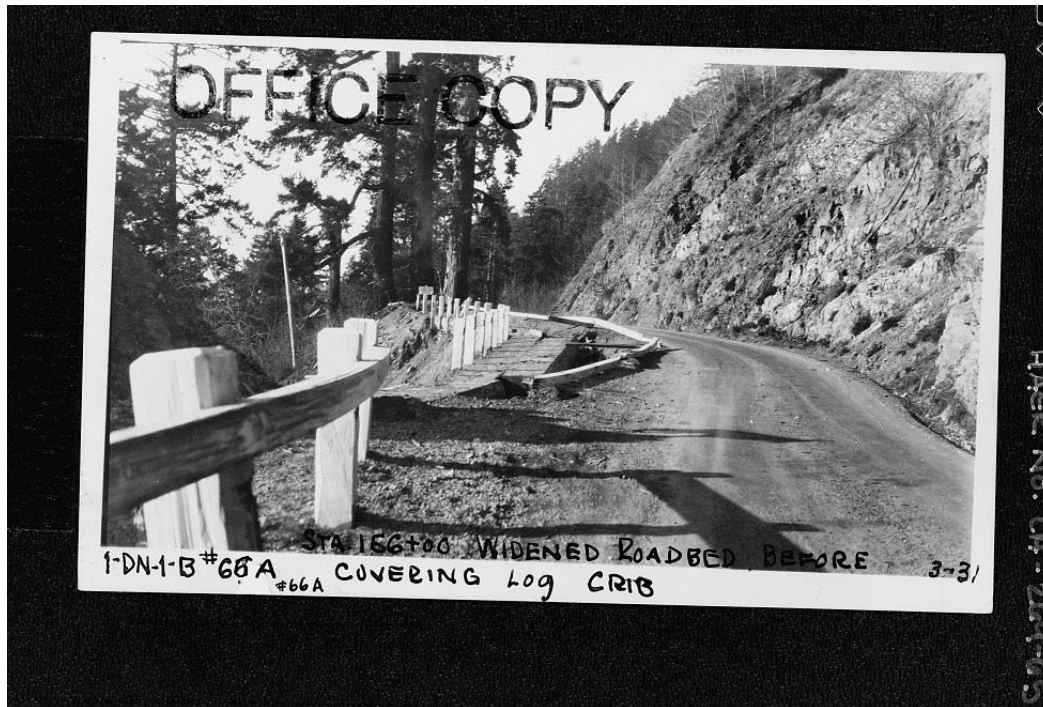


Figure 32. *Geologic instability on the coastal bluffs led frequent maintenance such as this crib wall along the ocean bluffs in Del Norte County in 1931, and eventually lead to rerouting the highway inland by 1934 (HAER 2001).*

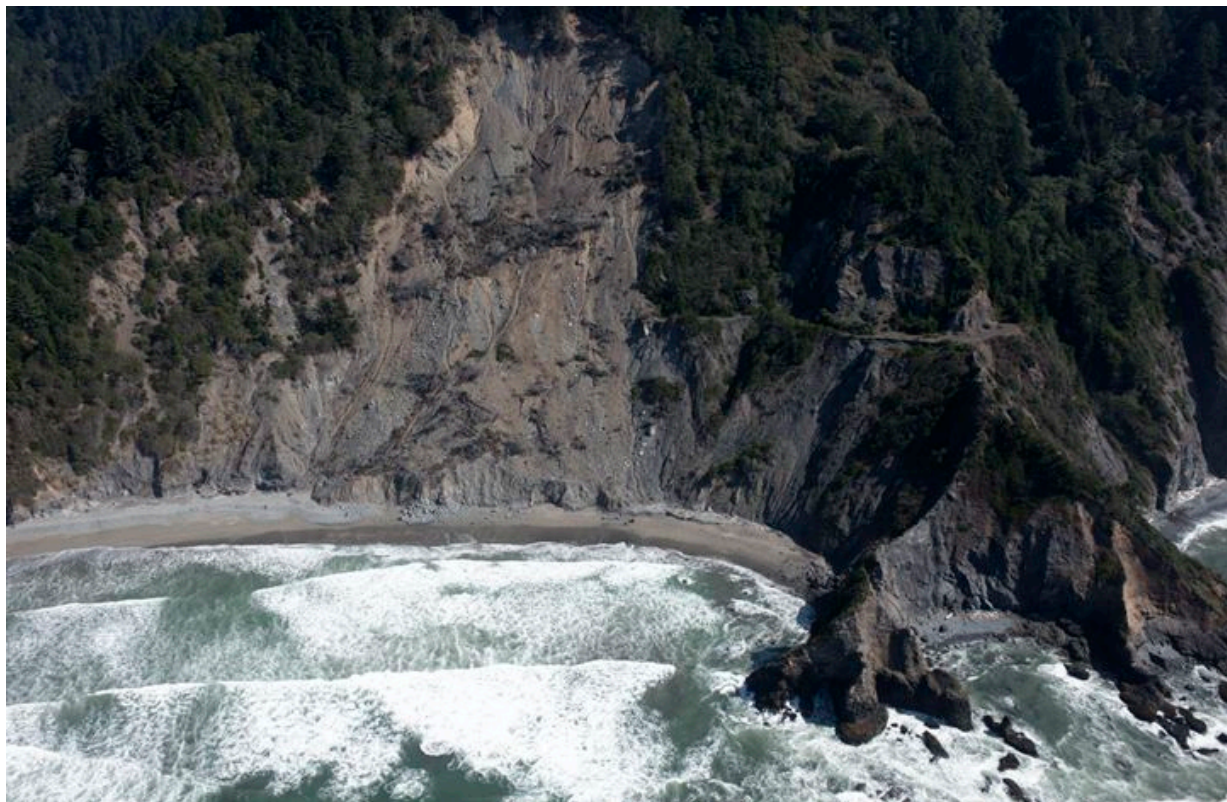


Figure 33. *Geologic instability on the coastal bluffs above Enderts Beach south of Nickel Creek. The Old Redwood Highway terrace can be seen to the right of the landslide(Image 200900395, California Coastal Records Project, 2009).*



Figure 34. *Natural Systems and Features: View in Del Norte Coast Redwoods State Park above the Old Redwood Highway showing typical vegetation in an old-growth redwood grove. (REDW 2018.)*



Figure 35. *Natural Systems and Features: Old-growth redwood forest surrounds the highway through Prairie Creek Redwoods State Park (PWR Cultural Landscape Program, 2013).*



Figure 36. *Natural Systems and Features: alder and Sitka spruce forest surrounds the former highway through Prairie Creek Redwoods State Park, which is aligned to follow the natural topography of the coast, seen here at Red Alder Road (PWR Cultural Landscape Program, 2013).*



Figure 37. *Natural Systems and Features: The highway was carefully designed through the redwood groves, and trees were left in place along the edge of the travel way. In this photo, a tree along the Damnation Creek segment was cut back with an ax to allow just enough room for the road alignment (PWR Cultural Landscape Program, 2013).*



Figure 38. *Natural Systems and Features: The old-growth Coast Redwood groves that surround the Damnation Creek segment of highway are sheltered from the ocean spray but are shrouded in fog (PWR Cultural Landscape Program, 2013).*

Spatial Organization

Spatial organization is the three-dimensional organization of physical forms and visual associations in the surrounding landscape. Important aspects of the road's spatial organization include the road's alignment, grade, and width. It is also affected by how the roadway sits in the surrounding topography and vegetation patterns.

The Old Redwood Highway Historic District is 25.6-miles of previously abandoned segments of the Redwood Highway within the boundaries of Redwood National and State Parks (RNSP). The historic district is in two groupings separated by the Klamath River and further separated into 11 segments. The 11 segments are separated by current usage, the period of original construction, and the variation of topography and vegetation. The historic road moves between flat open meadow, steep coastal bluffs, and dark forests. The highway was originally conceived of as a route for pleasure driving to draw motorists into the northern California coast and redwood forests and moving between these varied environments of light and dark, flat and steep, and enclosed and open created a dramatic experience.

Spatial organization on the Old Redwood Highway is also influenced by the date of construction within the decade it took to build. The technologies of vehicles and construction were rapidly evolving, requiring highways to accommodate higher speeds, and more became efficient to construct. This was still a time before uniform national construction standards for highways existed, although state highway departments had begun to organize toward that goal.⁹⁹ As time progressed through the decade, the former highway was built straighter, flatter, and wider. The early 1920s roads therefore are narrower and have tighter turns as they wound among the trees and topography.

General Road Character

The Old Redwood Highway Historic District shows a dramatic variety of spatial character that reflects the variation in the surrounding topography and vegetation. The overall spatial quality is experienced as moving through enclosed, winding corridors in the forests, contrasted by open light-filled spaces above the ocean and meadows. It is the contrast of moving between these environments that is an important experience of the Old Redwood Highway. The 11 segments are described individually, but the principal characteristic of the Old Redwood Highway is moving between the varied spaces.

Enderts Beach Road

The approximately 1.5-mile Enderts Beach Road section begins (see Figure 43) on a straight causeway a few feet above sea level through former farm fields, parallel to the beach. From the open road near the beach, the former highway then winds through a sparse alder forest to about 500 feet above sea level, with a steep vegetated slope to the east and occasional views of the ocean to the west.

Crescent Beach Overlook and Enderts Beach Trail Parking

This is the southern terminus of Enderts Beach Road on the coastal bluff and the beginning of the Nickel Creek trail to the south. This approximately 500-foot segment is not contributing because of the NPS construction of the overlook picnic area and the parking, it does demonstrate the drama of elevated views down the rocky California coast, out to the ocean, and north to Crescent Beach and Crescent City.

Coastal Trail Nickel Creek Section

This ¾-mile section is on a cut terrace above the rocky coast with steep rocky slopes above and below (see Figure 11). The terrace ranges from about 50 feet wide with a few trees to about 15 feet with no vegetation at its narrowest. It enters an alder forest as it drops in elevation to Nickel Creek. The former

⁹⁹ The American Association of State Highway Officials (AASHO) first adopted uniform highway numbering in 1926. AASHO published the first national highway standards edition of specifications for materials on bridges and structures in 1931.

highway leaves the maintained trail just south of Nickel Creek and ends where the old highway departs from the Coastal Trail south of Nickel Creek.

Abandoned Road South of Nickel Creek

This 2-mile segment was cut into the steep rocky slopes high above the ocean coast and is largely buried. The views from the elevated terrace above the shore were likely some of the most dramatic ocean views of the historic road (see Figures 32, 33, and 45). The proximity of the ocean made for a great scenic experience, but the ocean waves constantly undermining an unstable geology proved a difficult environment to maintain a highway. It was abandoned as a highway in 1934 and has continued to be buried and fall away. It is too unstable to be utilized as a hiking trail and a bypass for the Coastal Trail was constructed inland. This segment has been abandoned. There is a short segment between the Coastal Trail and the rockfall on the Coastal bluff that is passable, but not maintained.

Coastal Trail Damnation Creek Section

Coming from the north, this is first segment that moves from the bluffs into the coastal redwood forest. The contrast of moving from the open bluff into the enclosed tall-treed forest is striking. This approximately 5 mile segment demonstrates the narrow lanes and meandering path through the redwood forest (see Figure 39). Towering trees that grow adjacent to the narrow roadway dwarf anything on the road. The roadbed is cut into a steep hillside that slopes to Damnation Creek and the ocean, creating limited views inland up the slope, but dramatic views over the understory and through the downslope redwoods trunks into the distant canopy of redwoods hundreds of feet below the road elevation. The roadway itself is relatively level but is rarely straight, with tight turns around trees and gentle curves across the face of the hillside above Damnation Creek. The segment ends at the modern U.S. Highway 101.

Wilson Creek

This is a short 600-foot segment, isolated from other portions of former highway, immediately south of Wilson Creek. This segment is a portion of the former highway that connected the route along the beach at False Klamath Cove to the previous bridge over Wilson Creek, east of the current bridge. The segment ends at the park boundary approximately 500 feet from the current U.S. Highway 101. Most of the former highway has been obscured by the large turnout south of the current bridge, and an access road to a former hostel site.

Coastal Drive

Coastal Drive is a 2 ½-mile segment connecting the former highway to the ferry landing on the south bank of the Klamath River that operated prior to the completion of the bridge. It rises from the beach access gate to sparsely vegetated terraces above the ocean coast. There are open, dramatic views out to the ocean, haystack formations, and the mouth of the Klamath River. This segment ends at the intersection of Alder Camp Road and Coastal Trail Tey-wo-lew Section.

Alder Camp Road

This 2 ½-mile segment connected the first bridge across the Klamath River through a coastal alder forest to the coastal bluffs. Built in 1926, it was modified in 2009 when the road was flattened, culverts replaced, and pavement widened. The original layout exhibited significantly less of the meandering curves of the earlier built segments, reflective of both its environment and time of construction. The changes made in 2009 did not significantly alter the spatial character of this segment.

Coastal Trail Tey-wo-lew Section

The segment is about 3 ½ miles of former highway along the coastal bluffs, hundreds of feet above the rocky ocean coast. Built between 1926 and 1928 it is generally level with broad gentle curves and short, straight sections. The terrace cut into the bluff is significantly wider than the abandoned segment. Scattered patches of coastal forest and trees historically existed here, but the segment is generally open

with broad views of the California coast. The segment ends at the vehicle gate at Red Alder Road as the former highway reenters the forest.

Red Alder Road

The former highway makes a dramatic shift as it moves from the open coastal bluffs into alder forest and quickly into the dark coastal redwoods (see Figure 36). The former highway is cut into a forested ridge which obscures views east of the road, and the light from the ocean to the west fades as the road continues inland. It is approximately 2 miles long and ends at the intersection with Newton B Drury Parkway.

Newton B. Drury Parkway

At the intersection of Red Alder Road, the Old Redwood Highway continues south for about 9 miles. Newton B Drury Parkway also continues north, but that section of highway was added in 1965 when the replacement bridge over the Klamath River was built. The Parkway is in a dense coastal redwoods forest, through a valley along Prairie Creek (see Figure 40). The combination of topography, tall canopy, large trunks, and understory shrubs limits views to the side and the road appears as an enclosed corridor. Built in 1928, less than 8 years after the Coastal Trail Damnation Creek Section, these two segments illustrate the rapid evolution of automobiles and highway engineering in the 1920s. The parkway is significantly wider and straighter, but large trees were spared to the extent possible, some left growing next to the paved edge and in some cases removing only part of the trunk for the travel lanes (see Figure 37). There is a gently rolling vertical alignment that limits views and the former highway generally runs downhill to the south.

There is another dramatic transition to the south as the Old Redwood Highway leaves the dense coastal redwood forest and into the open space of Elk Prairie. Like Enderts Beach Road, the former highway is straight, atop a causeway, and through open former agricultural fields (see Figure 42). Unlike Enderts Beach Road, the segment in Elk Prairie was widened to accommodate park visitor parking, but this does not significantly change the spatial character.

Summary

The images of the Old Redwood Highway winding through giant redwood trees is iconic, frequently seen on many postcards (see figure on cover). The drama of driving on a road enclosed by giant trees is contrasted by the drama of terraces cut into steep hillsides hundreds of feet above the ocean coast (see Figures 44 and 45). Redwoods at the edge of the former highway remain and the distant views to the horizon of the Pacific Ocean are still evident. Although the segments were originally constructed within a decade of each other, this was a period of rapid evolution in highway construction. The segments reflect the time and the environments in which they were constructed. The earlier former highway at the north end of the district is narrower, with frequent tight turns that wind between the giant redwood trunks. The southern portions were built a few years later and are typically wider and straighter, but still allow a close-up experience of the trees for motorists. Similarly, the southern coastal segments are on a broader terrace with gentler more uniform curves, but also allow the motorist broad sweeping views of the ocean and rugged coastline.

Spatial Organization Graphics:



Figure 39. Coastal Trail Damnation Creek Section in Del Norte Coast Redwoods State Park looking north. The segment of road has not been altered since constructed in the 1920s. It cuts into steep hillsides above Damnation Creek and ocean. The road winds through the trees and follows the natural curves of the slopes. The steep slopes also allow for more open views to the left over the understory, below the old-growth canopy (NPS 2018).

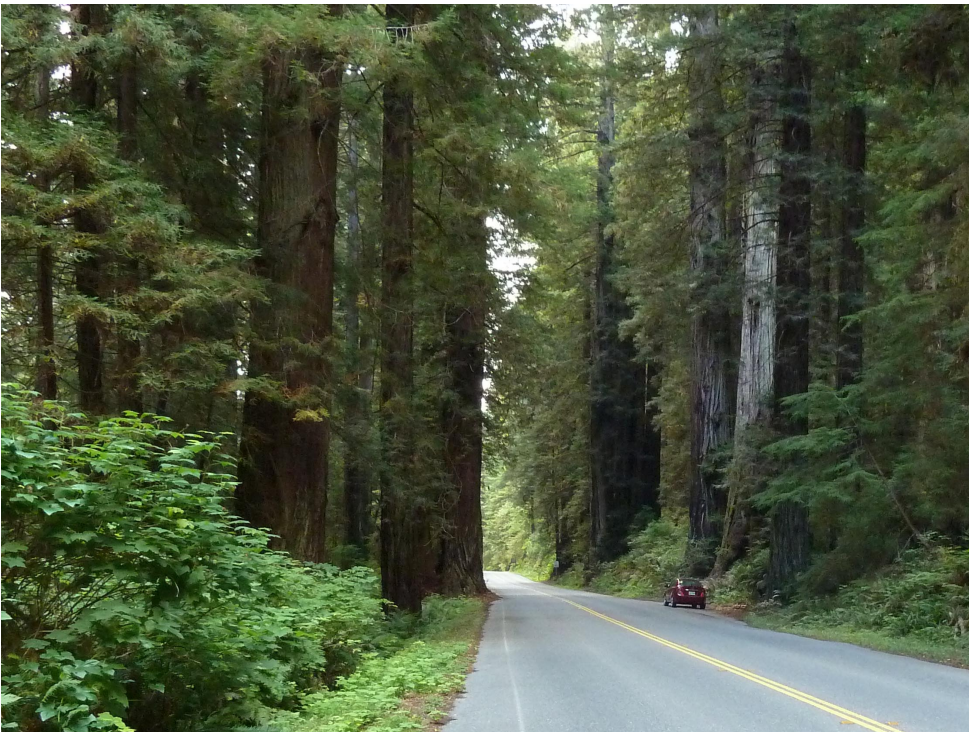


Figure 40. Newton B Drury Parkway through the dense, enclosing forests of the old-growth redwoods. This section was the last to be built in 1928 and paved in 1930. It is wider and straighter, which reflect its later construction but also its position in a valley along a creek. The large trees adjacent to the roads remain and dominate. The rolling vertical alignment also limits distant views down the road (NPS 2018).

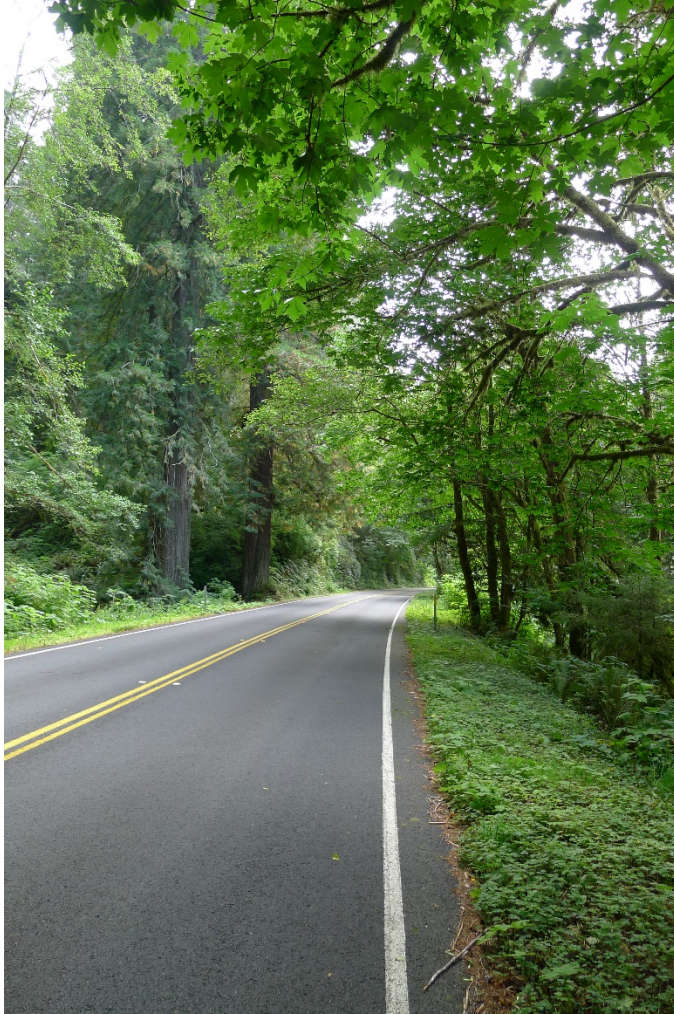


Figure 41. Alder Camp Road cut through steep hillsides that are generally obscured by the dense undergrowth. The cut hillside is above the road on the left, and steep drop to Richardson Creek on the right (NPS 2018).



Figure 42. Newton B Drury Parkway near the southern end of the Old Redwood Highway travels straight through Elk Prairie in Prairie Creek Redwoods State Park. Paved shoulder parking was added but does not significantly alter the spatial character (Leach and Grogan, HAER 2001).



Figure 43. Enderts Beach Road looking north. Although the surrounding grade is somewhat obscured by the invasive Himalayan Blackberry, the causeway is about six feet above the adjoining former farm fields. Crescent Beach and the Pacific Ocean can be seen to the left. The wood guard rails above the culvert are not historic and no longer exist. (Leach and Grogon, HAER 2001).



Figure 44. Coastal Drive looking north with expansive and distant views to the mouth of the Klamath River and the Pacific Ocean. The curves can be very tight as the roads typically follow the surrounding topography (NPS 2017).

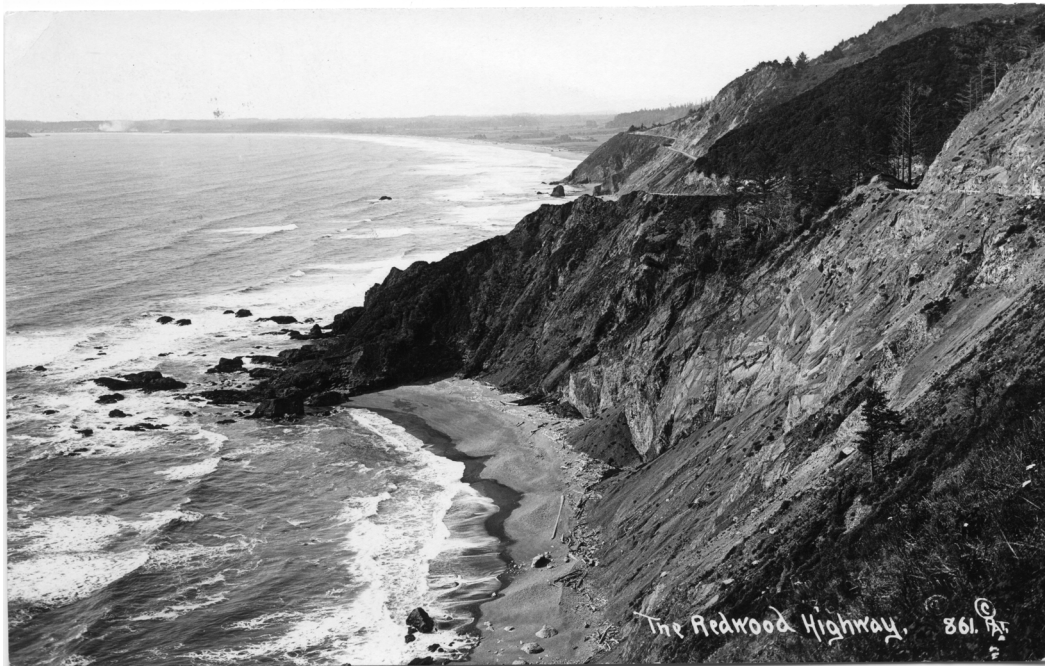


Figure 45. Historic postcard of the Old Redwood Highway south of Nickel Creek looking north above Enderts Beach. The former highway is also seen on the distant bluff where the road disappears inland at what is currently the Crescent Beach Overlook. Evidence of unstable slopes can be seen in the foreground above the beach. The segment to the right is now buried in landslide debris (McKay Collection, Humboldt Room, Humboldt State University, date unknown).

Land Use

Land use describes the dominate uses and the historic uses of the Old Redwood Highway.

The Yurok and Tolowa used redwood canoes to travel the coast and rivers. Trails inland and along the coast connected villages and other seasonal areas. European Americans began to settle in the area after 1850, creating towns where coastal schooners could land, bringing supplies and goods. Humboldt and Del Norte Counties began constructing trails for pack animals and wagons, often following Native American trails, to supply inland gold mining along the Klamath River and southern Oregon. Trails along the coast were eventually improved in the late 19th century as an alternative to moving goods by boat along a hazardous and ill-weathered coastline. When the Old Redwood Highway was constructed in the 1920s, it often straightened and improved the previous county wagon road, seen on the original highway construction drawings (see Figure 46). Significantly, the Old Redwood Highway diverted away from the previous wagon road with sections along the ocean coast. Cut from the steep hillsides, these segments provided a scenic experience and dramatic contrast to the enclosed redwood forests.

The early highway brought motorists to the tall redwood trees, it also improved the ability to move goods for along the coast and created better access to redwood and other forests for lumber. The highway developers negotiated logging buffers along the highway to preserve the old-growth redwoods next to the road, but to the dismay of some of the early highway supporters, the highway also made other stands of old-growth redwood easier to harvest.

The Save the Redwood League (League) began purchasing and facilitating donations of old-growth redwood for preservation when the Old Redwood Highway was being constructed. The highway was successful in bringing the public to see redwoods and the League focused efforts on preserving stands along the new highway. The first donated grove in the Old Redwood Highway Historic District was the Pioneer Grove set aside in 1923 within what is now Prairie Creek Redwoods State Park. Many other groves were set aside for preservation and recreational use in areas that became Prairie Creek Redwoods State Park and Del Norte Coast Redwoods State Park. The construction of the highway also created commercial opportunities in accommodating travelers and motorists with many motorist camps, cafes, and garages built. In 1968 the land surrounding the Old Redwood Highway Historic District outside of state parks became park land with the creation of Redwood National Park. By this time the motorist cabins and garages along the road had been abandoned, and along with many of the farm buildings, were removed in the following years.

Current Use

The Old Redwood Highway Historic District within Redwood National and State Parks is no longer a highway, or used for commercial transportation, but it is still used for recreational transportation. Some segments are still used by automobiles, and some primarily by day-hikers and long-distance hikers. Some segments have proven to be unstable and been closed.

Beginning at the north end of the Old Redwood Highway Historic District, Enderts Beach Road is open to vehicle traffic. The Crescent Beach Overlook and trailhead parking at the south end of this road were constructed by NPS. A fence at this trailhead prevents visitor vehicles from entering the Coastal Trail Nickel Creek Section but is open to hiking. After Nickel Creek the Old Redwood Highway moves to the coast and has been abandoned due to geologic instability. After the abandoned section, the former highway is referred to as the Coastal Trail Damnation Creek Section and continues as a hiking trail until the current U.S. Highway 101. Within this segment, the bridge across Damnation Creek is a pedestrian bridge, preventing any administrative vehicles traveling farther north. South of the Klamath River Coastal Drive is a one-way visitor vehicle road with traffic moving north. Alder Camp Road to the east is a two-way visitor vehicle road. These two roads meet at a four-way intersection with the access road to the Alder Creek CalFire Camp to the east, and Coastal Trail Tey-wo-lew Section to the south. A vehicle

barrier gate at the Coastal Trail Tey-wo-lew Section allows administrative vehicles. The Coastal Trail Tey-wo-lew Section was closed to visitor vehicles when a 350-foot section about $\frac{3}{4}$ of a mile north of Red Alder Road slid downhill. Hikers and bicycles can still traverse the slumped section. A vehicle gate at Red Alder Road stops visitor vehicles traveling farther north. Red Alder Road and Newton B. Drury Parkway and are open to visitor vehicles. The district ends at the May Creek Bridge north of where the Parkway meets U.S. Highway 101.

Summary

Historic land uses have not been significantly altered from the original intent and use of the road. The main change is that through vehicular traffic, and any commercial traffic, no longer use the Old Redwood Highway Historic District, replaced by bypasses to the east. Some segments have also been lost to landslide and are no longer used for any purpose. Visitors can still drive, bike, or walk along all but the two-mile segment buried along the coast in Del Norte County and enjoy the scenes of grand coastal redwood trees and the rough California coastline.

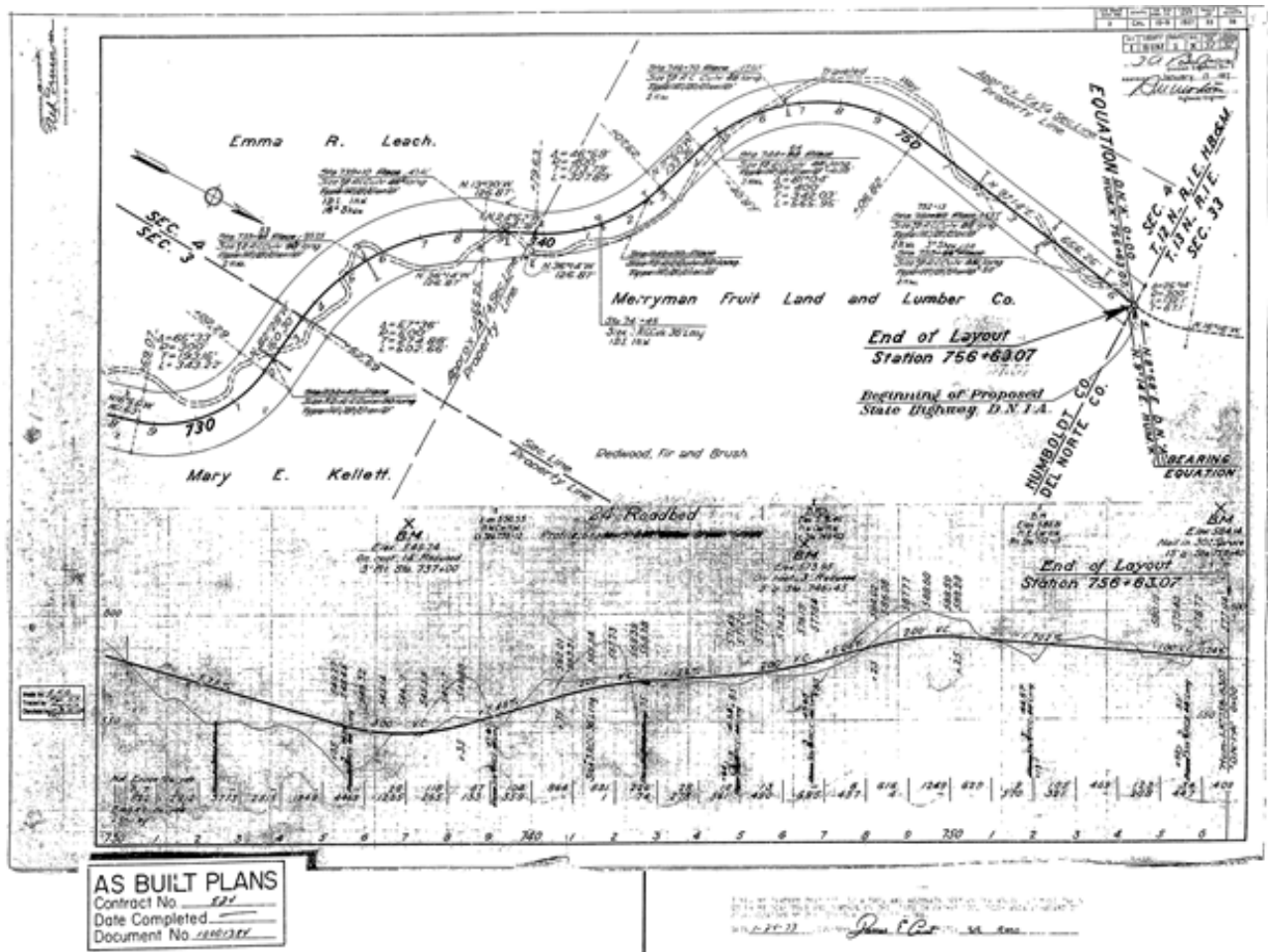


Figure 46. Proposed vertical and horizontal layout sheet for the Redwood Highway, what is now Red Alder Road at the county line. The proposed horizontal layout is shown over the meandering double-dashed line representing the then existing county road. Adjacent structures and buildings were noted but none are seen here (CHPW as-built 1928).

Vegetation

Vegetation for a cultural landscape refers to trees, shrubs, vines, and herbaceous plants planted or modified by humans. No formal plantings were made in creating the Old Redwood Highway, however there was a conscious decision to preserve coastal redwood trees along the road to the extent practical when creating a highway. The coastal redwoods are essential in the concept and creation of the Redwood Highway as early environmentalists saw the highway as a means of preserving redwoods within the right of way along the highway. The vegetative communities of the coast redwood, are described in “Natural Systems and Features.”

The tall and majestic coastal redwoods were the draw to bring people in from the first days of the highway and still are today. If any trees are charismatic mega-flora, it is the *Sequoia sempervirens* and its Sierra Nevada cousin *Sequoiadendron giganteum*. The images of a road through the groves of giant trees is the most iconic and recognizable image of the Old Redwood Highway. Preservation of coastal redwoods was integrated into the highway design with a broad right-of-way to preserve the trees up to the edge of the pavement. The highway brought many motorists into the forest and inspired early conservationists, but the highway also created better access for loggers. The highway provided Save the Redwoods League the opportunity to raise money and purchase particularly scenic and large groves of redwoods found along the highway. Within state parks groves donated or purchased through the League are dedicated to people or groups as the donors wish, sometimes marked with signs or plaques. Later, the League adopted the practice of also accepting donations to dedicate land that had previously been deeded to the State of California.

Character Defining Features

Dedicated Redwood Groves along the Old Redwood Highway

The first grove of redwoods donated for preservation through the Save the Redwoods League to the State of California was in 1919 along the Redwood Highway in southern Humboldt County near the Eel River. The first grove preserved along the Old Redwood Highway in what eventually became Prairie Creek Redwoods State Park was the 160-acre Joseph and Zipporah Russ Grove in 1923. In 1924 George Schwarz purchased 157 acres of redwood along the coast and deeded it to California, leading to Del Norte Coast Redwoods State Park. There are many other dedicated groves, but those along the former highway were the earliest to be dedicated.

Prairie Creek Redwood State Park

Joseph and Zipporah Russ Grove, 1923

This is the first grove donated within the boundary of Prairie Creek Redwood State Park in 1923, as a gift from the family of pioneer Joseph Russ who came to California in 1852, and also in memory of all the early European Americans who helped to build-up Humboldt County. Several years later, Humboldt County acquired the Roberts Tract and deeded it to the state as a memorial to Humboldt County's pioneers as well. The grove was dedicated on September 2, 1923.¹⁰⁰

Del Norte Coast Redwood State Park

Henry Solon Graves Grove, 1924

The first grove dedicated within this state park, the 137-acre grove was purchased by George Schwarz, deeded to California, and dedicated to Henry Graves, former chief forester of the U.S. Forest Service. Schwarz then added two more adjoining parcels of 130-acres each in 1926.¹⁰¹ There is a bronze plaque along the old highway north of the intersection of the old and new highway.

¹⁰⁰ The Brooklyn Botanic Garden, Record, Volumes 11-15

¹⁰¹ Bearss, 248

Joseph D. Grant Grove, 1929

Joseph D. Grant was one of California's pioneering industrialists and a founding member of the Save the Redwoods League.¹⁰²

Madison Grant Grove, 1929

Madison is one of the original founders of the Save the Redwoods League in 1918. He was known for his extensive environmental advocacy and controversial views on eugenics. The grove was set aside in his honor by the League.

Non-character Defining Features

Prairie Creek Redwood State Park

James Irvine Grove, 1944

Named for the founder of The Irvine Company. After the 1906 San Francisco quake, James Irvine II (1867-1947) relocated to the family ranch in Orange County but kept his ties with Northern California. He joined the Save the Redwoods League in 1921. A \$15,000 donation to the league established a grove of redwoods that bears his name, and he also provided an additional \$85,000 to the league to purchase more from timber companies.¹⁰³

Bruce Lyon Grove, 1945

Dedicated by Harvey B. Lyon, of Oakland, in honor of his son, Bruce, who died in World War II while piloting over Germany.

Edward C. Wagner Grove, 1945

Edward Wagner was President of Wagner Leather Company. His son, Charles Christian Wagner II, was one of the founders of the Pacific Storage Company and served as the Chief Executive Officer of the Wagner Corporation, a real estate and timber company. Wagner was a pioneer in tree breeding research in Humboldt County in conjunction with the University of California at Berkeley. He served on the Save the Redwoods League board and was the founding director of Forest Land Owners of California. He was named the California Tree Farmer of the Year in 1977.¹⁰⁴

George Bruen Whitehouse Grove, 1946

This 80-acre grove is named in honor of a World War II hero.¹⁰⁵

Anna Dickie Miracle Memorial Grove, 1946

Benjamin Franklin and Martha Webster Fabens Grove, 1946

Benjamin Franklin Fabens was born in 1818, in Salem, Massachusetts. After completing school, he began work as a clerk in Salem, after which he was sent to Cayenne to improve the state of his health. In 1840 he went to Zanzibar, East Africa as a clerk, and in 1844 he was appointed a permanent agent in Zanzibar for the firm Bertram and Shepard. He married Martha Webster Frost.¹⁰⁶

John and Edgar Vance and Edgar Vance Morgan, 1946

John Vance co-founded a lumber company in Eureka in 1853, his son, Edgar, sold the company to A.B. Hammond and it became Hammond Lumber. Edgar Vance Morgan is the grandson of Edgar and the son of W.O. Vance, general manager of the Hammond Lumber Company.

¹⁰² *Joseph D. Grant County Park*, San Jose Mercury News, August 31, 2007.

¹⁰³ <http://www.orangecoast.com/oc-traveler/the-irvine-connection-james-irvine-and-the-redwoods/>

¹⁰⁴ <http://www.sanjoaquinhistory.org/documents/HistorianNS8-3.pdf>

¹⁰⁵ <https://www.newspapers.com/newspage/37647475/>

¹⁰⁶ <http://phillipslibrarycollections.pem.org/cdm/ref/collection/p15928coll1/id/3446>

Laura G. Heald Grove, 1947

James & Fredda Otis Grove, 1947

They were Humboldt County pioneers.

Soroptimist Grove, 1947

The Soroptimist Club participated in a Save The Redwoods campaign and raised \$5,000, which was matched by the State of California. This was dedicated as the Soroptimist Grove on August 14, 1949.¹⁰⁷

Lizzie H. Glide and Mary Glide Goethe Grove, 1948

Mary was the wife of Charles Goethe, a philanthropist, eugenicist, and colleague of Madison Grant and Stephen Mather. Lizzie was Mary's mother. Mary and Charles have been credited with starting nature guides in the National Park Service.¹⁰⁸

Madison Grant Forest and Elk Refuge, 1948

Madison Grant is one of the founders of the Save the Redwood League, also a eugenicist and controversial historical figure, in whose name the Elk Meadow and surrounding forest was preserved.

California Garden Clubs Grove, 1949

Frederick Gardener Cottrell Grove, 1949

Frederick Gardner Cottrell was born January 10, 1877 in Oakland, California and known as a scientist in high efficiency cleaning of gases.¹⁰⁹

National Council of State Garden Clubs Grove, 1949

Ada Fenimore Bock, 1950

William May Garland Grove, 1950

William was a pioneer in Los Angeles real estate and credited with bringing the 1932 Olympic Games to Los Angeles.¹¹⁰

Harvey M. Toy Grove, 1950

Former chairman of the California State Highway Commission from 1922 to 1926, and president of the Northern California Hotel Association.¹¹¹

Rotary Grove, 1952

The grove is dedicated in honor of the fallen soldiers of World War II by the Rotarians of California. A stone memorial pillar is located along the Foothill Trail.

Earl Warren Grove, 1954

Named in honor of former California Governor Earl Warren who appointed Newton Drury Chief of the Division of Beaches and Parks after he left the National Park Service in 1951 and oversaw one of the California State Park System's greatest periods of growth.

¹⁰⁷ <https://sibidwellrancho.org/founding-history/>

¹⁰⁸ *Charles M. Goethe*, Oakland Tribune, September 28, 1958, C1

¹⁰⁹ <http://www.tandfonline.com/doi/pdf/10.1080/00022470.1977.10470476>

¹¹⁰ *LA Civic Leader Dies*, Oakland Tribune, September 27, 1948, 16

¹¹¹ *Hotelman Harvey M. Toy, 65, Dies*, Oakland Tribune, March 1, 1950, 10

Allen & Alma S. Chickering Grove, 1958

The grove in Prairie Creek Redwoods State Park was established in honor of Allen and Alma S. Chickering. Allen Chickering (1877-1958) had been a member of Save the Redwoods League since 1919 and one of its councilors for 28 years. He also was the director of the California Historical Society for 27 years beginning in 1923.

George A. Lancaster Memorial Grove, 1965

Mrs. Abbie Lancaster Lawler, bequeathed to the Save the Redwoods League about \$125,000 to be used to acquire a redwood grove in memory of her first husband, George A. Lancaster. Abbie and George were pioneers in Humboldt County.¹¹²

Arthur E. and Florence R. Connick Grove, 1965

The grove in the Prairie Creek Redwoods State Park in honor of Arthur E. and Florence R. Connick. Arthur was president of Save the Redwoods League from 1951 to 1960.

Mary Kellogg Jensen, 1971

Newton B. Drury and Aubrey Drury Memorial Grove, 1979

In 1919, Newton and his brother Aubrey, founded the Drury Brothers Company, an advertising and public relations agency. Later that year, Save the Redwoods League asked the Drury Brothers to manage the League. Newton B. Drury served as executive director of the Save the Redwoods League from 1919 to 1939, and from 1959 to 1971; President from 1971 to 1975; and Chairman of the Board until his death in December 1978. Newton was Director of the National Park Service in 1940 and Director of California Division of Beaches and Parks from 1951 to 1959.¹¹³

Del Norte Coast Redwood State Park

Edward Barnes Jones Grove, 1936

Mary Prentice Huntington Grove, 1936

G. Frederick Schwarz Grove, 1943

George Frederick is presumably the same individual that purchased the Graves Grove. He was an early author on the practice of forestry in the United States.

The Honorable Alfred Anson Grove, 1944

There is a bronze plaque along the old road west of Damnation Creek that reads:

This Grove is Dedicated in Memory of Captain, The Honorable Alfred Anson, 1876-1944. Born in London England, the thirteenth child of the IV Earl of Lichfield and Lady Henrietta/ Hamilton, eldest daughter of the Duke of Abercorn. Served in the British Army in World War I. In 1918 he returned to America. This memorial is grove is given by his wife Lela Alexander Anson.

Summary

The giant coastal redwood trees found along the California coast were the inspiration to create a highway along the coast and gave the Redwood Highway its moniker. A broad right-of-way preserved coastal redwoods along the route. It was hoped the highway would bring motorists into the forest and inspire conservationism, but it also created better access for logging. The highway provided Save the Redwoods League the opportunity to raise money and purchase, or receive donations of, particularly scenic and large

¹¹² *Eureka Humboldt Standard*; Eureka, California. August 30, 1962, 1.

¹¹³ <https://www.savetheredwoods.org/about-us/mission-history/newton-drury/>

groves of redwoods, donate them to the State of California, which lead to the creation of the California State Park system. The memorial groves found in state parks along the highway are the legacy of how state parks began.

Vegetation Graphics:



*Figure 47. The Coastal Redwood, *Sequoia sempervirens*, can be described as charismatic mega-flora. Preservation of coastal redwoods was integrated into the highway by including a broad right-of-way in which trees were not harvested outside of the roadway (NPS 2018).*

Circulation

Circulation is comprised of the spaces, features, and applied material finishes which constitute systems of movement in a landscape. Circulation of the Old Redwood Highway consists of the 25.6-miles of roadway along the Northern California coast and coastal redwood forests.

The Redwood Highway began in the early days of automobile highway construction before national design standards for uniform curves and lane existed. National construction standards were adopted later in the 1930s. Construction began on the Redwood Highway in 1912 at Sausalito, and it was a process of trial and error with much of the early road rebuilt in the 1920s. For example, in Mendocino County near Cumming, grade was originally up to 20%.¹¹⁴ By 1923 the highway had been made flatter with the maximum vertical grade reduced to less than 6%. The highway was made straighter, too, with many tight 50-foot radius curves increased or eliminated and 0.4 miles of road length was eliminated from a 6.4-mile segment in Leggett Valley. The Redwood Highway had reached Humboldt County by 1918 generally along improved existing county roads originally built to accommodate wagons. The county roads can be seen on the 1919 northern Humboldt County construction documents (see Figure 46) with the straighter and flatter new highway. Significantly, the Old Redwood Highway deviated from the previous county roads to provide dramatic ocean views on the bluffs.

Modern highway designs must follow standards that accommodate high speeds and volumes of vehicles. In contrast, the design of the Old Redwood Highway accommodates the difficult landscape of northern California with frequent curves without a consistent radius to better accommodate the natural topography and avoid the many large trees. The Old Redwood Highway demonstrates early, and evolving, highway construction focused on leisurely driving, with less demand for efficient travel. Pullouts were added at narrow points, so vehicles had a safe place to stop and allow opposing traffic through narrow spots. The design of the road across the district therefore reflects, in part, the landscape it is in rather than a consistent design standard. In addition, vehicle and construction technology rapidly evolved over the ten years the Old Redwood Highway was constructed. The increasing mechanization of road construction during this decade created more efficient means of excavation and tree removal, meaning that a landscape could be heavily modified more easily to accommodate a highway. Within the Old Redwood Highway the narrow, winding lanes of the segment above Damnation Creek in Del Norte Coast Redwood State Park, when compared to the wider, straighter lanes of Newton B Drury Parkway, reflect not only the earlier construction time, but also its position in a coastal redwood forest on the steep slopes above Damnation Creek compared to Newton B Drury Parkway in a coastal redwood forest on more level ground alongside Prairie Creek.

In 1926 the Douglas Memorial Bridge was completed along with 30 miles of road in southern Del Norte and northern Humboldt Counties, some of which are within the Old Redwood Highway. At this time the highway was widened from 20 to 30 feet on over 100 blind curves to allow two-way traffic and turnouts added where conditions did not allow two-way traffic. Construction documents do not show scenic turnouts, but these are likely the result of vehicles stopping over the years at particularly scenic locations or in spaces between trees where a car can be accommodated. Scenic turnouts are clearly visible in 1945 aerial photos of the coastal sections of the Old Redwood Highway. The last ten miles from the Del Norte County line to Orick (now Red Alder Road and Newton B Drury Parkway) was constructed in 1928 and paved in 1930.

The Old Redwood Highway segments were abandoned and bypassed when the land proved too unstable, or when traffic standards required cutting significant numbers of coastal redwood trees proved too controversial. The current Redwood Highway, U.S. Highway 101, parallels the Old Redwood Highway

¹¹⁴ 20% is one-foot of vertical for every five-feet of horizontal change.

is a series of modified sections and bypasses, completed in 1934, 1964,¹¹⁵ and 1992. Much of the earlier 1934 bypass has been modified several times and the California Transportation is currently planning yet another bypass inland because it has proven to be too unstable to maintain.

Roadway Alignment

Contributing

Enderts Beach Road was built in 1920 through open fields and up to the coastal bluffs. It retains the narrow 20-foot pavement and the 9-foot lanes of the early road. The narrow lanes continue along the Coastal Trail Nickel Creek section with most of the section on a terrace cut into the cliffs and the road following the curves of the cliff rather than consistent curve radii. The Coastal Trail Damnation Creek Section has narrow 9-foot road lanes, maximum, meandering around the large trees of the old-growth redwood follow the natural topography across steep slopes (see Figure 48). The combination of large trees and steep slopes creates a road that is more meandering than other segments, and with a greater variation in lane widths.

Except for Coastal Road, the Old Redwood Highway south of the Klamath River is 24 to 30 feet wide with rights-of-way of 100 feet that is typical of the highway built after 1926 (see Figures 52-55). Travel lanes were typically at least 9 feet wide and paved with macadam. Alder Camp Road is generally 24 feet wide with travel lanes of 11 feet. Continuing south the Coastal Trail Tey-wo-lew Section and Red Alder Road are generally 24 feet wide with 9-foot travel lanes and broad curves. Currently Newton B Drury Parkway is generally 30 feet wide with lanes of 12 feet.

Non-contributing

Three segments, the abandoned coastal segment south of Nickel Creek, the short segment at Wilson Creek, and a small segment at the south end of the Coastal Trail Tey-wo-lew Section have lost integrity and are not contributing (see Figure 51).

There is no evidence of paved shoulders in historic photographs (see Figure 24). Paved shoulders were added to Alder Camp Road for drainage and parking when the road was rehabilitated in 2009. Along Newton B Drury Parkway some locations have paved shoulders and turning lanes extend the pavement up to 60 feet wide. The paved shoulders for parking are found at trailheads along the parkway and likely evolved over time. Through Elk Meadow the parkway is 50 feet wide with the paved shoulder parking likely added in the 1960s.

Turnouts

Non-contributing

The original construction documents do not show turnouts or pullouts. Documents describe pullouts constructed during the period of significance to allow faster moving traffic or oncoming traffic to pass at tight curves, or at points where the road was not wide enough for two full lanes. None were identified in the survey and were likely eliminated when the former highway was widened. Scenic turnouts are areas motorists could pull off the road at scenic opportunities on the coastline or take in the giant trees (see Figure 47). On the Old Redwood Highway scenic turnouts were not constructed, but likely evolved as travelers stopped where space allowed, and the scenery was noteworthy (see Figures 70 and 71).

Turnouts along the Old Redwood Highway do not have consistent characteristics other than flat, graveled areas next to the road at scenic locations. Some turnouts were later formalized with walls such as at the south end of Coastal Trail Tey-wo-lew Section, but this wall was later construction c. 1961 (see Figure 76). Aerial photography from 1948 reveals 13 such area along the coastal sections that are wider areas along the road with no apparent constructed features or asphalt pavement. Postcards show cars parked beneath the large trees along the highway but the locations of these cannot be easily determined (see

¹¹⁵ Caltrans report

Figure 57). Furthermore, any turnouts along Newton B Drury Parkway have likely been displaced with the increase in pavement (see Figure 58). Altogether 124 turnouts were identified on the Old Redwood Highway that are not contributing, but compatible with the historic district.

Parking

Non-contributing

Crescent Beach Overlook and Nickel Creek Trail Parking

At the south end of Enderts Beach Road is trailhead parking, with a wooden vehicle barrier, split-rail fence, vault toilet, picnic grounds, and overlook above Crescent Beach. These facilities were developed by the NPS between the years of 1972 and 1979, except the vehicle barrier installed in 2015 and the pit toilet installed in 2019. The development of these facilities required realigning the road and building the trailhead parking over the former highway. The Old Redwood Highway through this location is not contributing to the historic district. The facilities and segment of the highway were concurred by California SHPO as not eligible for the National Register of Historic Places in 2014.

Flint Ridge Trail Parking

A large unpaved area on Coastal Drive overlooks the ocean and serves as trailhead parking for the Flint Ridge Trail. This parking area was constructed in the 1980s by NPS after nearby buildings were removed, and the trail was built.

Alder Camp Road Parking

At the north end of the road a small parking lot to the side of the road was constructed in 2009 as a trailhead to Flint Ridge Trail.

Big Tree Parking

About ½ mile north of Elk Prairie on Newton B Drury Parkway is a parking lot for the Big Tree, a large tree frequented by many park visitors. The date the lot was constructed was not determined, but it does not appear in park maps prior to the 1960s. The restroom is a small pit-toilet likely constructed when the parking lot was built. The parking lot is mostly screened from the Old Redwood Highway and not obtrusive.

Summary

The Redwood Highway began in the early days of automobile highway construction and national design standards such as uniform curves and lane widths did not exist. The Old Redwood Highway demonstrates early, and evolving, highway construction focused on leisurely driving, with less demand for efficient travel. The design of the road across the district therefore reflects the landscape it is in rather than a consistent design standard. In addition, vehicle and construction technology rapidly evolved from when the Old Redwood Highway was constructed. For example, the narrow, winding lanes of the Damnation Creek Section in Del Norte Coast Redwood State Park, when compared to the wider, straighter lanes of Newton B Drury Parkway, reflect not only the slightly earlier construction time, but also its position in a coastal redwood forest on the steep slopes above Damnation Creek compared to Newton B Drury Parkway in a coastal redwood forest and the more level ground alongside Prairie Creek.

Parking, turnouts and paved shoulders were added after the period of significance, are compatible, but non-contributing.

Feature:	Enderts Beach Road
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Coastal Trail Nickel Creek Section
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	55734
Feature:	Coastal Trail Damnation Creek Segment
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	55734
Feature:	Abandoned Coastal Segment
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing
IDLCS Number:	
Feature:	Wilson Creek Segment
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing
IDLCS Number:	
Feature:	Coastal Drive
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	55734
Feature:	Alder Camp Road
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Coastal Trail Tey-wo-lew Section
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Red Alder Road
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Newton B. Drury Parkway
Feature Identification Number:	

Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Turnouts (124)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Crescent Beach Overlook and Nickel Creek Trail Parking
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Alder Camp Road Parking
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Flint Ridge Trail Parking
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Big Tree Parking
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Paved shoulders on Alder Camp Road
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Paved shoulders on Newton B Drury Parkway
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	

Circulation Graphics:



Figure 48. Coastal Trail Damnation Creek Section in Del Norte Coast Redwoods State Park segment of early 1920s road listed in the National Register (PWR Cultural Resources 2013).



Figure 49. Early 1920s Coastal Drive segment south of the Klamath River was part of the highway until 1926 and is listed in the National Register (PWR Cultural Resources 2013).



Figure 50. Coastal Trail Tey-wo-lew Section was Highway 101 until 1964 and closed to vehicle traffic in 2011 (PWR Cultural Resources 2013).



Figure 51. Landslide damage on Coastal Trail Tey-wo-lew Section (PWR Cultural Resources 2013).



Figure 52. Alder Camp Road, part of U.S. Highway 101 between 1926 and 1964 (PWR Cultural Resources 2013).



Figure 53. Red Alder Road, part of U.S. Highway 101 until 1964 (PWR Cultural Resources 2013).



Figure 54. Newton B Drury Parkway looking north part of U.S. Highway 101 until 1992 (PWR Cultural Resources 2013).

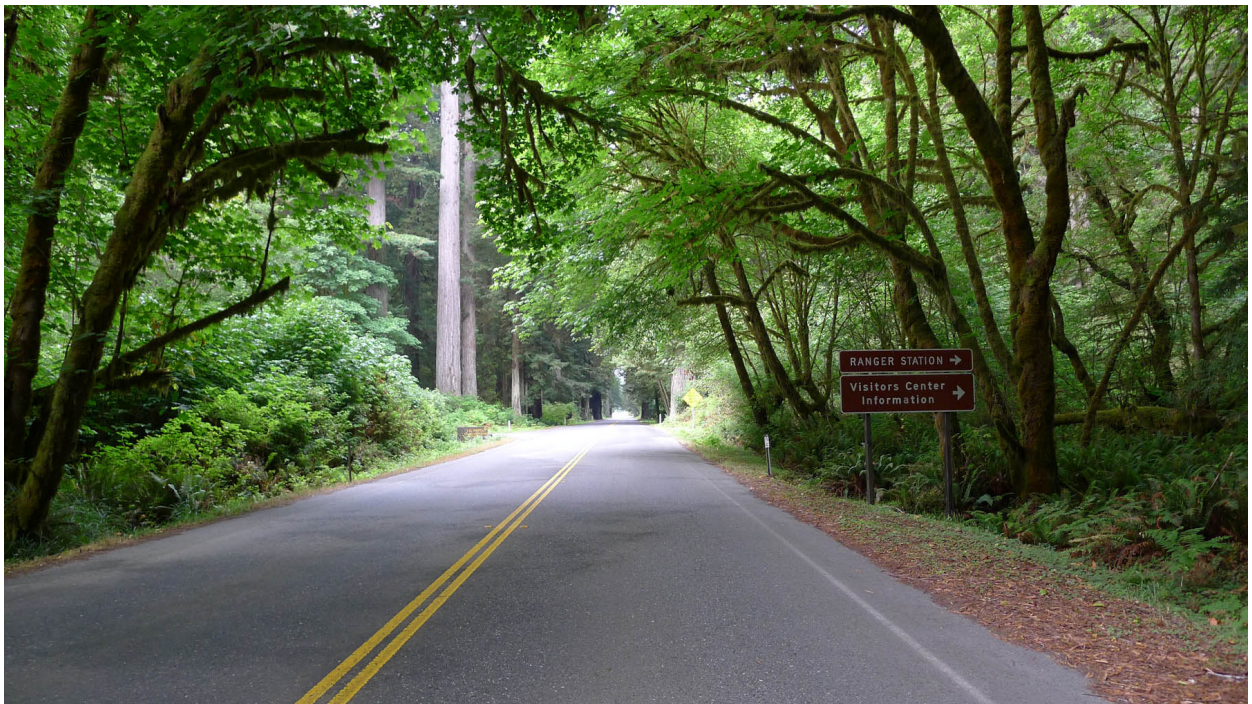


Figure 55. Newton B Drury Parkway to the south approaching Elk Prairie (PWR Cultural Resources 2013).



Figure 56. Newton B Drury Parkway in meadow at south end looking north. The CCC originally constructed fences along the highway, but the current fences are replacements in a similar style. Paved roadside parking was added later (PWR Cultural Resources 2013).



Figure 57. Postcard of the Old Redwood Highway now Newton B Drury Parkway with informal turnout in foreground and where car is parked (Humboldt Room, McKay Collection 2007.02.1901, date unknown).



Figure 58. Newton B Drury Parkway, U.S. Highway 101 until 1992 with paved turnout in the foreground (PWR Cultural Resources 2013).

Buildings and Structures

Culverts are the most common structure found in the Old Redwood Highway Historic District but only a few of these structures can be seen from the road or nearby trails. Bridges were not common, and culverts covered in fill was the common method of spanning the many creeks and drainages. There are currently two bridges along the former highway: a vehicular bridge over May Creek bridge constructed in 1985, and a footbridge over Damnation Creek constructed in 1990s.

Culverts

The culverts along the Old Redwood Highway are particularly important since it is subject to heavy seasonal rains within damp redwood forests and cut into steep slopes above the Pacific Ocean. As-built drawings of the 1920s indicate fewer culverts than are found today, indicating many culverts were installed as conditions warranted, but not recorded, or added after the original construction (see Figure 60). Of the 204 culverts found within the Old Redwood Highway Historic District, 78 are contributing, 114 are non-contributing, and 12 are undetermined. There are three types of contributing culverts: formed in-place concrete box structures, large concrete culverts, and the riveted corrugate-steel pipes with concrete retaining walls. Of the three types, construction drawings from 1923 show typical details of concrete box culverts that are found along all segments except for the Coastal Trail Damnation Creek Section (see Figure 61).

The concrete box culverts have a head wall and end wall with a chamfered edged “mantel” projecting out across the top. The mantel across the top varies in height from 7 to 10 inches tall. Dimensions of the culvert opening are most commonly 21-inch square, although some are rectilinear, and up to 6-feet across. The box culverts along Alder Camp Road have small wing walls projecting from either side of the headwall (see Figure 64). Five concrete box culverts have the year of construction embossed on the mantel of the head wall: 1920, 1924, and 1928. The “1920” culvert is on Enderts Beach Road at the north end of the district (see Figure 62). Alder Camp Road has three “1924” culverts and Newton B. Drury Parkway has one “1928” culvert (see Figure 65). These dates are all consistent with the dates of original construction on the given sections.

The second type of culverts are large concrete culverts at least 12-feet wide. One of these is at Boyes Creek and the other is at Nickel Creek. The Boyes Creek culvert is a 12-foot square with a concrete walkway to one side. The culvert at Nickel Creek is the largest, about 16 feet wide with an arched top, and about 16 feet high at the peak (see Figure 66).

The final culvert type is found south of Nickel Creek, mostly within the Coastal Trail Damnation Creek Section. These are riveted corrugated-steel culverts with concrete headwalls and retaining walls. Corrugated-steel culverts were in use in the 1920s and became increasingly more common by the 1930s.¹¹⁶ The Damnation Creek Section was active for less than 15 years, abandoned as a highway in 1934 and was impassible soon after, so it is unlikely these smaller, steel-pipe culverts were a wholesale replacement to previous larger, concrete culverts. Steel pipe culvert installation is faster than forming individual culverts from concrete, could sustain the weight of vehicles at that time so did not need to be buried deep. Formed concrete culverts needed to be deeper so the fill could distribute the weight. A deeper concrete box culvert in this location would have required significantly greater excavation into the uphill side. The steel-pipe culverts in the Damnation Creek Section utilize 16 to 24-inch diameter riveted steel pipes with a concrete headwall, and typically installed less than a foot under the road surface. The steep grades were kept away from the culvert opening with a 48-inch wide by 80-inch tall retaining wall with a gap of less than 12-inches between the retaining wall and headwall (see Figure 63). The walls have narrow wing walls that protrude from the wall at a ninety-degree angle, and taper from the top.

¹¹⁶ Parsons, et al. Small Structures on Maryland’s Roadways – Historic Context Report. Maryland State Highway Administration. July 1997.

Within the Old Redwood Highway Historic District culverts with only steel pipe and no other elements are not contributing because these culverts cannot be dated to a specific time.¹¹⁷ The other non-contributing culverts are CPDP pipes that are modern replacements or additions.

Approximately 50% of the culverts are in fair condition based on field survey. The most common threat to culverts is being buried in debris and clogging the pipes. A culvert assessment done by cultural and maintenance staff in September of 2015 along the Coastal Trail segment of the Old Redwood Highway in Del Norte Coast State Park and of the 40 culverts identified, 9 were completely full of sediment, 20 were partially filled and 9 were clean. Sediment is a particular threat to steel pipes because sediment loads in storm water can scour and erode the pipes. Along road segments in steep slopes, storm water can travel very quickly, and can have sediment loads of small stones and gravel, depending on soil types and slopes, that can erode the steel pipes. On the remaining Old Redwood Highway, the numbers of failed culverts are proportionally less.

Contributing

Concrete Box Culverts (37)

There are thirty-seven contributing concrete box culverts constructed between 1920 and 1928. At the north end of the district on Enderts Beach Road, are two contributing concrete box culverts. The first one is 6-feet square and the second is 4-feet square, each with an flat end wall and flat head wall with a reveal above the headwalls, and the interiors still showing the outlines of the planks used for the concrete forms. The first culvert has the date of “1920” embossed in the mantel.

South of the Klamath River, along Alder Camp Road many of the culverts were replaced in 2009, however three contributing box culverts remain, and embossed “1924” on the reveal of the head wall (see Figure 64). This segment was constructed to bring traffic from the coast to the Douglas Memorial Bridge, completed in 1926. Two of the contributing culverts measure 34-inch by 36-inch, and remaining measures 24-inch by 26-inch. The 1924 culverts are located tens of feet below the road surface, in natural drainage ways with sides of board-formed concrete, gravel floors, angled concrete wing walls extending down from each side of the culvert, and a reveal on top bearing the year of construction.

West of Alder Camp Road, Coastal Drive from the Klamath River south to intersection with Alder Camp Road was the original route to the ferry crossing, until the completion of the Douglas Memorial Bridge. There are no contributing culverts on this segment.

South of the intersection of Coastal Drive and Alder Camp Road the Old Redwood Highway continues as Coastal Trail Tey-wo-lew Section for approximately 3 miles until another gate at Red Alder Road. There is one contributing concrete box culvert with a flat headwall and 21-inch square opening.

Red Alder Road is where the Old Redwood Highway moves away from the coast and into the redwood forest. There are two contributing concrete box culverts here, each with a flat headwall and 21-inch square opening.

Twenty-nine of the 84 culverts along Newton B. Drury Parkway are contributing concrete box culverts. One culvert on Newton B Drury Parkway has a date on its mantel of “1928” (see Figure 65). Twenty-seven of the concrete box culverts have a flat headwall and 21-inch square opening. Two contributing box culverts have openings of 3-feet by 5-feet, and 6-feet square, respectively.

¹¹⁷ Ibid, 4-14.

Large Culverts (2)

South of Enderts Beach Road, the former road continues as Coastal Trail Nickel Creek Section, with Nickel Creek about 1/2 mile south. At Nickel Creek is one very large contributing culvert, the largest culvert still found on the Old Redwood Highway (see Figure 66). This culvert is a curved arched, formed-concrete structure about 16-feet wide, about 16-feet tall, approximately 150-feet long, and about 30 feet below the level of the present trail and old highway. Although the upstream side was not accessible when surveyed, reports from maintenance crews say the headwall is in poor condition, and large chunks of rebar and concrete are found just downstream of the culvert, which are likely pieces of the deteriorating wall washed downstream. The interior also appears in poor condition with some rusted rebar visible on the walls.

Along Newton B Drury Parkway at Boyes Creek at the north end of Elk Prairie is a 12-foot square culvert and underpass. Within the culvert is a four-foot concrete walkway to the southside of the culvert, allowing for pedestrians to pass from the nearby Visitors Center to trails. The evidence of concrete forms on the interior of the underpass indicate it has been extended from its original construction and the walkway probably added at this time. Towards the center of the underpass, a 35-foot long section shows it was constructed with board forms, but 18-foot and 10-foot sections at either end appear to have been added later using a plywood or other smooth board form. It was likely done when a left turn lane was added to the road above in the 1960s. The modifications are compatible, and the original culvert can be distinguished.

Steel-culverts with Retaining Walls (39)

Thirty-nine of the 44 culverts on the Old Redwood Highway within Del Norte Coast Redwood State Park are steel pipes with a retaining wall and contributing. Four other culverts were located but could not be assessed due to debris and fallen trees, and one culvert at the U.S. Highway 101 intersection is a modern addition. These culverts are the only ones clearly seen from the road with narrow concrete retaining walls above the road, on the up-slope side, holding the slope away from the pipe and headwall. The uphill walls measure 48-inches wide and 80-inches high, with two wings at 90-degrees from the wall, tapering from the top. The concrete headwalls vary slightly in dimension but usually have a reveal (or formed mantel) across the top, and a gap of about a foot between the uphill wall and the headwall. These culverts appear similar to a drop-inlet without a grate or fully formed sides. The pipe is typically 16-inch diameter, with a few 24-inch diameter, corrugated-steel. The outfall is typically 30 feet away, with often less than 12-inches of cover between the pipe and the road. The outfalls do not have end-walls.

One additional culvert of this type is found near Nickel Creek on the abandoned section north of the rockfall. Within the two-mile abandoned segment there is possibly dozens of similar culverts, but ground surveying was not done because of the ongoing hazard and any structures are likely buried by landslide or destroyed.

Non-Contributing culverts (114)

Most of the non-contributing culverts within the district are CPDP or steel with no headwalls or masonry structure.

Many of the culverts along Alder Camp Road were new or replaced in 2009. These replacement culverts are either drop inlets with steel grates, or smooth plastic pipe with smooth concrete head walls and no end wall. A culvert with a fiberglass slip liner, likely originally steel, with a headwall and a reveal, was likely installed after the period of significance and appears to have used a plywood or smooth surface form. There are two drop inlet structures with a side inlet of 24-inch by 12-inch, small wing walls extending to the sides, and dropping into a concrete box. The outfall structure is a 20-inch square concrete box with no evidence of the board forms.

The culverts at Coastal Drive were replaced in 2017 with CPDP, but steel pipe added to the inlet and outlet to retain the previous appearance. The existing culverts at that time were corrugated steel that had deteriorated. There were no indications in 2017 that any replaced pipes were from the period of significance or had any concrete nor were there any masonry features.

South of Coastal Drive near the north gate of Coastal Drive Trail are rough stone masonry culvert walls with small basins at the culvert inlet. There are also walls of the same materials and construction in a nearby picnic area and at an overlook at south end of Coastal Drive Trail. These structures are very similar in materials and construction to culverts found along a secondary egress road to the Alder Camp CalFire facility that is roughly parallel and east of Coastal Trail Tey-wo-lew Section. This secondary egress road, and the rough stone structures found along it, was likely built around 1961 when the Alder Camp was constructed.¹¹⁸ This road generally follows the old county wagon road that existed prior to the Old Redwood Highway, but these structures contain steel pipes and are also seen where the road leaves the former wagon road and into the camp.

At the Coastal Trail Tey-wo-lew Section, as with the other segments near the ocean, geologic instability required many road repairs and eventually to be closed to vehicles. Except for one concrete box culvert, the other culverts here are steel or HDPE pipe and are replacements or additions.

Red Alder Road has 11 non-contributing culverts from a total of 15 culverts along the road.

Along Newton B Drury Parkway, the most common non-contributing culvert is a concrete drop-inlet with side inlets of 12 inches by 24 inches facing the ditch and a wooden cover on the top the same level as the road. These were most likely added after the 1950s, possibly the 1960s. About 10% of the wood covers, show a significant amount of deterioration from rot, but many are in surprisingly good condition given the wet environment. The wood tops may have replaced iron grate inlets that were removed to reduce the large levels of redwood needles and debris from directly entering the culvert.

Undetermined Culverts (12)

There remain at least 12 culverts that are undermined. A culvert was identified due to observing, or hearing, water flowing under a road or if one had been previously located by park facility staff. Fallen trees and heavy debris prevented a culvert from being observed during the CLI survey in these locations. If the culverts are located in the future, a determination can be made.

Bridges

Most creek crossings were made with concrete culverts, some as large as 16 feet across, and with as much as 30 feet of fill below the road grade. There are two bridges within the Old Redwood Highway Historic District, at May Creek and Damnation Creek, but both are replacements after the period of significance. The south bank abutment of the former Douglas Memorial Bridge remains but is discussed in the archaeology section. Remains of the earlier highway bridge over Wilson Creek also exist but are outside park boundaries. The current bridge over Wilson Creek was completed in 1957 when the section of highway was updated.

Non-contributing

There are two bridges within the historic district, but these were constructed after the period of significance. The bridge over May Creek is a modern steel beam and concrete slab bridge built in 1990. The Damnation Creek footbridge is a wood-laminate beam pedestrian bridge about five feet wide (see Figure 69). Several park staff recalled the current bridge replaced another pedestrian bridge sometime in the 1990s. It is not known when the bridge constructed during the period of significance was demolished

¹¹⁸ Accessed on 3/16/2018 http://www.cdcr.ca.gov/Conservation_Camps/Camps/Alder/index.html

and could have been as late as the 1960s, according to staff recollections, but records could not be located to verify this.

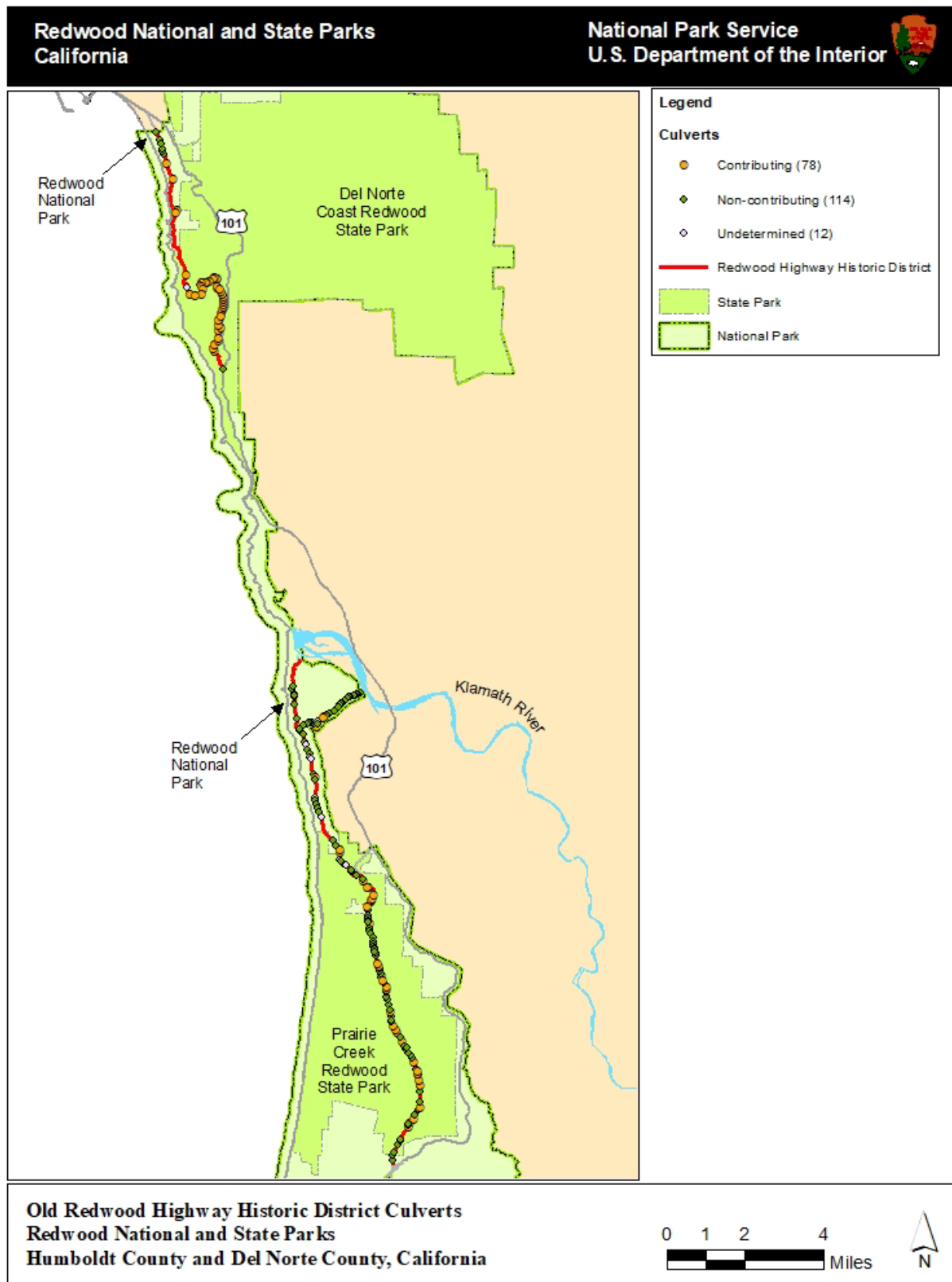
Summary

Crossing streams and drainages in the steep and rolling terrain are commonly traversed with culverts and fill. Of the 204 culverts surveyed along the road, 78 are contributing. Of the contributing, 37 are concrete box culverts, 2 are large concrete culverts, and 39 are steel-pipe and concrete retaining wall type found mainly in the Coastal Trail Damnation Creek Section in Del Norte Coast Redwood State Park. No bridges are contributing to the Old Redwood Highway.

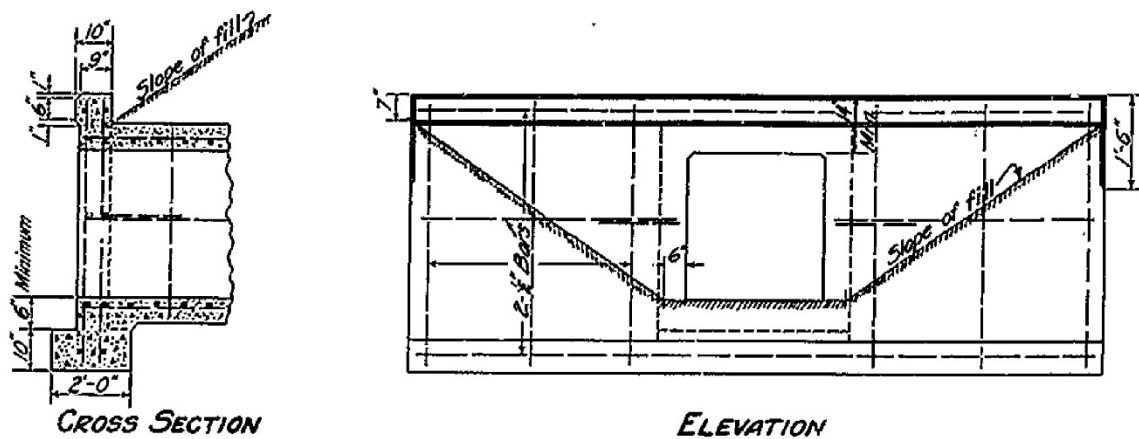
78 contributing culverts (39 steel pipe, 37 concrete box, 2 large), 114 non-contributing, 12 undetermined, 204 total

Contributing, Non-contributing, and Undetermined Features

Feature:	Concrete box culverts (37)
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Steel pipe culvert with concrete headwall (39)
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Large concrete culverts at Nickel Creek and Boyes Creek
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Undetermined culverts (12)
Feature Identification Number:	
Type of Feature Contribution:	Undetermined
IDLCS Number:	
Feature:	Steel and CPDP culverts (114)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Damnation Creek footbridge
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	May Creek bridge
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	



Buildings and Structures Graphics:



STANDARD HEADWALL FOR SMALL CULVERTS

Figure 61. Typical box culvert construction detail from California Highways, High Bluff to Klamath Section, 1923. This is currently known as Alder Camp Road. Other details show slight variations with wing walls, and date of construction stamp. Most box culverts on the Old Redwood Highway appear as this detail indicates, but with some variations in dimension (California Highway Commission, 1923).



Figure 62. Date stamp on concrete box culvert under Enderts Beach Road (NPS 2017).



Figure 63. Typical steel pipe with retaining wall type culvert found along the Old Redwood Highway on the Coastal Trail Damnation Creek Section. The uphill side of many culverts have a narrow retaining wall a short distance from the pipe opening (NPS 2017).



Figure 64. Contributing concrete box type culvert below Alder Camp Road with angled wing walls and the date of construction embossed on the headwall (NPS 2017).



Figure 65. Contributing concrete box culvert below Newton B Drury Parkway with the date of construction embossed on the headwall (NPS 2019).



Figure 66. Largest contributing culvert on Old Redwood Highway at Nickel Creek. Although also made of concrete, the size and design make it a distinct type from the concrete box. Current trail level approximately 30 feet above (NPS 2018).



Figure 67. Douglas Memorial Bridge over the Klamath River completed in 1926 and destroyed in a 1964 flood. The bear statues to the right in above postcard are facing north and no longer exist, but the extant bears can be seen in the distance (<http://delnortephotos.multiply.com/photos/album/1/-coastline#photo=91> on 01/02/2013).



Figure 68. Douglas Memorial Bridge abutment looking south across the Klamath River. (NPS 2018).



Figure 69. Current footbridge across Damnation Creek in Del Norte Coast Redwoods State Park (NPS 2017).

Views and Vistas

Views and vista allow a cultural landscape to be seen in the context of a broader landscape or see a particular feature in detail. Views can be close, middle-ground, or distant and vistas typically refer to broad, distant views or panoramas. In a landscape, views and vistas can be intentionally framed and managed with a fixed focal point and a static viewpoint in a designed element; they can also be broad views seen as motorists or hikers moves through the landscape.

Contributing

The Old Redwood Highway was intended to show visitors the beauty of the redwood forests and the rugged, picturesque coastline of northern California. When construction of the Old Redwood Highway began in 1920, the speed of vehicles was significantly more leisurely than today, and motorists and passengers had time to see more of their surroundings as they moved at a slower pace. The views and vistas along the Old Redwood Highway of the forest and ocean are spectacular, and particularly dramatic when juxtaposed. Within a forest a motorist can see the towering canopies, massive trunks and spongy bark of a redwood, streaks of filtered sunlight in the fog, and the bright red of azaleas in the understory. Then onto a sunny, rocky, hillside high above the Pacific Ocean looking out to a vast and distant horizon.

Views out across the ocean often lack a particular focal point, but the location of the highway high up the bluff contrasted with the enclosed forests provide interest and drama. These ocean views were important enough to locate the highway out on the coastal bluffs, significantly farther from the previous county road that other sections more closely followed and required significant excavation to complete. However, the instability of the coastal bluffs was underestimated and many dramatic vistas along the coast are no longer accessible (see figure 23). Within the more stable Coastal Trail Tey-wo-lew Section woody vegetation has further encroached along the edge of the former highway and obscured the once open and continuous views in some locations, but the coastal views along the trail are still evident and reflect views of the historic period.

There are two locations where the drama of the former highway emerging from the forest and onto the coast are clearest. The first is a few hundred feet north of the vehicle gate on the Coastal Trail Tey-wo-lew Section. It is currently marked with a wall and interpretive signs, although these are features were constructed later. The second point is in Del Norte Coast Redwoods State Park where the old highway runs west to the coast and takes a dramatic turn to the north high above the coast. It is the dramatic change between the quiet, close forest to the expansive light and sound of the ocean that is a critical part of the visitors' experience. Although turnouts do not appear to have been originally constructed, turnouts in both locations are evident in 1948 aerial photographs and likely evolved as motorists stopped.

Within the forests the views are also continuous, with near views of the massive redwoods and alder forests. The dominant images of the Old Redwood Highway Historic District are massive redwood trees lining the road (see cover image). There is no evidence a view of a particular tree along the road was significant. There has been a convention of naming exceptional redwoods and sequoias that are particularly large or have unusual gnarled or distinctive growth and along the Old Redwood Highway named trees such as Corkscrew Tree and Big Tree in Prairie Creek Redwoods State Park are near, but beyond the district boundaries and not visible from the road.

Non-contributing

A third location where a motorist historically experienced the drama of emerging from a forest onto a high bluff above the ocean existed at the south end of Enderts Beach Road and can also be seen in 1948 aerial photographs. A picnic overlook and parking were constructed in the 1970s by NPS and the motorists' experience has been muted. The road was likely lowered where the road come onto the bluff's edge, so the picnic area appears raised and blocks the view out from this point. Although the ocean and

Crescent City can still be seen in the parking areas, it is not the dynamic, panoramic view from the road, but static views from the more recently constructed picnic area and parking lot.

Summary

Continuous views and vistas of the trees, the ocean, and rocky shoreline are critical to experiencing the Old Redwood Highway. The juxtaposition of the two environments at two key points create drama that highlight the dramatic and unique landscape of northern coastal California. Brush along the Coastal Trail Tey-wo-lew Section that obscures the ocean views in some locations. Although lost in some areas due to landslide and some vegetation encroachment, historic views and vistas are clearly evident along the Old Redwood Highway Historic District.

Contributing and Non-contributing Features

Feature:	Continuous views of ocean and shoreline along Coastal Trail Tey-wo-lew Section and Coastal Drive
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Continuous close views of redwoods along Coastal Trail Damnation Creek Section, Red Alder Road, and Newton B. Drury Parkway
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	View of ocean at southern turnout on Coastal Trail Tey-wo-lew Section
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	View of ocean at northern turnout on Coastal Trail Damnation Creek Section
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	View of ocean and Crescent City at Enderts Beach Road/ Nickel Creek parking
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing
IDLCS Number:	

Views and Vistas Graphics:



Figure 70. Expansive views to the sea stack rock formations and the vast ocean frequently exist along the coastal sections (NPS 2016).



Figure 71. View looking south above the ocean as old highway emerges from the coastal redwood forests to the south on Coastal Trail Tey-wo-lew Section (NPS PWR 2013).



Figure 72. View of Coastal Trail Nickel Creek Section from above Enderts Beach. The abandoned old highway is seen in middle of photo as a terraced area approximately 75 feet above shoreline. One of many rockslides can be seen to the left and covers the abandoned old highway (NPS PWR 2013).

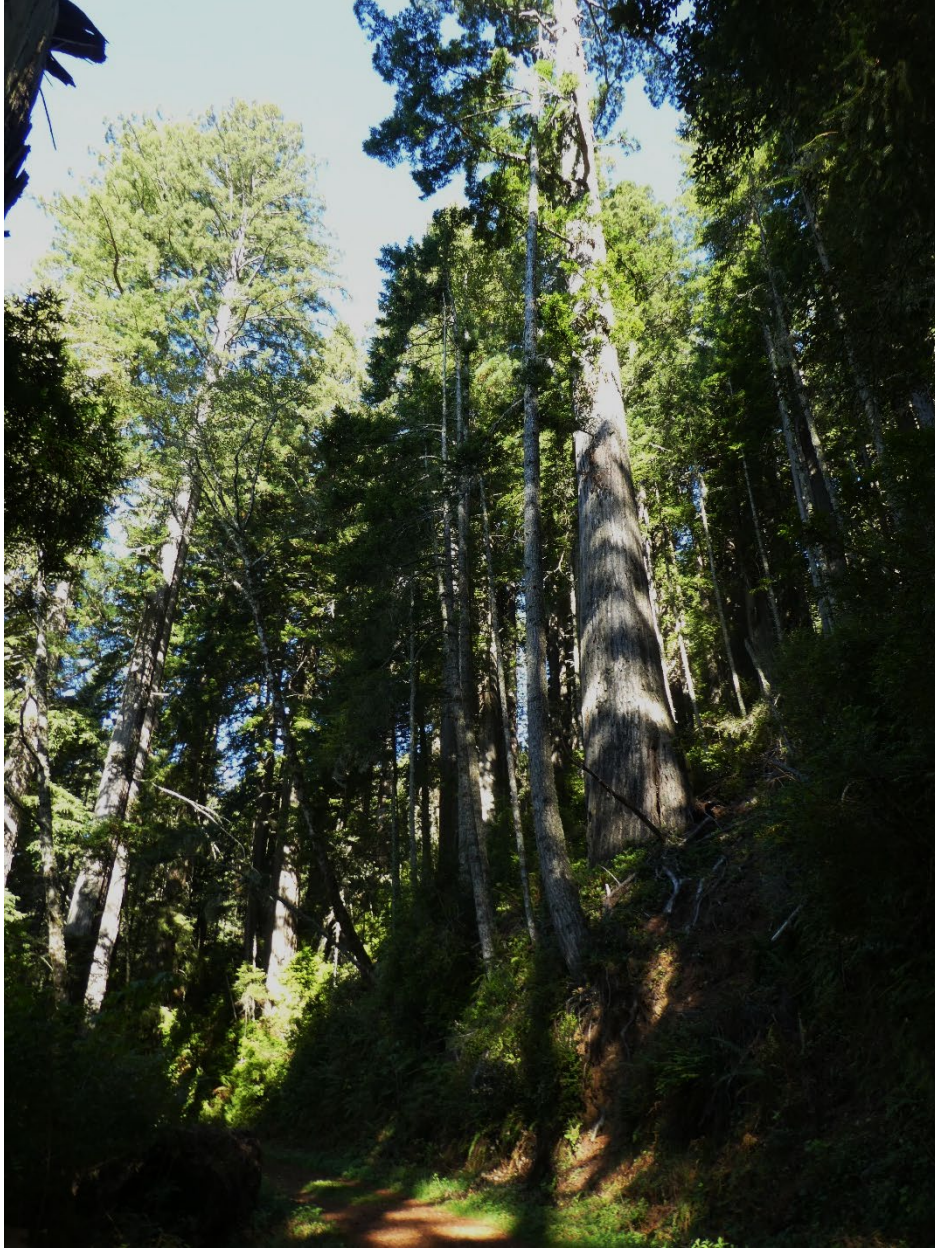


Figure 73. View of massive coastal redwood adjacent to the Coastal Trail Damnation Creek Section (NPS PWR 2013).

Small-Scale Features

Small scale features historically found along the Old Redwood Highway include traffic signs and barriers that improve safety; and signs and plaques that note dedicated redwood groves. Comparatively, modern highways with increased design speeds and safety concerns have more small-scale features such as signs and barriers than the Old Redwood Highway originally had. Signs and barriers of the Old Redwood Highway were typically made of wood, rather than steel, and in damp forest or harsh coastal conditions these did not last indefinitely. The most common small-scale feature on the Old Redwood Highway are the grove dedication signs and plaques. These dedications are frequently wooden signs along the road, but some are carved stone or bronze plaques mounted on stone.

Contributing

Memorial Grove Bronze Plaques (1)

Alongside the former highway within state parks are bronze memorial plaques affixed to rough boulders commemorate person or persons the grove is dedicated to. Grove donations of significant size by individuals or groups through the Save the Redwood League allowed donors to install plaques dedicated to relatives or whatever group or noted individual they chose. All monuments are a rough stone with a level face where a brass plaque is mounted. The stone monuments vary in size from about 3 feet high to about 5 feet with plaques varying in size but less than 16 inches on each side (see Figures 78). These plaques became more common after World War Two, however one plaque was installed during the period of significance.

Coastal Trail Damnation Creek Section

Graves, Henry Solon Grove – 1926

This Grove of ancient Trees is named in Honor of Henry Solon Graves, Forester, Educator, Administrator. A leader of unusual ability in the profession of forestry, in which he has rendered distinguished service to his country. A gift to the State of California by G. Frederick Schawz of New York City and the Save the Redwoods League, 1925.

Location-marker Posts (6)

Marker posts were found along the Coastal Trail Damnation Creek Section (see Figure 74). These markers were once found all along the old highway and seen in period photos (see Figure 75). Two of the posts are not anchored in their original location but are likely very near. These posts were used to mark stations along the highway like modern mile-markers. They are 8-inch by 8-inch posts that stood approximately 4-feet above the ground. The tops were chamfered at the top about 1 and ½ inches with the top 8 inches painted black and the remainder painted white. Some have black station numbers stenciled on side.

Non-contributing

Memorial Grove Bronze Plaques (6)

Donations and memorials continued after the period of significance. The plaques that were installed later are the same style as the previous memorial plaques (see Figures 77 and 79). The following stone monuments are compatible with the historic district:

Coastal Trail Damnation Creek Section

Anson, Alfred Honorable - 1944

Red Alder Road

Bock, Ada Fenimore - 1950

Newton B. Drury Parkway

Cottrell, Frederick Gardner Memorial Grove - 1949

Grant, Madison Forest and Elk Refuge - 1948

Madison Grant Forest and Elk Refuge, Dedicated to the Memory of Madison Grant, 1865-1937. Conservationist, Author, Anthropologist, A Founder of The Save-the-Redwoods League. This area of 1600 acres, habitat of the last surviving herd in California of Roosevelt Elk is established as a memorial by De Forest Grant, John D. Rockefeller, Jr., Archer M. Huntington, New York Zoological Society, Boone and Crockett Club, National Audubon Society, American Wildlife Foundation, Save-the-Redwoods League, California State Foundation, 1948

Wagner, Edward C. Memorial Grove - 1945

Red Alder Road

Garland, Blanche Hinman – 1959

Wood Memorial Grove Signs (23)

There are many memorial grove signs along both the west and east sides of the road that indicate the name of the memorial grove (see Figure 80). These wood signs are painted brown with inset carved lettering painted yellow. The signs are replaced as they deteriorate. All wood signs are modern construction and materials. They are compatible and placed unobtrusively within the trees and parallel to the road. The signs are often the only indicator of the memorial groves that are an integral part of the highway's character. They show the preservation of these groves that were an important reason for the highway in the mind of preservationists. The following list indicates when the memorial was dedicated, rather than the date of the current sign itself:

Red Alder Road

Garland Family Grove - 1950, 1976

James, Henry and Imelda - 2011

Robinson Family Grove - 1997

Rugg, Jessamine and Morrill Goddard – 1971

Newton B. Drury Parkway Segment

California Garden Clubs Grove - 1949

Connick, Arthur E. and Florence R. Grove - 1965

Drury, Newton Bishop, and Aubrey Drury Memorial Grove 1979

Fabens, Benjamin Franklin and Martha Webster Grove - 1946

Goethe, Mary Glide Memorial Grove - 1948

Hunnewell, Donald Memorial Grove - 1950

Izaak Walton League Grove - 1949

Lancaster, George A. Grove - undetermined

Lyon, Bruce Grove - 1945

Moorman Grove - 1953, 1965

National Council of Garden Clubs Grove - 1949

Otis, James and Fredda Memorial Grove - 1947, 1965

Rehnborg, Edith L. Memorial Grove - 1952

Russ, Joseph and Zipporah Pioneer Grove - 1923

Soroptimist Grove - 1947

Vance Memorial Grove - 1946

Wagner, Edward C. Memorial Grove - n.d.

Warren, Earl Grove - 1954

Whitehouse, George Bruen Grove - 1946

Location-marker Posts (3)

Two markers found along the Coastal Trail Damnation Creek Section (see Figure 74) were not anchored in their original locations, but likely very near. Although probably original these markers do not contribute since they are no longer in their original locations. One post appears to be slightly different dimensions and likely of more modern origin.

Wood Post Barrier (1)

In one location along Coastal Trail Tey-wo-lew Section is a series of 14 stout posts arrayed in a slight arc at the bend of the road. These posts are similar in construction to the location posts with a chamfer, but are 12 inches square, stand about 2 ½ feet tall, and are painted all white. There is no indication there were cross beams attached to the posts. These posts are likely not original to the highway and added later. Original construction documents and photos (see Figures 11 and 23) indicate a guardrail with small posts and connected with a cross timbers were commonly built. They are very similar in construction to the location posts described earlier, are unobtrusive, and compatible with the historic district.

Fences and Guardrails (5)

Wood split-rail fences were installed and existed along the highway in the 1920s, however no historic fences were located during field surveys.

The guardrail at the Enderts Beach Trail Parking and Crescent Beach Overlook were installed in 2014 by NPS. The guardrail along the bluff edge is a vehicle barrier with large square posts and crossbeams backed by a steel bar. The guardrail it replaced was determined to be non-historic.¹¹⁹ The rustic character of the barrier is compatible with the historic district. Additional barrier was constructed in 2019 when the comfort station was installed at the new handicapped parking location.

The fence in this parking area is a split-rail style and compatible. It was installed by the NPS in the 1970s between the parking lot and the trail to the south when the parking lot was built, and Coastal Trail Nickel Creek Section was closed to public vehicle traffic.

At a scenic overlook at southern end of Coastal Trail Tey-wo-lew Section, a low wooden fence extends from either side of a stone wall at a scenic overlook (see Figure 76). The barrier is similar to barriers seen during the period of significance but is not the same style and constructed with pressure-treated lumber. It is compatible with the historic district.

The longest fences are along either side of Newton B Drury Parkway through Elk Prairie. They are rustic double post type similar to the fence installed in the same location by the CCC in the 1930s. The fences, however, are replacements, but compatible with the historic district.

Stone Walls (2)

The retaining wall constructed by NPS at the Crescent Beach Overlook was discussed previously. The wall is built of rounded cobbles about 2 feet high and 60 feet long along the side of the road. The area is not contributing to the historic district, but the rustic nature of the wall is compatible.

The scenic overlook at southern end of Coastal Trail Tey-wo-lew Section (see Figure 76) has a rock wall built of native stone after the period of significance. The type of stone and style of the wall match other catch basins and walls found along the secondary access road to the CalFire Conservation Camp, and at the south end of Coastal Drive. These were all likely installed in the 1960s, when the camp was built, or sometime after by the inmates from the camp. Rock was also added to the wall in the 1970s by the NPS to raise the wall for safety concerns and to accommodate interpretive signs. The walls are not substantial and are unobtrusively to the side of the old highway. The rustic character of the wall also makes it compatible with the historic district.

¹¹⁹ Peterson, 2014.

Gates (5)

Standard steel-pipe vehicle barriers are in a few locations within the district. These modern barriers have a steel post with a single horizontal post, and an angled support. One gate is at the intersection of the former highway and U.S. Highway 101 in Del Norte Coast Redwood State Park. Two pairs of steel-post barrier gates are at either end of Coastal Trail Tey-wo-lew Section to prevent visitor vehicles onto this section but allow administrative vehicles. Two pairs of steel gates are also on Newton B Drury Parkway to close the road during icy conditions or a tree falls across the road. These are modern elements, but unobtrusive and compatible.

Benches (2)

At the north end of Elk Prairie in Prairie Creek Redwoods State Park are two benches, one on each side of the road, each carved from a single redwood log. Each is about 6 feet long with a section about 100-degrees of the circumference of the log removed to create the bench. These simple benches are modern but replaced other benches of similar design built by the CCC in the nearby campgrounds and are compatible with the district.

Traffic and Interpretation signs

All traffic signs found on segments allowing visitor vehicles are modern. These signs are necessary to maintain traffic safety, do not obstruct the surrounding landscape, and are compatible with the historic district.

Similarly, there are about a dozen interpretation signs found throughout the historic district, mostly along Newton B Drury Parkway. The signs are to the side of the road in limited locations and do not distract from the historic district.

Summary

The only contributing small-scale features in the historic district are three bronze memorial plaques signifying the dedication of the surrounding redwood forest. Although there are many other small-scale features found in the district, they postdate the period of significance and do not contribute. All these features are compatible with the historic district due to similarity to historic design or are not distracting from the historic character.

Contributing and Non-contributing Features

Feature:	Bronze memorial plaques (3)
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Bronze memorial plaques (5)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Wood memorial signs (23)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Location marker posts (6)
Feature Identification Number:	

Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Location marker posts (3)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Wood post barrier (1)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Fences and guardrail (5)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Stone walls (2)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Gates (4)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Benches (2)
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	
Feature:	Traffic and interpretation signs
Feature Identification Number:	
Type of Feature Contribution:	Non-contributing, compatible
IDLCS Number:	

Small-Scale Features Graphics:



Figure 74. Location marker post found in concrete spillway along the Coastal Trail Damnation Creek Section (NPS PWR Cultural Resources 2013).

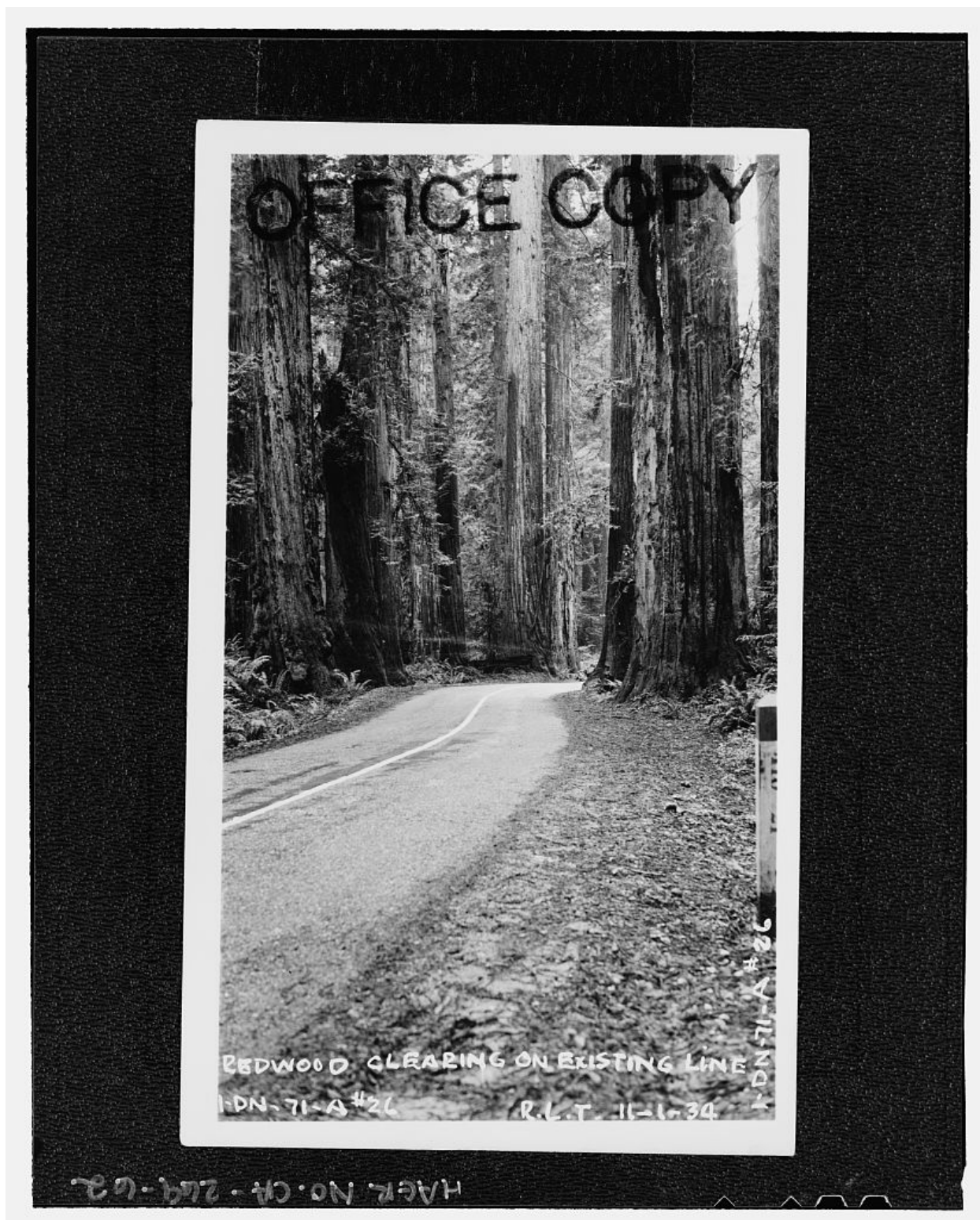


Figure 75. Location marker post along the Redwood Highway in Del Norte County, 1934 (HAER 2004).



Figure 76. Pullout and scenic overlook at southern end of the Coastal Trail Tey-wo-lew Section non-historic stone wall and guardrail, abandoned as a highway in 1965 (NPS PWR Cultural Resources 2013).

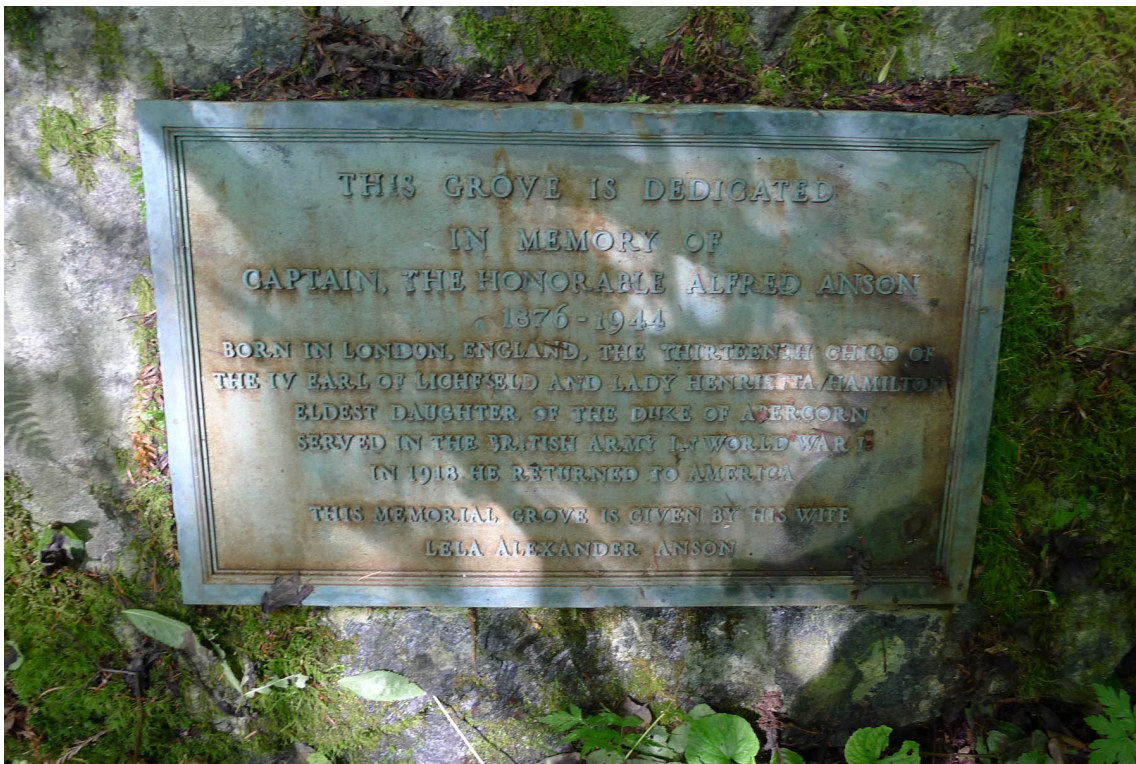


Figure 77. Alfred Anson Monument found along the Coastal Trail Damnation Creek Section listed in the National Register (NPS PWR Cultural Resources 2013).



Figure 78. Henry Graves Monument found along the Coastal Trail Damnation Creek Section listed in the National Register (NPS PWR Cultural Resources 2013).



Figure 79. Ada Bock Monument found along the Red Alder Road segment (NPS PWR Cultural Resources 2013).



Archeological Sites

Archeological sites are the location of ruins, traces, or deposited artifacts in the landscape, and are evidenced by the presence of either surface or subsurface features. Archeological sites inventoried by the CLI include ruins, traces, or deposited artifacts in the landscape that are associated with the period of significance and are evidenced by the presence of either surface or substance features. The CLI does not disclose the location of sites.

A complete archeological investigation was not conducted as part of this document. Eight associated archeological sites that have been previously documented exist within the historic district. The abutment of the Douglas Memorial Bridge has not been documented as an archeological site, but it is a recommendation to be recorded in the future. These sites are contributing to the Historic District with surface features, or because they may contain subsurface features that may reveal additional information regarding the Old Redwood Highway Historic District.

Contributing

1894 Crescent City to Trinidad Wagon Road (REDW00169)

The wagon road was built by the counties of Del Norte and Humboldt and completed in 1894. Prior to the road pack animals, coastal schooners, and canoes moved bulk goods and material north and south. The road generally followed previous trails including Native American trails. Later, the Old Redwood Highway also followed this route, with notable exception at the coastal cliff locations. The road connects with the Old Redwood Highway in numerous locations. It continued to be used as a detour in the 1920s and 1930s north of Wilson Creek before the 1934 bypass was completed. Portions throughout the parks continue to be used as connecting roads and trails.

CA-DNO-30/CA DNO-56

This was a trail that lead from a Native American village site on the Pacific Ocean to the interior. It intersects the Old Redwood Highway and is generally followed by a current park trail.

Enderts Beach Cottage Resort (REDW00166)

This was a small resort of 7 or 8 cabins built by Fred Endert in the mid-1920s, next to the Old Redwood Highway that had been constructed a short time before. It is unclear when it ended operations, but it advertised until at least 1947. The property was brought into the park in 1969 with many of the structures existing. All structures were removed by NPS before 1975.

Douglas Memorial Bridge South Abutment

Of the bridges that existed during the period of significance, only a remnant of the Douglas Memorial Bridge remains at the north end of Alder Camp Road (see Figure 68). The bridge was damaged in a flood in 1964 and replaced with the current bridge about a mile upstream in 1965. The abutment is a prominent feature at the intersection of Alder Camp Road and Klamath Beach Drive. The original approach includes the formed-concrete bollard-wall barriers, and a pair of concrete bears atop formed concrete bases, seen in the postcard in Figure 67.

Hamilton House/ Crivelli Ranch (REDW00029/CA-DNO-265H)

This site overlooking the ocean was settled in the 19th century as a ranch that became a stopping point for travelers along the wagon road, and later the Old Redwood Highway. The property changed hands several times, a hotel was established at some point, and became a popular location for sportsmen and motorists. Farm operations appeared to continue. The property was brought into the park in 1968 and the buildings were removed in the 1970s by NPS.

Pozzi Auto Court (REDW00165)

A gas station, store, and 8 motorist cabins were established by 2 Pozzi brothers in 1927 along the Old Redwood Highway. It is unclear when the Auto Court closed, but likely by the mid-1940s or 50s. The property was brought into the park in 1968 with several buildings and structures remaining. One was used for NPS housing until all buildings were removed by 2001.

Radar Station Quarters (REDW00155)

The quarters for the men serving the Radar Station in World War Two were a short distance from the radar facility. No buildings remain at the site.

Trinidad to Klamath Trail (REDW00167)

This trail followed the bluffs and beaches near the shore. It likely followed Native American routes connecting villages before the Crescent City to Trinidad Wagon Road. It connects to the Old Redwood Highway in a few locations and portions continue to be used as park trails.

Webster's Store (no record number)

Webster's Store was built about 1950. It was a small road-side store where gifts, souvenirs and groceries were sold. Tourist cabins and campground were added in 1952. The property was acquired by the Save-the-Redwoods League in 1963 and transferred to the State of California. All buildings and structures were removed shortly after.

Summary

Three of the sites are previous Native American trails or early European American transportation routes that intersect or overlap the Old Redwood Highway. Five of the sites are directly related to the Old Redwood Highway as sites of previous stores, tourist cabins and other business that supported travel and tourism along the former highway. The radar station is directly adjacent to the former highway and used Coastal Drive to connect the troop living quarters to the radar facility. Finally, the remaining abutment of the Douglas Memorial bridge is a remnant of the first bridge of the Old Redwood Highway across the Klamath River.

Contributing and Non-contributing Features

Feature:	Documented archeological sites (8)
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	
Feature:	Douglas Memorial Bridge abutment (undocumented)
Feature Identification Number:	
Type of Feature Contribution:	Contributing
IDLCS Number:	

Condition

Condition Assessment

Condition Assessment: Poor

Assessment Date: 05/06/2020

Condition Assessment Explanatory Narrative:

Through the analysis and evaluation of landscape characteristics and features, it is determined the proposed Old Redwood Highway Historic District is in "poor" condition. The landscape shows clear evidence of minor disturbances and deterioration by natural and/or human forces, and some corrective action is needed within 3-5 years to prevent further harm to its cultural and/or natural values. Significant sections of the old highway have previously been lost to landslides and a small segment of the Coastal Trail Tey-wo-lew Section has slumped but appears stable, however sudden loss can occur in the future. Without appropriate corrective action, the cumulative effect of the deterioration of many of the landscape characteristics and allow further degradation to the historic district.

Impacts

Type of Impact: Deferred Maintenance

External or Internal: Internal

Impact Description:

Some culverts are blocked resulting in damage to the headwalls and infill of organic material in the catch basins. This can lead to the surrounding ground being saturated, the loss of the culvert and the loss of the surrounding road.

Type of Impact: Erosion

External or Internal: Internal

Impact Description:

A significant amount of erosion occurs on the coastal segments of the Old Redwood Highway. Caused by the interaction of heavy seasonal rains, unstable geology, and ocean waves undermining hillsides, it can cause the old highway to slump or become buried. This is the principle reason sections were abandoned in the past and it continues to be an issue.

Type of Impact: Neglect

External or Internal: Internal

Impact Description:

Vegetation continues to encroach into the roadway and damage pavement. Duff and debris build up on paved areas and allow groundcovers to move onto paved areas and creating conditions for larger plants to move in and damaging the road surface.

Type of Impact: Improper Drainage

External or Internal: Internal

Impact Description:

Due to erosion and the accumulation of vegetative debris in and around the ditches and culverts, inadequate drainage occurs if not cleared out regularly.

Type of Impact: Vegetation/Invasive Plants

External or Internal: Internal

Impact Description:

The growth of woody vegetation has damaged some of the road corridors and is encroaching on historic views and vistas. Herbaceous and woody natives are within ditches, and paved surfaces. Moss growth can lead to damage on concrete and stone surfaces.

Type of Impact: Exposure to elements

External or Internal: Internal

Impact Description:

The harsh, wet conditions of northern California combined with exposure to salt-laden air near the ocean are particularly hard on many built elements.

Type of Impact: Structural Deterioration

External or Internal: Internal

Impact Description:

Culverts along the road are impacted by structural deterioration.

Stabilization Measures:

Vegetation Removal

The removal of vegetation is necessary to stabilize the features that are being negatively impacted by vegetation growth. Vegetation is growing along turnouts and encroaching into the paved area of the road. Clearing should occur on an annual or semiannual basis to reduce excessive regrowth. Care must be taken to not damage historic features. Vegetation along historic views should be managed by selective thinning and the removal of young trees so that views can be maintained. Vegetation removal should also include removal of algae and moss on concrete surfaces at the Klamath River bridge abutment, including the two bear ornaments, with careful power washing or similar means. This work should be done with the coordination of cultural resource staff.

Ditch Cleaning

The ditches along the road need to be cleaned in order to permit the proper drainage of the road and to prevent undermining or deterioration of the roadbed. This process should include the removal of woody vegetation and rock debris within the ditches. The removal of vegetation adjacent to historic features should be done with care taken not to damage the features.

Culvert Cleaning

The cleaning and repair of culverts is required to permit the proper drainage of the road and to prevent deterioration of the roadbed. This process should involve the removal of vegetation adjacent to the culvert. Some culverts will also require the excavation of the headwall, some of which have been partially obscured by the buildup of sediment and debris. The headwalls of the culverts are important for the proper function of the culverts as they serve to protect the otherwise exposed end of the culvert and to anchor it in place. For this reason, as well as to preserve the integrity of these historic features, the headwalls that have been damaged should be repaired. The culvert pipes should also be cleaned out using an appropriate method. Again, care should be taken to ensure the protection of the historic components of the culverts throughout the cleaning process. This work should be done with the coordination of cultural resource staff.

Bank Stabilization

Bank stabilization measures are necessary to prevent slides and further erosion particularly along the coastal sections. When appropriate rock scaling should take place to clear loose or unstable rocky debris that can damage or block the trail.

Specific geologic conditions along the coastal sections continue to make maintenance costly at specific locations and continuously filling slumping, or excavating sliding, sections may prove to be prohibitive. Coastal geology within RNSP was investigated and the study suggested investigating alternative engineering structures such as walls used at the then Requa Maintenance Facility (Smith 1978). The park should investigate measures to limit the further spread of these issues.

Rehabilitation of Trail Sections

In areas such as at Coastal Trail Tey-wo-lew Section where a section of trail has been lost to erosion, the park should investigate alternatives that meet the Secretary of the Interior's Standards for Rehabilitation and allow the remaining Old Redwood Highway to be used to its full extent.

Road and Trail Repairs

Repairs are necessary to address slumping, heaving, and cracking. Repairs should comply with historic preservation guidelines and use minimal intervention to maintain the current functionality.

Treatment

Approved Treatment: Undetermined

Bibliography and Supplemental Information

Bibliography

Archival Repositories

Humboldt State University Library, Special Collections, Arcata, Calif.

Redwood National and State Parks, Archives, South Operations Center, Orick, Calif.

Published Works

Adams, Kenneth C. "Start of Highway System." *California Highways and Public Works—Centennial Edition* (September 9, 1950): 71-80.

Arcata Union. "Highway Clearing Starts at Orick," *Arcata Union*, Arcata, California. April 7, 1927.

Barnett, Gabrielle. "Drive-by Viewing: Visual Consciousness and Forest Preservation in the Automobile Age." *Technology and Culture* 45, no. 1 (2004): 30-54.

Bearss, Edwin C. *History Basic Data: Redwood National Park, Del Norte and Humboldt Counties, California*. Washington, D.C.: National Park Service, Div. of History, 1969.

Belasco, Warren J. *Americans on the Road: From Autocamp to Motel, 1910-1945*. Cambridge, Mass.: MIT Press, 1979.

Bottles, Scott L. *Los Angeles and the Automobile: The Making of the Modern City*. Berkeley: University of California Press, 1987.

California Department of Parks and Recreation. *North Coast Redwood Master Plan*. Sacramento, Calif., 1965.

Comly, H.S. *Report on the Routing of the State Highway from Wilson Creek to Crescent City in Del Norte County*. Sacramento. Department of Public Works, Division of Highways. 1932.

Fogelson, Robert M. *Fragmented Metropolis: Los Angeles, 1850-1930*. Berkeley: University of California Press, 1967.

Grant, Madison. "Saving the Redwoods: An Account of the Movement During 1919 to Preserve the Redwoods of California." *[New York] Zoological Society Bulletin* 22, no. 5 (1919): 91-118.

———. "Saving the Redwoods." *The National Geographic Magazine* 37, no. 6 (1920): 519-36.

Hawk, Diane. *Touring the Old Redwood Highway: Humboldt County*. Piercy, Calif.: Hawk Mountaintop Publishing, 2004.

———. *Touring the Old Redwood Highway: Del Norte County*. Piercy, Calif.: Hawk Mountaintop Publishing, 2006.

Interrante, Joseph. "The Road to Autopia: The Automobile and the Spatial Transformation of American Culture." *The Automobile and American Culture*, edited by David Lanier Lewis, and Laurence Goldstein. Ann Arbor: University of Michigan Press, 1983.

Leach, Sara Amy, and Brian Grogan. *Redwood National & State Parks Roads: HAER No. Ca-269*. Washington, DC: U.S. Dept. of the Interior, National Park Service, 2001.

Lears, T.J. Jackson. *No Place of Grace: Antimodernism and the Transformation of American Culture, 1880-1920*. New York: Pantheon, 1981.

Maslin, Marsh. "Redwood Highway." *California Highways and Public Works—Centennial Edition* (September 9, 1950): 148-51.

Morton, R.M. "Where We Are Drifting in Highway Construction." *California Highways* 1, no. 8 (August 1924): 3-6.

Olmsted, Frederick Law, Jr. *Report of State Parks Survey of California*. Sacramento, Calif.: California State Parks Commission, 1928.

———. *Report on Del Norte Park Roads and Scenery*. Sacramento. Department of Public Works, Division of Highways. 1931.

Page, Marshall A. "The Growth of Motoring in California." *California Highways and Public Works* 7, no. 10 (October

- 1929): 2-4, 23.
- Rae, John B. *The Road and the Car in American Life*. Cambridge, Mass.: MIT Press, 1971.
- Robinson, John. "The Redwood Highway: Part II, Building the Road." *California Highways and Public Works* 43, nos. 7-8 (July-August 1964): 24-33.
- Robinson, John. "The Redwood Highway: Part I, Early History of Transportation in the Northern Coastal Counties." *California Highways and Public Works* 43, nos. 5-6 (May-June 1964): 2-11.
- Robinson, John. "The Redwood Highway: Part III, Bringing It up to Modern Standards." *California Highways and Public Works* 43, nos. 9-10 (September-October 1964): 14-23.
- Robinson, John. "The Redwood Highway – Rebuilding after the Flood." *California Highways and Public Works* 44, nos. 3 - 4 (March – April 1965): 14-26.
- Smith, Susan. *Coastal Slope Stability along 35 Miles of Northern California Coast: Orick to Crescent City*. Crescent City, Calif.: National Park Service, Redwood National Park, 1978.
- Schmitt, Peter J. *Back to Nature: The Arcadian Myth in Urban America*. New York: Oxford University Press, 1969.
- Schrepfer, Susan R. *The Fight to Save the Redwoods: A History of Environmental Reform, 1917-1978*. Madison: University of Wisconsin Press, 1983.
- Spence, Mark David. *Watershed Park: Administrative History, Redwood National and State Parks*. Seattle, Wash.: National Park Service, 2011.
- Sutter, Paul. *Driven Wild: How the Fight against Automobiles Launched the Modern Wilderness Movement*. Seattle: University of Washington Press, 2002.
- Wiley, Malcolm M., and Stuart A. Rice. "The Agencies of Communication," in *Recent Social Trends in the United States: Report of the President's Research Committee on Social Trends*. New York: McGraw-Hill, 1933.
- Williams, James C. *Energy and the Making of Modern California*. Akron, Ohio: University of Akron Press, 1997.
- Withycombe, Earl. "Construction Records made in 1930 on California State Highway System." *California Highways and Public Works*. May 1931: 22, 23, 30-34.
- U.S. Dept. of the Interior. *Environmental Assessment: Rehabilitate Alder Camp Road Project*. Crescent City, Calif.: National Park Service, Redwood National and State Parks, 2004.
- _____. *General Management Plan, Redwood National and State Parks*. Crescent City, Calif.: National Park Service, Redwood National and State Parks, 2000.
- U.S. Dept. of Transportation. *Final Environmental Impact Statement: U.S. 101 Bypass, Prairie Creek Redwoods State Park, Humboldt and Del Norte Counties, California*. Sacramento, Calif.: Federal Highway Administration, 1983.

Site Records (DPR 523)

- Baker, S., John Roscoe. *Hamilton House/ Crivelli Ranch*. Oakland. Archeological Consultants. 1983
- Baxter, Scott. *104-A-1-01-0-001, 104-A-1-02-0-001, 104-A-1-7-0-001, 104-A-12-0-001, 104-A-13-2-001, 104-A-3-02-0-001, 104-A-3-04-2-001, 104-A-3-04-2-001, 104-A-3-04-2-002, 104-A-3-04-2-003, 104-A-3-04-2-004, 104-A-3-05-2-003, 104-A-3-05-2-004, 104-A-3-05-2-005*. Richmond, Calif. Past Forward Inc. 2001.
- Peterson, Michael. *CCC Co. 1903 - Camp Prairie Creek*. Orick, Calif. Redwood National Park. 2013.
- _____. *1894 Crescent City to Trinidad Wagon Road*. Orick, Calif. Redwood National Park. 2013.
- _____. *Enderts Beach Cottage Resort*. Orick, Calif. Redwood National Park. 2011.
- _____. *Pozzi Auto Court (1927-1935) (REDW00165)*. Orick, Calif. Redwood National Park. 2011.
- _____. *Pozzi Ranch Home Place*. Orick, Calif. Redwood National Park. 2011.
- _____. *Trinidad-Klamath Trail*. Orick, Calif. Redwood National Park. 2012.
- _____. *Webster's Store*. Orick, Calif. Redwood National Park. 2013.

Ritter, E. *DNO-30/ DNO-56*. Orick, Calif. Redwood National Park. 1969.

Construction documents

California Highway Commission. *Plan and Proposed Profile of Proposed State Highway in Humboldt County, from Orick to Northerly Boundary*. Sacramento, Calif. January 15, 1927 (As built, no date).

_____. *Plan and Proposed Profile of Proposed State Highway in Del Norte County, from Head of Richardson Creek to Hunter Creek*. Sacramento, Calif. December 22, 1923 (As built, no date).

_____. *Proposed State Highway, Layout No. 384, Wilson Creek (Sta. 0+00) to Last Chance Grade (Sta. 168+00)*. Sacramento, Calif. February 7, 1921 (As built, no date).

Department of Public Works, Division of Highways. *Plan and Profile of State Highway in Del Norte County, between Last Chance Slide and Flannigan's*. July 10, 1933 (Construction revisions, August 7, 1941).

_____. *Plan and Profile of State Highway in Del Norte County, from Richardson Creek to Hunter Creek*. January 5, 1924.

_____. *Plan and Profile of State Highway in Del Norte County, from Southerly Border to Richardson Cr.* October 10, 1927.

_____. *Route of Proposed State Highway in Humboldt and Del Norte Counties between 0.8 mi. So. of Humboldt Co. Line and 0.6 mi. So. of Minot Creek*. Sacramento, Calif. April 18, 1958.

_____. *Route of Proposed State Highway in Humboldt and Del Norte Counties from 0.6 mi. So. of May Creek Bridge No. 4-52 to 0.5 mi. No. of Del Norte County Line*. Sacramento, Calif. August 23, 1983.

Aerial Photographs

California Department of Forestry. *CDF2 Flight 20 Images 130-140, June 23, 1948*. Orick, Calif. Redwood National Park. 1948.

California Department of Forestry. *CDF2 Flight 22 Images 25-34, June 23, 1948*. Orick, Calif. Redwood National Park. 1948.

GIS

National Park Service. *Soils*. Orick, Calif. Redwood National Park GIS database. 2014.

_____. *Vegetation*. Orick, Calif. Redwood National Park GIS database. 2014.

Internet

California Coastal Records Project. *Image 200900398*. [California Coastal Records Project \(californiacoastline.org\)](http://californiacoastline.org). Downloaded 01/15/2021.

<http://delnortephotos.multiply.com/photos/album/1/-coastline#photo=91> downloaded on 01/02/2013.

Supplemental Information

Appendix A: National Register of Historic Places Nomination, Old Redwood Highway

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE**NATIONAL REGISTER OF HISTORIC PLACES
INVENTORY -- NOMINATION FORM**

FOR FEDERAL PROPERTIES

FOR NPS USE ONLY

RECEIVED

DATE ENTERED

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS**1 NAME**

HISTORIC

Redwood Highway (California State Highway #1)

AND/OR COMMON

Old Redwood Highway (abandoned)

2 LOCATION

STREET & NUMBER

(Redwood National Park and Del Norte

Not applicable Redwoods State Park)

-- NOT FOR PUBLICATION

CITY, TOWN

CONGRESSIONAL DISTRICT

Not applicable

☒ VICINITY OF Klamath, Crescent City

Second

STATE

CODE

COUNTY

CODE

California

06

Del Norte

015

3 CLASSIFICATION

CATEGORY

OWNERSHIP

STATUS

PRESENT USE

☐ DISTRICT☒ PUBLIC☐ OCCUPIED☐ AGRICULTURE☐ MUSEUM☐ BUILDING(S)☐ PRIVATE☒ UNOCCUPIED☐ COMMERCIAL☒ PARK☒ STRUCTURE☐ BOTH☐ WORK IN PROGRESS☐ EDUCATIONAL☐ PRIVATE RESIDENCE☐ SITE

PUBLIC ACQUISITION

☐ ACCESSIBLE☐ ENTERTAINMENT☐ RELIGIOUS☐ OBJECT☐ IN PROCESS☐ YES: RESTRICTED☒ GOVERNMENT☐ SCIENTIFIC☐ BEING CONSIDERED☐ YES: UNRESTRICTED☐ INDUSTRIAL☐ TRANSPORTATION☐ NO☐ MILITARY☐ OTHER:**4 AGENCY**

REGIONAL HEADQUARTERS: (If applicable)

Western Regional Office, National Park Service

STREET & NUMBER

450 Golden Gate Avenue, Box 36063

CITY, TOWN

San Francisco

-- VICINITY OF

STATE

California 94102

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE,

REGISTRY OF DEEDS, ETC.

Del Norte County Courthouse, County Clerk's Office

STREET & NUMBER

H Street

CITY, TOWN

Crescent City

STATE

California

6 REPRESENTATION IN EXISTING SURVEYS

TITLE

Basic Data Study "Redwood National Park"

DATE

1969

☒ FEDERAL ☐ STATE ☐ COUNTY ☐ LOCAL

DEPOSITORY FOR

SURVEY RECORDS

Office of Archeology and Historic Preservation, National Park Service

CITY, TOWN

Washington

STATE

D. C.

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
☐ EXCELLENT	☒ DETERIORATED	☒ UNALTERED	☒ ORIGINAL SITE
☐ GOOD	☐ RUINS	☐ ALTERED	☐ MOVED DATE _____
☐ FAIR	☐ UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

There are two sections of the old original Redwood Highway which have been abandoned. The first abandoned section of the old Redwood Highway (California State Highway #1) runs from High Bluff to the mouth of the Klamath River. This section of the highway follows the general route of the old Crescent City-Trinidad Wagon Road, and during the construction of the highway just after the First World War state highway crews upgraded and partially realigned and rerouted the road for automobile traffic. This section of road was paved and is very similar to the second section of abandoned highway further up the coast in terms of engineering and construction. The road runs through an open brushy area along the steep hillsides where the coast range meets the Pacific Ocean and terminates at the Klamath River, where the old Requa Ferry transferred autos across the river to the town of Requa, where the highway began again.

Due to the inefficiency of the ferry operation (traffic was often delayed for up to six hours while waiting to cross), a contract was let out for the construction of a bridge across the Klamath. The bridge was begun in 1924 about one mile upstream from the ferry. Finished in 1926 and named the Douglas Memorial Bridge, this eliminated the need for the ferry and the stretch of the highway along the coast. To meet the bridge, a new section of highway was constructed from High Bluff following the Richardson Creek down to the Klamath and the new bridge. This bypassed the old route, which was then downgraded to a local road, which it continues to be at this time. This old section has fallen into disrepair. The paving is broken in some spots, and is missing in others. The grade, however, is intact and unaltered, allowing for easy identification of the road's engineering.

The second abandoned section of the highway starts at a point north of Wilson Creek, where the present highway splits from the original route. Running through the lands of the Del Norte Coastal Redwoods State Park, the original route leaves State lands and enters Redwood National Park, where it turns and follows the coastline along the cliffs. The route continues along the cliffs until it reaches Enderts Beach, where the road is blocked. This route affords a spectacular view of Crescent City and of the rocky Pacific shoreline.

This second abandoned section of the state highway runs for approximately three miles through the forest and along the coast. Completed in 1923 after four years' labor, the road was hard-paved. Numerous landslides and the natural erosion of the cliff faces often blocked or washed out sections of the road, making maintenance difficult and costly. To eliminate this problem, the road was eventually relocated a few miles inland through the forest, bypassing the old coastal route.

As of 1969, the old road was in a deteriorated state. Paving was broken in some places; in other spots the paving had vanished. Slides had blocked the road in several locations and other portions of the grade were washed out. These same conditions exist today. The road cannot be traversed entirely by foot due to slipouts and traffic is possible only for a short distance from the southern junction with the modern highway. The original road engineering and construction details are still discernable, however.

(See Continuation Sheet)

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Where the road enters the redwood forest area, the road paving is fragmentary. Basically the forest area road is for the main part a dirt trail now, with paving appearing on the old grade every now and then. Still, the engineering and construction details are evident.

8 SIGNIFICANCE

PERIOD		AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
☐ PREHISTORIC	☐ ARCHEOLOGY-PREHISTORIC	☐ COMMUNITY PLANNING	☐ LANDSCAPE ARCHITECTURE	☐ RELIGION	
☐ 1400-1499	☐ ARCHEOLOGY-HISTORIC	☐ CONSERVATION	☐ LAW	☐ SCIENCE	
☐ 1500-1599	☐ AGRICULTURE	☐ ECONOMICS	☐ LITERATURE	☐ SCULPTURE	
☐ 1600-1699	☐ ARCHITECTURE	☐ EDUCATION	☐ MILITARY	☐ SOCIAL/HUMANITARIAN	
☐ 1700-1799	☐ ART	☒ ENGINEERING	☐ MUSIC	☐ THEATER	
☐ 1800-1899	☐ COMMERCE	☐ EXPLORATION/SETTLEMENT	☐ PHILOSOPHY	☒ TRANSPORTATION	
☒ 1900-	☐ COMMUNICATIONS	☐ INDUSTRY	☐ POLITICS/GOVERNMENT	☐ OTHER (SPECIFY)	
		☐ INVENTION			

SPECIFIC DATES 1919-1923

BUILDER/ARCHITECT California State Highway Commission

STATEMENT OF SIGNIFICANCE

These abandoned sections of the old Redwood Highway (California State Highway #1) are of local historical significance in the categories of engineering and transportation as excellent surviving examples of a highway built in the late years after the first World War and the early 1920s. Since the roadway was abandoned in favor of a different route during the early 1930s due to the instability of the steep cliffs which were constantly being eroded away by the Pacific Ocean, and due to changes in river crossing locations, parts of these sections have survived little changed in form since their original engineering and construction, whereas elsewhere sections of the highway have been constantly modernized, widened, altered, and rerouted. Consequently, these sections of the highway alone accurately represent a highway of the 1920s.

These sections of highway are also locally significant in transportation in that they are original surviving components of the first state highway to be built in Del Norte and Humboldt Counties. Until the construction of the highway in the 1920s, transportation to this area was limited due to the lack of developed roads and transportation. The only way to transport materials from the area was by ship which was available on a small scale alone, or by inadequately engineered and poorly maintained wagon roads. With the construction of the Redwood Highway, the area was opened to a great number of persons who otherwise would not have visited or settled here. This encouraged development of the area's resources, and also helped make the public cognizant of the grandeur and beauty of the redwoods, which helped in part establish the Redwood State and National Parks enjoyed by the public today.

HISTORY:

The Redwood Highway was established as a State highway by a bond issue in 1909. It was October 19, 1917, before any action to expedite its construction was taken in Del Norte County. At that time, the Board of Supervisors announced plans to secure the right-of-way for the Redwood Highway between Wilson Creek and Crescent City. A contract was let in July 1919, for construction between Cushing and Wilson Creeks. In 1923, the section from the head of Richardson Creek to Hunter Creek was built by prison labor. A camp for the prisoners was established in the Del Ponte place.

By the end of 1923, the Redwood Highway, except for the bridge across the Klamath, had been completed and opened to through traffic in Del Norte and Humboldt Counties. Between Crescent City and Cushing Creek, the Redwood Highway and the old road followed the same alignment. South of Cushing Creek, the Redwood Highway clung for three miles to the

(See Continuation Sheet)

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cliffs, providing the motorists a spectacular view of Crescent City and the Pacific. The new highway then skirted the headwaters of Damnation Creek, descending Damnation Ridge to Wilson Creek. Its alignment here was parallel to and a few hundred yards west of the old road. Wilson Creek was crossed several hundred yards above the False Klamath. Between Wilson and Hunter Creeks, the Redwood Highway followed the same alignment as the old road. From Hunter Creek the Redwood Highway swept towards Requa, ending at the ferry there. Once across the Klamath, the Redwood Highway wound along the coast until High Bluff, following the old road alignment in several places. From High Bluff to Orick, the alignments were identical, except at two points: between Elk Grove and May Creek, the new road was located east of the old, while at Orick the Redwood Highway crossed Redwood Creek about one half mile farther south.

The California Highway Commission, which has more recently been criticized by conservationists, demonstrated at that time a keen sense of aesthetic values in accepting the right-of-way for the Redwood Highway in Del Norte and Humboldt counties. The counties had to acquire land for the right-of-way. Heretofore, they had been in the habit of purchasing the the right-of-way, logging it for profit, and then turning it over to the State Highway Commission. The State Commission now refused to go along with this practice and the County Boards of Supervisors were required to turn over to the State an unlogged right-of-way. In building the Redwood Highway through Del Norte and Humboldt Counties, only those redwoods interfering with construction were felled. Thousands of these giants were thus saved for the American people. This practice was followed when sections of the highway were relocated in the 1930s.

Two events caused the relocation of segments of the Redwood Highway. The Requa Ferry, which operated between the southern banks of the Klamath and Requa, was the only means by which to cross the river and continue the Redwood Highway north to Crescent City. By 1919, however, the ferry had seen better days. On May 9, 1919, the editor of the Del Norte Triplicate complained that the ferry at Requa, because of the low stage of the river, might have to be relocated and new equipment provided "if the present regular mail, passenger, and tourist service is maintained." Traffic during ebb tide was delayed as much as six hours.

In June 1919, the Triplicate announced that a new contract for the Klamath ferry had been let by the Board of Supervisors. Dave Ball was to receive \$1,402.13 for building a new boat, while Stacy Fisher was to be paid \$2,580 a year for operating the ferry. Subsequently, Frank Bosch ran the ferry until the Douglas Bridge was opened for traffic in 1926. The ferry then went out of business.

Bids for the Klamath River Bridge were received May 26, 1924, and the contract awarded to F. Rolandi of San Francisco on June 19. Work was commenced in July. The bridge was dedicated May 17, 1926, with appropriate addresses by Governor Friend W. Richardson

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of California and Walter M. Pierce, Governor of Oregon. It was not opened to traffic, however, until the late fall of 1926. The bridge was named the Douglas Memorial Bridge in honor of the late Dr. Gustave H. Douglas. Dr. Douglas had spearheaded the campaign to secure construction of a highway bridge across the lower Klamath, which would link Del Norte County with the improved highway system of Humboldt County and other areas to the south.

With the bridge in operation and the ferry no longer in business, the highway was relocated to the new bridge. Now, from Hunter Creek the Redwood Highway, instead of sweeping towards Requa, continued southeastward and struck the Klamath at the bridge. The roadway on the south side of the Klamath ascended Richardson Creek and intersected the old road near High Bluff.

The other relocation was caused when costly slides, which fortunately caused no fatalities, compelled the State of California to relocate six miles of the Redwood Highway in Del Norte County. This was done in the early 1930s. South of Crescent City, the new highway, on entering Section 35, Township 16 North, Range 1 West, ascended the ridge and passed around the head of Cushing Creek. From this point it ran through the redwood forest. Descending Damnation Ridge, the new highway intersected the old road just above Wilson Creek.

There are no surviving remains of the old Requa Ferry and the Douglas Memorial Bridge was destroyed by the 1964 flood and replaced by an entirely new and modern bridge at a location further upstream.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

1. Bearss, E. C., Basic Data Study, "Redwood National Park"
National Park Service: Washington, D. C. 1969.

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 50.00

UTM REFERENCES

	ZONE	EASTING	NORTHING
A	10	404940	4617000
B	10	405500	4617000
C	10	405765	4614190
D	10	407350	4614190

 (continued)

VERBAL BOUNDARY DESCRIPTION

Within the coordinates of UTM points A, B, C, D, E, F, G, H, I, J, K, and L, a seventy five foot wide strip of land following the course of the old highway grade and centered on it.

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE James Delgado, Historian

Gordon Chappell, Regional Historian, Western Region

ORGANIZATION

National Park Service, WRO

DATE

June 30, 1978

STREET & NUMBER

450 Golden Gate Ave., Box 36063

TELEPHONE

(415) 556-8376

CITY OR TOWN

San Francisco

STATE

California, 94102

12 CERTIFICATION OF NOMINATION

STATE HISTORIC PRESERVATION OFFICER RECOMMENDATION

YES _____ NO _____ NONE _____

STATE HISTORIC PRESERVATION OFFICER SIGNATURE

In compliance with Executive Order 11593, I hereby nominate this property to the National Register, certifying that the State Historic Preservation Officer has been allowed 90 days in which to present the nomination to the State Review Board and to evaluate its significance. The evaluated level of significance is _____ National _____ State _____ Local.

FEDERAL REPRESENTATIVE SIGNATURE

TITLE

DATE

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

DIRECTOR, OFFICE OF ARCHEOLOGY AND HISTORIC PRESERVATION

ATTEST:

DATE

KEEPER OF THE NATIONAL REGISTER

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

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U. T. M. Coordinates
Zone 10

E: 4/07/350 46/10/410

F: 4/06/680 46/10/410

G: 4/06/650 46/13/285

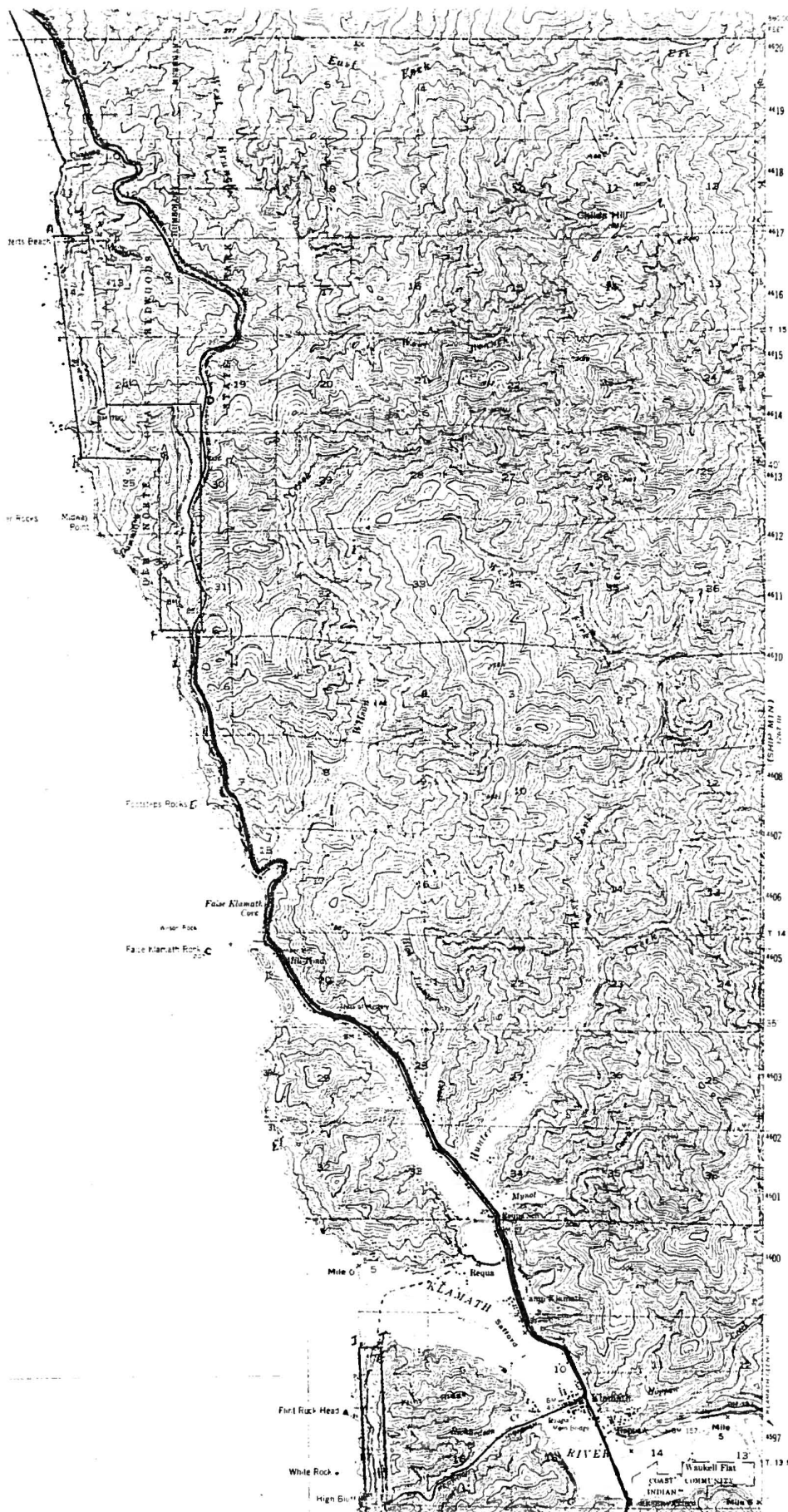
H: 4/05/350 46/13/320

I: 4/09/860 45/98/460

J: 4/10/240 45/98/460

K: 4/10/340 45/95/730

L: 4/09/960 45/95/730



State Highway No. 1)

REDWOOD NATIONAL PARK
Del Norte County, CA

U.T.M. Coordinates
Zone 10

A: 4/04/940 46/17/000
B: 4/05/500 46/17/000
C: 4/05/765 46/14/190
D: 4/07/350 46/14/190
E: 4/07/350 46/10/410
F: 4/06/680 46/10.410
G: 4/06/650 46/13/285
H: 4/05/350 46/13/320
I: 4/09/860 45/98/460
J: 4/10/240 45/98/460
K: 4/10/340 45/95/730
L: 4/09/960 45/95/730

LEGEND TO MAP:

Blue Indicates the original
Redwood Highway.

Green Indicates the modern
Highway route.

All sections not colored
are those utilized from
1926 to 1965, when the
present Highway was
initiated.

Blue dotted line represents
site of the Old Requa Ferry
No remains extant.

STATES
F THE INTERIOR
AL SURVEY

UNITED STATES
DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS





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are t
1926
prese
initi

Blue
site
No re

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4607

4606
4605

T. 14 N.

4603

35'

4602

4601

4600

4597

T. 13 N.

459500m N.

41°30'

124°00'

415000m E.

1266

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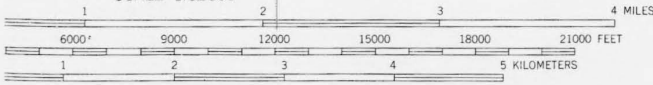
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SCALE 1:62500



CONTOUR INTERVAL 50 FEET
DATUM IS MEAN SEA LEVEL
H CURVES IN FEET—DATUM IS MEAN LOWER LOW WATER
IE SHOWN REPRESENTS THE APPROXIMATE LINE OF MEAN HIGH WATER
THE AVERAGE RANGE OF TIDE IS APPROXIMATELY 4 FEET

MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
NATIONAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
NATIONAL TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

(FERN CANYON 1:24 000)
1:166 I NE

QUADRANGLE LOCATION

ORICK 17 MI.
EUREKA 59 MI.

R. 1 E. INTERIOR—GEOLOGICAL SURVEY, RESTON, VIRGINIA—1974

415000m E.

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ROAD CLASSIFICATION

Heavy-duty 4 LANE 16 LANE Light-duty
Medium-duty 4 LANE 16 LANE Unimproved dirt
U. S. Route State Route

KLAMATH, CALIF.
N4130-W12400/15

1952

AMS 1167 II SERIES V79R

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS
Rochester, NY



Old Redwood Highway
Redwood National Park
Del Norte County, California
South of Crescent City, SW 31
T 15 N R 1 E H.M.
National Park Service photo
By Steve Veirs, October 26, 1972
View toward Southeast
photo 6 of 6

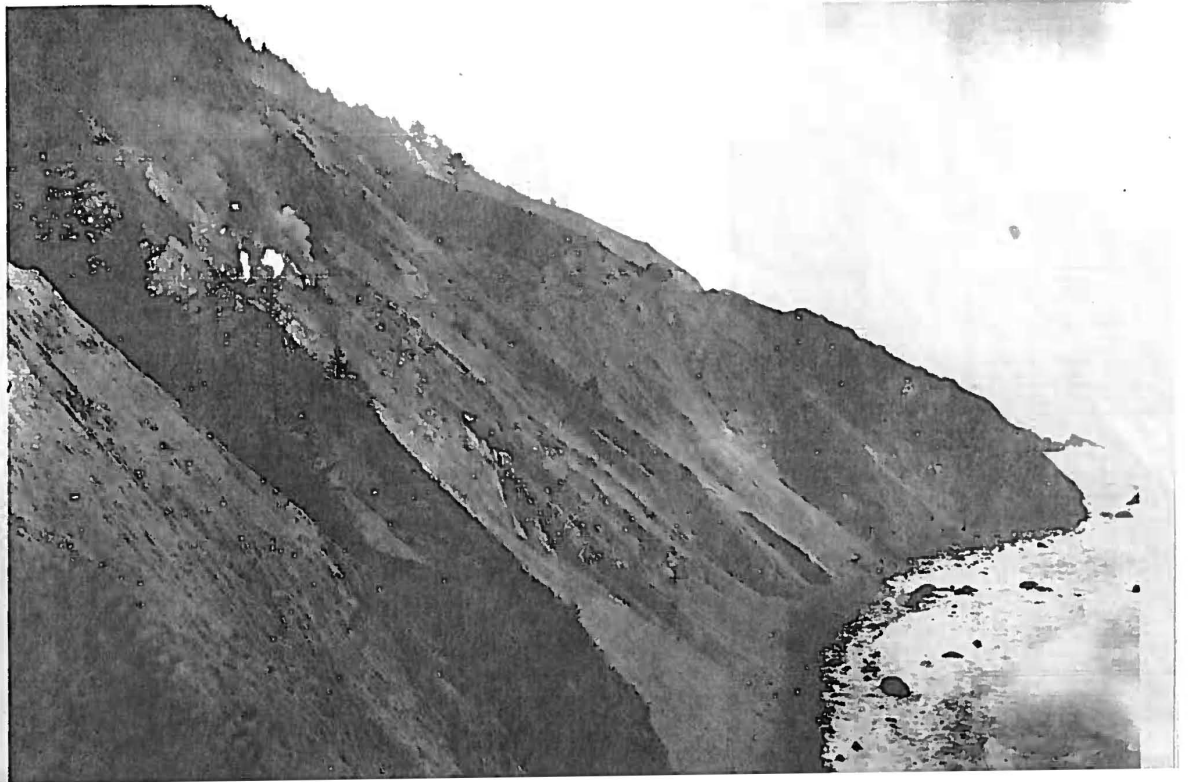
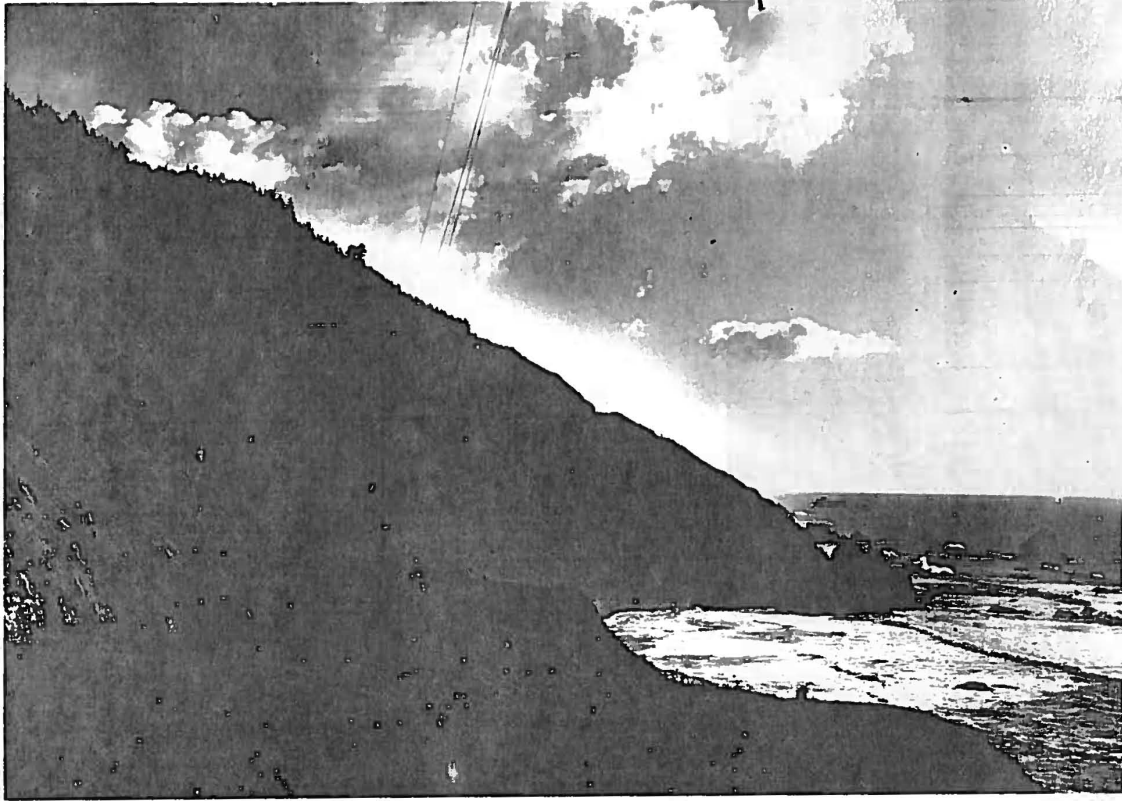
OLD REDWOOD HIGHWAY
VIEW NORTH A SHORT DISTANCE
ABOVE WHERE OLD HIGHWAY
DIVERGES FROM MODERN HIGHWAY
NORTH OF WILSON CREEK

REDWOOD NATIONAL PARK
DEL NORTE COUNTY, CALIFORNIA
PHOTO 1 OF 6
FALL, 1975

CREDIT: NATIONAL PARK SERVICE PHOTO BY

Gordon S. Channell

PHOTO * GUARD # 3224
LIGHT IMPRESSIONS
Rochester, NY



OLD REDWOOD HIGHWAY

VIEW SOUTH ALONG ROAD IN
VICINITY OF SLIDES AND
WASHOUTS JUST SOUTH OF
ENDERT'S BEACH NEAR
CRESCENT CITY, CALIFORNIA

REDWOOD NATIONAL PARK

DEL NORTE COUNTY, CALIFORNIA

PHOTO 2 OF 6

FALL, 1975

CREDIT: NATIONAL PARK SERVICE PHOTO BY

Gordon S. Chappell

OLD REDWOOD HIGHWAY

REDWOOD NATIONAL PARK

DEL NORTE COUNTY, CALIFORNIA

CONSTRUCTION IN 1923

NE, SE SEC. 14 T 15N R 1W H.M.

PHOTOGRAPHER UNKNOWN

1923

VIEW TO SOUTHEAST

PHOTO 3 OF 6

PHOTO ★ GUARD # 3224
LIGHT IMPRESSIONS
Rochester, NY



Old Redwood Highway
Redwood National Park
Del Norte County, California

CONSTRUCTION C. 1923 IN NE AND
SE SECTION 14T 15N R1W H.M.

SOUTH OF CRESCENT CITY, CALIFORNIA

Photographer UNKNOWN

VIEW TO SOUTHEAST

Photo 4 of 6

Old Redwood Highway

VIEW TO NORTH TOWARDS
CRESCENT CITY IN DISTANCE

SE SE SEC 14T 15N R1W H.M.

Photographer UNKNOWN

C. 1923 (?)

Photo 5 of 6



1. Redwood Highway (California State Highway No. 1)
2. Redwood National Park, Del Norte County, California
3. Photographer: Unknown
4. Date of Photo: 1923 *Date of copy: 1979*
5. Negative filed at:

DEC 17 1979

- Western Regional Office, N.P.S.
450 Golden Gate Avenue, Box 36063
San Francisco, CA 94102
6. View to north towards Crescent City in distance SE SE SEC 14T 15N R1W H.M.
 7. Photo Number 5 of 6 *6 SEP 1979*



1. Redwood Highway (California State Highway No. 1)
 2. Redwood National Park, Del Norte County, California
 3. Photographer: Unknown
 4. Date of Photo: 1923
 5. Negative filed at:
- 6 SEP 1979
Date of copy: 1979
- DEC 17 1979
- Western Regional Office, N.P.S.
450 Golden Gate Avenue, Box 36063
San Francisco, CA 94102
6. View to southeast of NE, SE SEC 14 T 15N R1W H.M.
 7. Photo Number: 3 of 6



1. Redwood Highway (California State Highway No. 1)
2. Redwood National Park, Del Norte County, California
3. Photographer: Steve Veirs
4. Date of Photo: October 26, 1972
5. Negative filed at:

DEC 17 1979

Western Regional Office, N.P.S.
450 Golden Gate Avenue, Box 36063
San Francisco, CA 94102

6. View towards southeast, south of Crescent City, SW SEC 31 T15N R1E H.M.
7. Photo Number: 6 of 6

6 SEP 1979



1. Redwood Highway (California State Highway
No. 1)

2. Redwood National Park, Del Norte County,
California

6 SEP 1979

3. Photographer: Unknown

4. Date of Photo: 1923

Date of copy 1979

5. Negative filed at:

DEC 17 1979
DOE

Western Regional Office, N.P.S.

450 Golden Gate Avenue, Box 36063

San Francisco, CA 94102

6. Construction c. 1923 in NE and SE SEC
14 and 15 T 15N R1W H.M. south of
Crescent City, California.

7. Photo Number 4 of 6



1. Redwood Highway (California State Highway No. 1)
2. Redwood National Park, Del Norte County, California
3. Photographer: Gordon S. Chappell
4. Date of Photo: Fall 1975 6 SEP 1979
5. Negative filed at:

DEC DEC 17 1979

Western Regional Office, N.P.S.
450 Golden Gate Avenue, Box 36063
San Francisco, CA 94102

6. View South, along road in vicinity of slides and washouts just south of Endert's Beach near Crescent City, California.
7. Photo Number: 2 of 6



1. Redwood Highway (California State Highway No. 1)
2. Redwood National Park, Del Norte County, California
3. Photographer: Gordon S. Chappell
4. Date of Photo: Fall 19756 SEP 1979
5. Negative filed at:

DEC DEC 17 1979

Western Regional Office, N.P.S.
450 Golden Gate Avenue, Box 36063
San Francisco, CA 94102

6. View North, a short distance above where old highway diverges from modern highway north of Wilson Creek.
7. Photo Number: 1 of 6

Appendix B: California Department of Parks and Recreation Record (DPR 523), Old Redwood Highway

State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code

Other Listings HAER, NRHP

Review Code _____ Reviewer _____ Date _____

Page 1 of 19 *Resource Name or #: Old Redwood Highway, REDW00162

P1. Other Identifier: Enderts Beach Road; California Coastal Trail- Enderts Beach Section, Damnation Creek Section and Tey-
wo-lew Section; Coastal Drive; Alder Camp Road; Red Alder Road; and Newton B. Drury Parkway

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County Del Norte County and Humboldt County (P2c, P2e, and P2b or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Childs Hill CA (1997); Sister Rocks CA (1966); Requa (1997); Fern Canyon (1966); Orick (1975)

Address _____

City _____ Zip _____

c. UTM: Zone 10N: 404355 mE/ 4620216.1 mN; 407091.7 mE/ 4610605.9 mN; 410299.1 mE/ 4598792.9 mN; 412802.1 mE/
4597464.6 mN; 414036 mE/ 4568096.3

e. Other Locational Data:

***P3a. Description:**

The Old Redwood Highway District is a historic district consisting of segments of decommissioned Redwood Highway within Redwood National and State Parks with a period of significance from 1919 to 1952. Approximately 5.5 of the 25.6 miles of Old Redwood Highway have been previously listed on the National Register of Historic Places. Outside the listed district boundaries, the boundaries of 20.1 miles of Old Redwood Highway are 50 feet to either side of the centerline, for a total area of approximately 350 acres, in two non-contiguous locations. The old road currently has a mixture of conditions from good to poor. It is currently paved and gravel roads, paved and gravel hiking trails, and a former road buried and undermined by landslide. (See continuation sheet).

***P3b. Resource Attributes**

HP11 Engineering structure, HP37 Highway/trail, HP39 Other.

P5a. Photograph or Drawing



*P4. Resources Present: ☐ Building ☒ Structure ☒ Object ☐ Site ☒
District ☐ Element of District ☐ Other (Isolates, etc.)

P5b. Description of Photo: Old Redwood Highway south of Nickel Creek.
1972 California Coastal Survey.

*P6. Date Constructed/Age and Source: ☒ Historic ☐ Prehistoric
☐ Both

Originally constructed between 1919 and 1928. Period of significance
includes modifications to 1952.

***P7. Owner and Address:**

California Department of Parks and Recreation, 1416 9th Street
Sacramento, CA 95814 and U.S. Department of the Interior, 1849 C St

NW, Washington, DC 20240.

*P8. Recorded by: Kevin McCardle, and others, Redwood National Park, 121200 Highway 101, Orick, CA. 95555.

*P9. Date Recorded: 2012, 2014, 2015, 2017, 2019 and 2020.

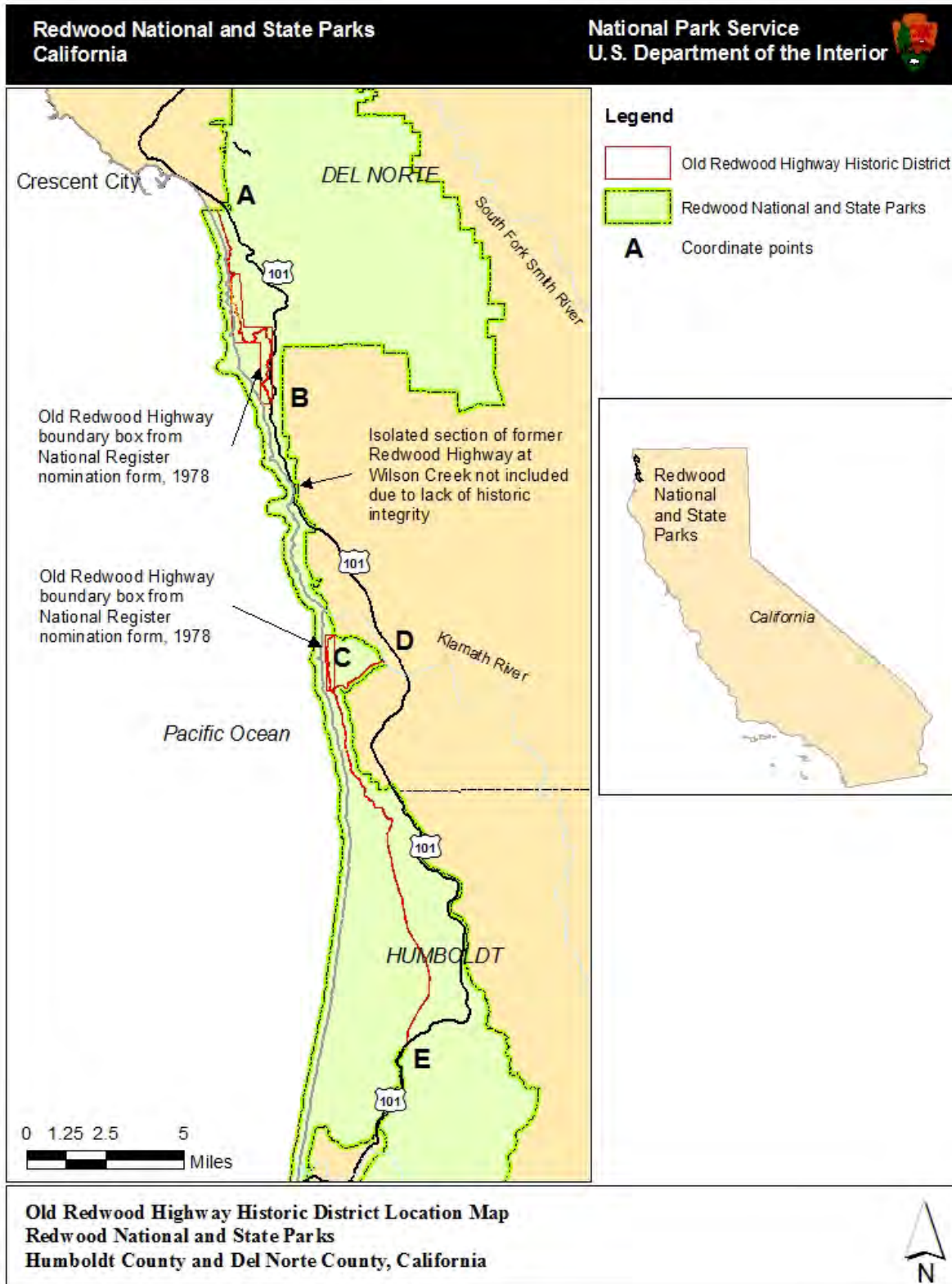
*P10. Survey Type: Intensive survey and archival research.

*P11. Report Citation: *Cultural Landscapes Inventory, Old Redwood Highway Redwood National and State Parks: Prairie Creek
Redwoods State Park, Del Norte Coast Redwoods State Park, Redwood National Park.*

*Attachments: ☐ NONE ☒ Location Map ☒ Continuation Sheet ☐ Building, Structure, and Object Record
☐ Archaeological Record ☒ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List): _____

Page 2 of 19 *Resource Name or # (Assigned by recorder) Old Redwood Highway, REDW 00162

*Map Name: Location Map Old Redwood Highway *Scale: 1:300,000 *Date of map: 12/20/2020



State of California - The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
DISTRICT RECORD

Primary #
HRI #
Trinomial

Page 3 of 19

*NRHP Status Code: 2S2, and 3D

*Resource Name or # (Assigned by recorder) Old Redwood Highway (REDW00162)

D1. Historic Name: Redwood Highway, Route 1, U.S. 101 D2. Common Name: _____

***D3. Detailed Description** (Discuss overall coherence of the district, its setting, visual characteristics, and minor features. List all elements of district.):

The Old Redwood Highway is a historic district consisting of decommissioned Redwood Highway totaling 25.6 miles, in two non-contiguous locations within Redwood National and State Parks. This district consists of sections of the Redwood Highway within the boundaries of Redwood National and State. Five and one-half miles of the 25.6 miles have been previously listed in the National Register of Historic Places. (See continuation sheet)

***D4. Boundary Description** (Describe limits of district and attach map showing boundary and district elements.):

Approximately 5.5 miles of road have been previously listed in the National Register of Historic Places. The boundary within the listed district is described as an approximately 75 foot strip of 50 acres within a defined box (see location map). Outside of the previously listed sections, the district boundary is 50 feet to either side of the roadway centerline. The district begins at the north end on Enderts Beach Road at the National Park boundary, south of the US Highway 101 intersection, and continues south to the Coastal Trail Nickel Creek Section. (See continuation sheet)

***D5. Boundary Justification:**

Outside the listed district, the 50-foot boundary to either side of the road centerline includes features such as turnouts, culverts, memorial plaques that note the preservation efforts of Coastal Redwood groves that give the road much of its current character, and other small-scale features. (See continuation sheet)

D6. Significance: Theme Transportation, Recreation **Area** Automobile, Tourism

Period of Significance 1919-1952 **Applicable Criteria** A (Discuss district's importance in terms of its historical context as defined by theme, period of significance, and geographic scope. Also address the integrity of the district as a whole.)

The significance of the entire historic Redwood Highway is closely related to the automobile and the meaning it had for American culture during an era of rapid development and evolution. The portion of the Redwood Highway documented in this inventory—the Old Redwood Highway—is associated with the early stage when automobiles were first entering popular usage in the United States. It derives its unique significance from the leisurely experience of scenic beauty that was afforded the early automobile user and is reflected in the Old Redwood Highway's narrow, meandering path through the dramatic landscape of the dense Coastal Redwoods and the dramatic contrast to the path along the northern California coast. Later highway improvements and the introduction of freeways in the second half of the twentieth century fundamentally altered the experience of auto tourism, substituting speed and efficiency for the intimate immersion in the surrounding environment that early motorists enjoyed. Surviving segments of the Old Redwood Highway preserve the feelings and associations of this early period of motoring and recall a time when the automobile was still valued as a means for appreciating natural scenery and an instrument of nature conservation.

***D7. References** (Give full citations including the names and addresses of any informants, where possible.):

Published Literature

Adams, Kenneth C. "Start of Highway System." *California Highways and Public Works—Centennial Edition* (September 9, 1950): 71-80.

Arcata Union. "Highway Clearing Starts at Orick," *Arcata Union*, Arcata, California. April 7, 1927.

(see continuation sheet)

***D8. Evaluator:** Kevin McCardle **Date:** 12/20/2020

Affiliation and Address: National Park Service, Redwood National Park, P.O. Box 7, Orick, California 95555

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***P3a. Description (Continued):**

The district begins at the north end on Enderts Beach Road at the National Park boundary, south of the US Highway 101 intersection, and continues south to the Coastal Trail Nickel Creek Section. The segment listed in the National Register begins where the Old Highway leaves the Coastal Trail at Nickel Creek and continues to the bluffs above the ocean coast where it is buried in landslides. The segment from this location to where it rejoins the Coastal Trail is predominantly buried and undermined by landslides. The Old Highway rejoins the Coastal Trail to the south within Del Norte Coastal Redwood State Park where it continues inland and south until it intersects with the current Redwood Highway (U.S. 101). The final segment included in the National Register is south of the Klamath River at Coastal Drive, where it ends at the intersection with Alder Camp Road. Alder Camp Road was part of the Old Highway after the first bridge over the Klamath River was completed in 1926 and the Coastal Drive segment was decommissioned. These roads intersect and continue south as the Coastal Trail Tey-wo-lew Section, and then inland along Red Alder Road. The Old Highway continues south along Newton B. Drury Parkway until the May Creek Bridge just north of the current Redwood Highway (U.S. 101).

The original Redwood Highway was designated Route 1 and first conceived of in the late 19th century as a state road that would connect Sausalito to the remote redwood forests along the coast of California and up to Oregon. Construction began in 1909 at Sausalito and was California's first state-funded route. It took until 1920 to make the road to Eureka "passable" and until 1926 to complete the link to Oregon when the Klamath River Bridge was built. The highway through Prairie Creek Redwoods State Park was the last segment in the district to be completed in 1928 when the county road was improved to highway standards of the day. The highway was initially embraced by both commercial interests as a route for timber and commerce; and by conservationists who saw a scenic road as a means to expose more people to the beauty of the tall trees, and as a means to preserve corridors of forests found along the new scenic highway. These dual goals became increasingly at odds as automobile technology rapidly developed in the 1920s, national uniform national highway standards were adopted, and roads needed to accommodate faster traffic and larger vehicles. California passed a highway transportation bill in 1952 to modernize the Redwood Highway and transform into a highway more familiar to contemporary highways.

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*D3. Detailed Description (Continued):

Integrity of a property is grounded in the physical features and how they relate to its significance. There are seven aspects or qualities: location, design, setting, materials, workmanship, feeling, and association. Most segments of the Old Redwood Highway have seen little change since first constructed and all contributing segments retain location, setting, feeling, association, and much of the design. All segments have the same location and setting and still convey the feeling and association of a scenic road in the dense redwood forests and on the coast. The original design was simple with little to no architectural adornment and this has not changed. The road has been widened in some locations but are still able to convey the original design intent. The remaining integrity aspects vary by segments.

The segment furthest north, Enderts Beach Road, retains a high degree of integrity and is still used as a vehicular road, and shows few modifications beyond resurfacing and additional culverts since its construction in 1920. The next short segment to the south has been heavily modified with the construction of the Crescent City Overlook and trail parking by the NPS and is not contributing. The Coastal Trail Nickel Creek Section to the landslide segment is no longer a vehicular road and has been deteriorating and losing pavement, but otherwise still conveys its historic character. The next approximately 2-mile section to the south has been buried and undermined by landslides and is not considered contributing. Although aerial photographs reveal some small isolated sections of road remain in this area, they are surrounded by buried road and unstable geology. South of this, through Del Norte Coastal Redwoods State Park, the Old Redwood Highway has high integrity and still retains some of the historic macadam surface, lane markings, culverts, and some objects but is slowly being covered in encroaching vegetation. An isolated segment within the park boundary at Wilson Creek is not considered contributing since it has been modified and currently used as a turnout of the current highway, and to the drive to the former hostel site. The short unpaved section beyond the large turnout does not retain integrity on its own to convey the historic character of a former highway. Continuing south of Klamath River, Coastal Drive continues as a vehicular road. It is unpaved, but it is not clear if this was paved during the time it was part of the Old Redwood Highway, nor does it retain any historic culverts, but it is also not clear if there were any originally. To the east is Alder Camp Road, also still in use as a vehicular road, and although it has been the most modified of the contributing road sections with a wider, more level road, it still can convey its historic feeling, association, location, setting, and the intent of a road winding through, and dominated by, the surrounding forest. Continuing south the Coastal Trail Tey-wo-lew Section was the most recent section closed to vehicle traffic. Although the pavement is deteriorated and several culverts have been replaced and more added, there are still several historic culverts, scenic turnouts with dramatic ocean views, and guard-posts. A 350-foot section to the south has been undermined and is no longer contributing. To the south in Humboldt County Red Alder Road was built about 1928 and retains a high degree of integrity. Newton B. Drury Parkway also continues to be used as a vehicular road, the pavement widths have increased, many of the culverts and objects have been replaced to more modern standards, but they still retain sufficient integrity to convey the historic scenic road through the forest.

*D4. Boundary Description (Continued):

The segment listed in the National Register begins where the Old Redwood Highway leaves the Coastal Trail at Nickel Creek and continues to the bluffs above the ocean coast. The segment from this location on the cliffs above the ocean to where it rejoins the Coastal Trail to the south is predominantly buried and undermined by landslides. The Old Redwood Highway rejoins the Coastal Trail to the south within Del Norte Coastal Redwood State Park where it continues inland and south until it intersects with the current Redwood Highway (U.S. 101). The final segment included in the National

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Register is south of the Klamath River at Coastal Drive, where it ends at the intersection with Alder Camp Road. Alder Camp Road was part of the Old Redwood Highway after the first bridge over the Klamath River was completed in 1926 and the Coastal Drive segment was decommissioned. These roads intersect and continue south as the Coastal Trail Tey-wo-lew Section, and then inland along Red Alder Road. The district continues south along Newton B. Drury Parkway until the May Creek Bridge just north of the current Redwood Highway (U.S. 101).

*D5. Boundary Justification (Continued):

During the period of significance, the highway served as both a scenic highway through the redwoods and along the coast; and a commercial thoroughfare. The segments reflect the evolution of highway design and construction beginning in 1920 until the desire for efficient, commercial transportation became the dominant goal in state highways around 1949, and the goal was formalized by the state in 1952 through legislation.

*D7. References (Continued):

- Barnett, Gabrielle. "Drive-by Viewing: Visual Consciousness and Forest Preservation in the Automobile Age." *Technology and Culture* 45, no. 1 (2004): 30-54.
- Bearss, Edwin C. *History Basic Data: Redwood National Park, Del Norte and Humboldt Counties, California*. Washington, D.C.: National Park Service, Div. of History, 1969.
- Belasco, Warren J. *Americans on the Road: From Autocamp to Motel, 1910-1945*. Cambridge, Mass.: MIT Press, 1979.
- Bottles, Scott L. *Los Angeles and the Automobile: The Making of the Modern City*. Berkeley: University of California Press, 1987.
- California Department of Parks and Recreation. *North Coast Redwood Master Plan*. Sacramento, Calif., 1965.
- Comly, H.S. *Report on the Routing of the State Highway from Wilson Creek to Crescent City in Del Norte County*. Sacramento. Department of Public Works, Division of Highways. 1932.
- Delgado, James and Gordon Chappell. *Redwood Highway (California State Highway #1) Old Redwood Highway (abandoned) National Register of Historic Places Inventory Nomination Form*. Washington, D.C.: National Park Service, 1979.
- Fogelson, Robert M. *Fragmented Metropolis: Los Angeles, 1850-1930*. Berkeley: University of California Press, 1967.
- Grant, Madison. "Saving the Redwoods: An Account of the Movement During 1919 to Preserve the Redwoods of California." *[New York] Zoological Society Bulletin* 22, no. 5 (1919): 91-118.
- . "Saving the Redwoods." *The National Geographic Magazine* 37, no. 6 (1920): 519-36.
- Hawk, Diane. *Touring the Old Redwood Highway: Humboldt County*. Piercy, Calif.: Hawk Mountaintop Publishing, 2004.
- . *Touring the Old Redwood Highway: Del Norte County*. Piercy, Calif.: Hawk Mountaintop Publishing, 2006.
- Interrante, Joseph. "The Road to Autopia: The Automobile and the Spatial Transformation of American Culture." In *The Automobile and American Culture*, edited by David Lanier Lewis, and Laurence Goldstein. Ann Arbor: University of Michigan Press, 1983.
- Leach, Sara Amy, and Brian Grogan. *Redwood National & State Parks Roads: HAER No. Ca-269*. Washington, DC: U.S. Dept. of the Interior, National Park Service, 2001.
- Lears, T.J. Jackson. *No Place of Grace: Antimodernism and the Transformation of American Culture, 1880-1920*. New York: Pantheon, 1981.
- Maslin, Marsh. "Redwood Highway." *California Highways and Public Works—Centennial Edition* (September 9, 1950): 148-51.

CONTINUATION SHEET

Property Name: Old Redwood Highway

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*Resource Name or # Old Redwood Highway, REDW00162 *Recorded by: Kevin McCardle *Date 12/20/2020

Continuation ☒ Update ☐

Morton, R.M. "Where We Are Drifting in Highway Construction." *California Highways* 1, no. 8 (August 1924): 3-6.

Olmsted, Frederick Law, Jr. *Report of State Parks Survey of California*. Sacramento, Calif.: California State Parks Commission, 1928.

_____. *Report on Del Norte Park Roads and Scenery*. Sacramento. Department of Public Works, Division of Highways. 1931.

Page, Marshall A. "The Growth of Motoring in California." *California Highways and Public Works* 7, no. 10 (October 1929): 2-4, 23.

Rae, John B. *The Road and the Car in American Life*. Cambridge, Mass.: MIT Press, 1971.

Robinson, John. "The Redwood Highway: Part II, Building the Road." *California Highways and Public Works* 43, nos. 7-8 (July-August 1964): 24-33.

Robinson, John. "The Redwood Highway: Part I, Early History of Transportation in the Northern Coastal Counties." *California Highways and Public Works* 43, nos. 5-6 (May-June 1964): 2-11.

Robinson, John. "The Redwood Highway: Part III, Bringing It up to Modern Standards." *California Highways and Public Works* 43, nos. 9-10 (September-October 1964): 14-23.

Robinson, John. "The Redwood Highway – Rebuilding after the Flood." *California Highways and Public Works* 44, nos. 3 - 4 (March – April 1965): 14-26.

Schmitt, Peter J. *Back to Nature: The Arcadian Myth in Urban America*. New York: Oxford University Press, 1969.

Schrepfer, Susan R. *The Fight to Save the Redwoods: A History of Environmental Reform, 1917-1978*. Madison: University of Wisconsin Press, 1983.

Spence, Mark David. *Watershed Park: Administrative History, Redwood National and State Parks*. Seattle, Wash.: National Park Service, 2011.

Sutter, Paul. *Driven Wild: How the Fight against Automobiles Launched the Modern Wilderness Movement*. Seattle: University of Washington Press, 2002.

Wiley, Malcolm M., and Stuart A. Rice. "The Agencies of Communication," in *Recent Social Trends in the United States: Report of the President's Research Committee on Social Trends*. New York: McGraw-Hill, 1933.

Williams, James C. *Energy and the Making of Modern California*. Akron, Ohio: University of Akron Press, 1997.

U.S. Dept. of the Interior. *Environmental Assessment: Rehabilitate Alder Camp Road Project*. Crescent City, Calif.: National Park Service, Redwood National and State Parks, 2004.

_____. *General Management Plan, Redwood National and State Parks*. Crescent City, Calif.: National Park Service, Redwood National and State Parks, 2000.

U.S. Dept. of Transportation. *Final Environmental Impact Statement: U.S. 101 Bypass, Prairie Creek Redwoods State Park, Humboldt and Del Norte Counties, California*. Sacramento, Calif.: Federal Highway Administration, 1983.

Construction documents

California Highway Commission. *Plan and Proposed Profile of Proposed State Highway in Humboldt County, from Orick to Northerly Boundary*. Sacramento, Calif. January 15, 1927 (As built, no date).

_____. *Plan and Proposed Profile of Proposed State Highway in Del Norte County, from Head of Richardson Creek to Hunter Creek*. Sacramento, Calif. December 22, 1923 (As built, no date).

_____. *Proposed State Highway, Layout No. 384, Wilson Creek (Sta. 0+00) to Last Chance Grade (Sta. 168+00)*. Sacramento, Calif. February 7, 1921 (As built, no date).

Department of Public Works, Division of Highways. *Plan and Profile of State Highway in Del Norte County, between Last Chance Slide and Flannigan's*. July 10, 1933 (Construction revisions, August 7, 1941).

_____. *Plan and Profile of State Highway in Del Norte County, from Richardson Creek to Hunter Creek*. January

CONTINUATION SHEET

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*Resource Name or # Old Redwood Highway, REDW00162 *Recorded by: Kevin McCardle *Date 12/20/2020

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5, 1924.

_____. *Plan and Profile of State Highway in Del Norte County, from Southerly Border to Richardson Cr.* October 10, 1927.

_____. *Route of Proposed State Highway in Humboldt and Del Norte Counties between 0.8 mi. So. of Humboldt Co. Line and 0.6 mi. So. of Minot Creek.* Sacramento, Calif. April 18, 1958.

_____. *Route of Proposed State Highway in Humboldt and Del Norte Counties from 0.6 mi. So. of May Creek Bridge No. 4-52 to 0.5 mi. No. of Del Norte County Line.* Sacramento, Calif. August 23, 1983.

Site Records (DPR 523)

Baker, S., John Roscoe. *Hamilton House/ Crivelli Ranch.* Oakland. Archeological Consultants. 1983

Baxter, Scott. *104-A-1-01-0-001, 104-A-1-02-0-001, 104-A-1-7-0-001, 104-A-12-0-001, 104 -A-13-2-001, 104-A-3-02-0-001, 104-A-3-04-2-001, 104-A-3-04-2-001, 104-A-3-04-2-002, 104-A-3-04-2-003, 104-A-3-04-2-004, 104-A-3-05-2-003, 104-A-3-05-2-004, 104-A-3-05-2-005.* Richmond, Calif. Past Forward Inc. 2001.

Peterson, Michael. *CCC Co. 1903 - Camp Prairie Creek.* Orick, Calif. Redwood National Park. 2013.

_____. *Enderts Beach Cottage Resort.* Orick, Calif. Redwood National Park. 2011.

_____. *Pozzi Auto Court (1927-1935) (REDW00165).* Orick, Calif. Redwood National Park. 2011.

_____. *Pozzi Ranch Home Place.* Orick, Calif. Redwood National Park. 2011.

_____. *Webster's Store.* Orick, Calif. Redwood National Park. 2013.

Ritter, E. *DNO-30/ DNO-56.* Orick, Calif. Redwood National Park. 1969.

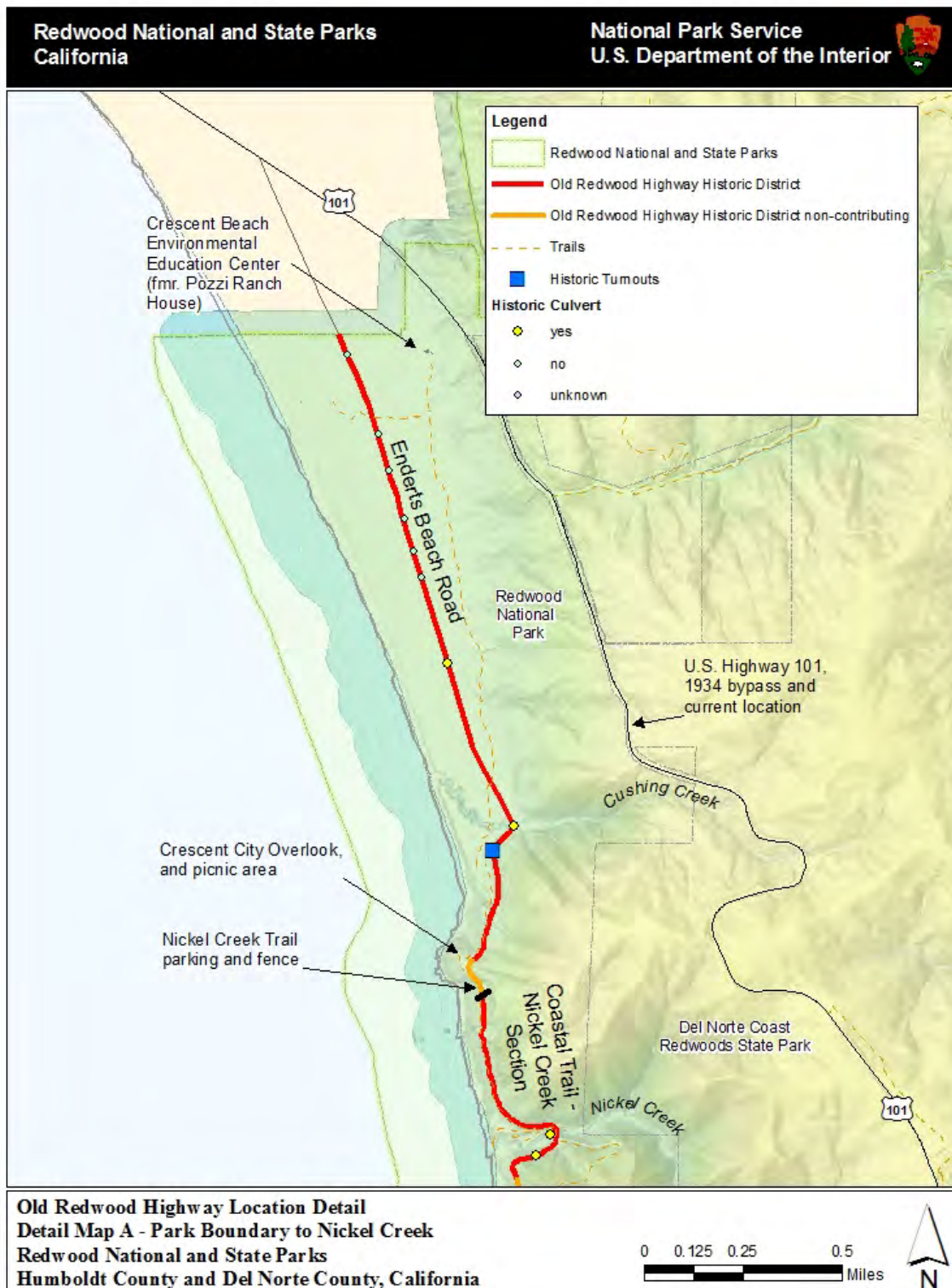
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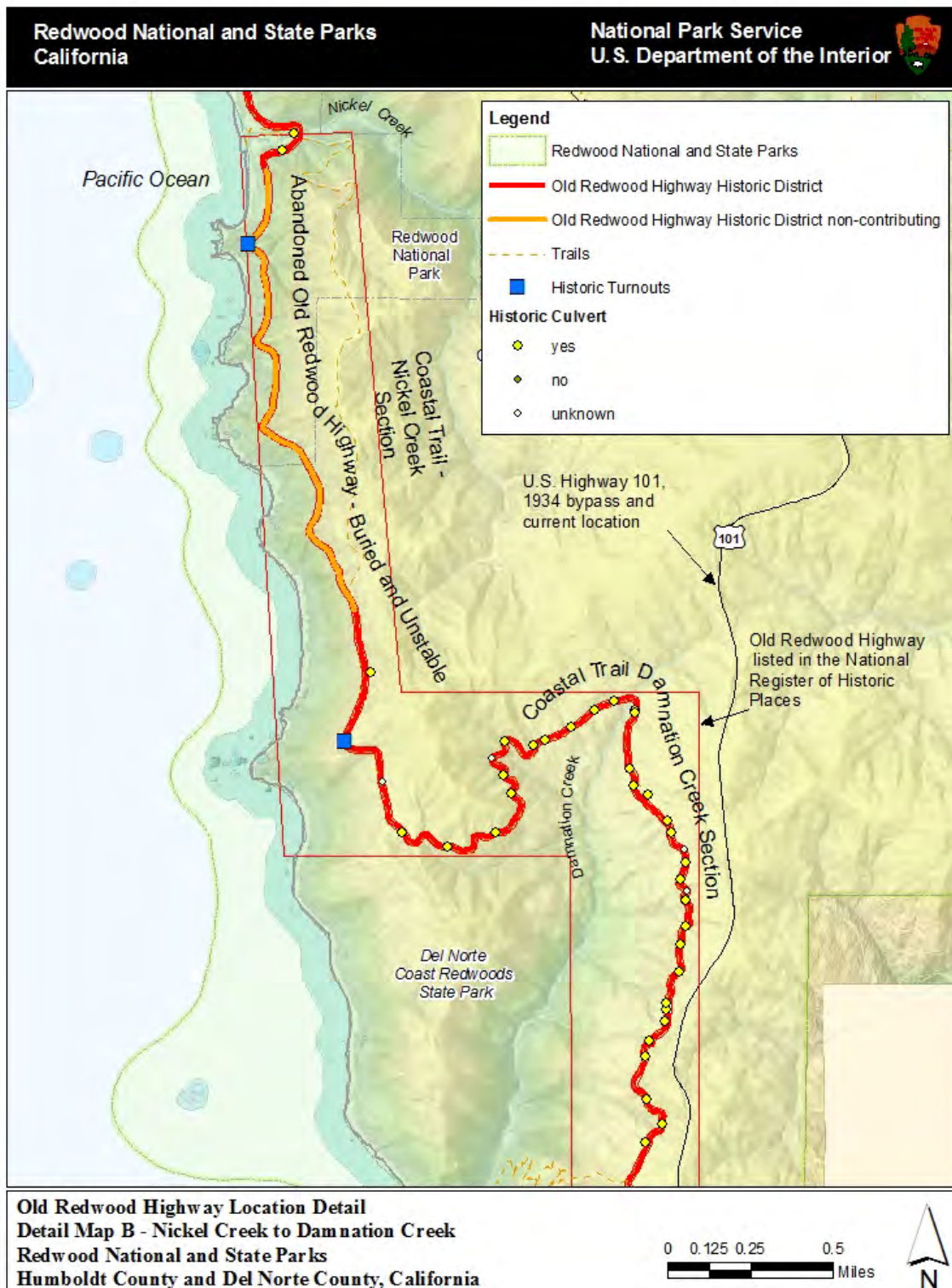
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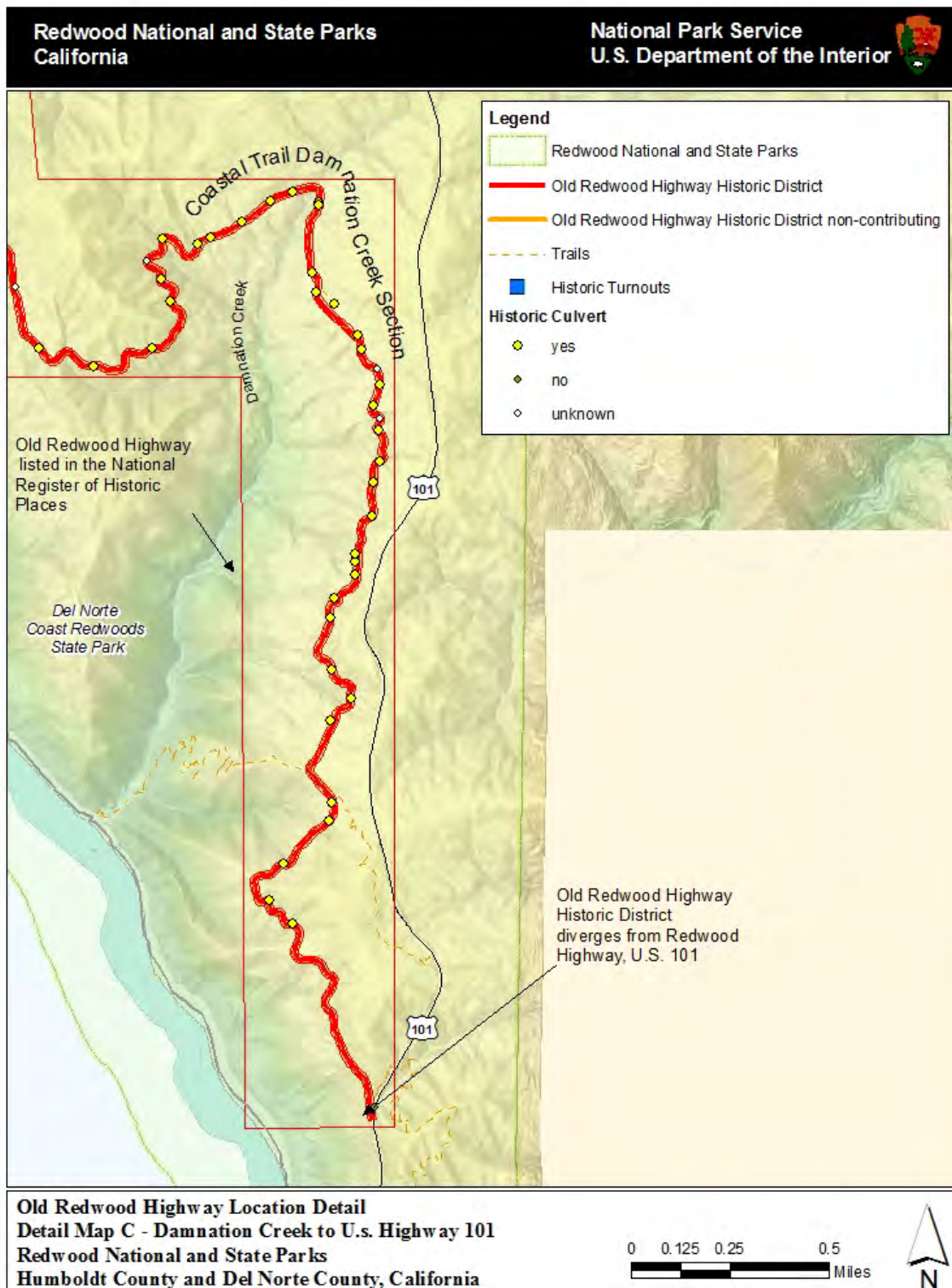
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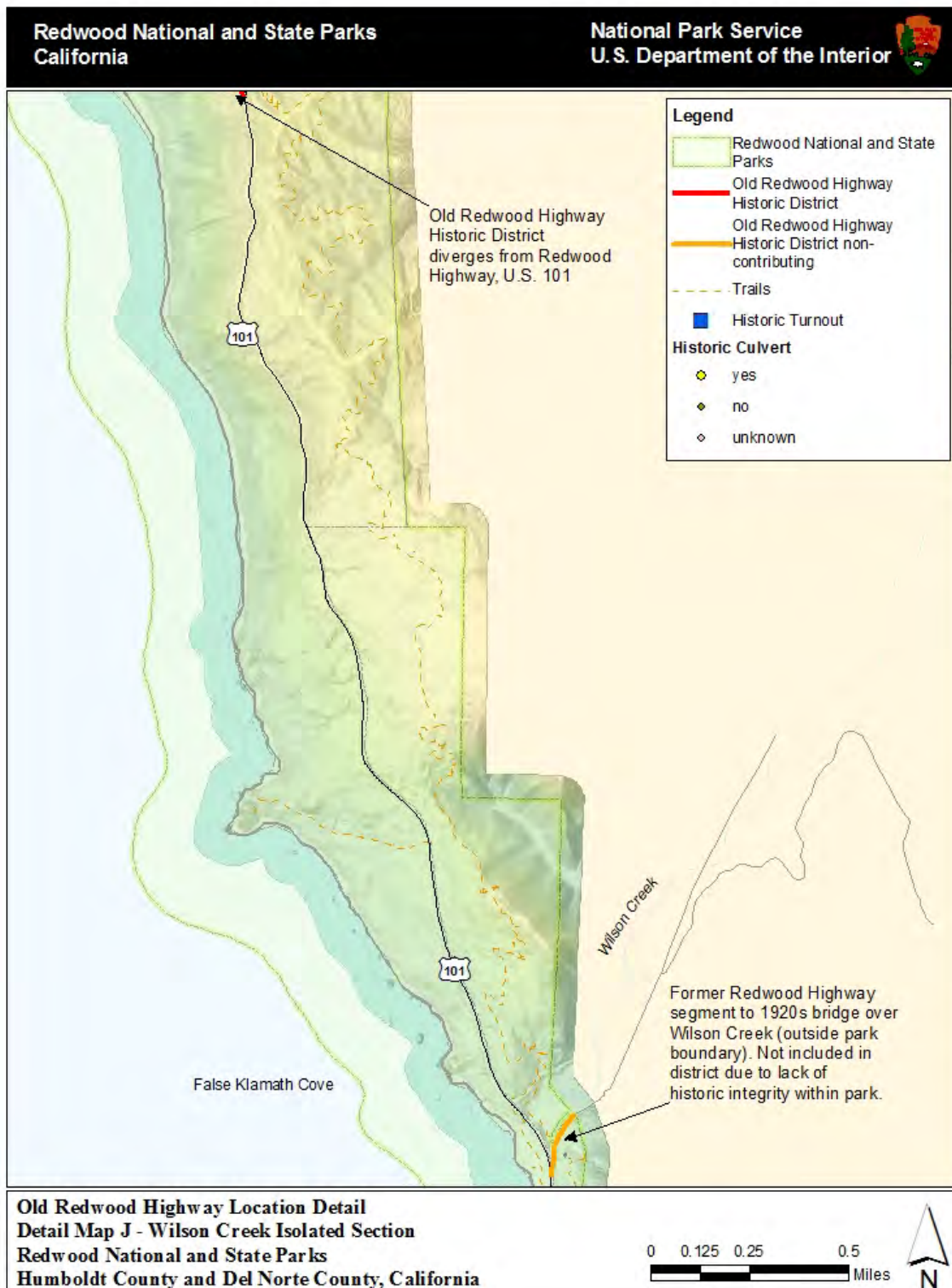
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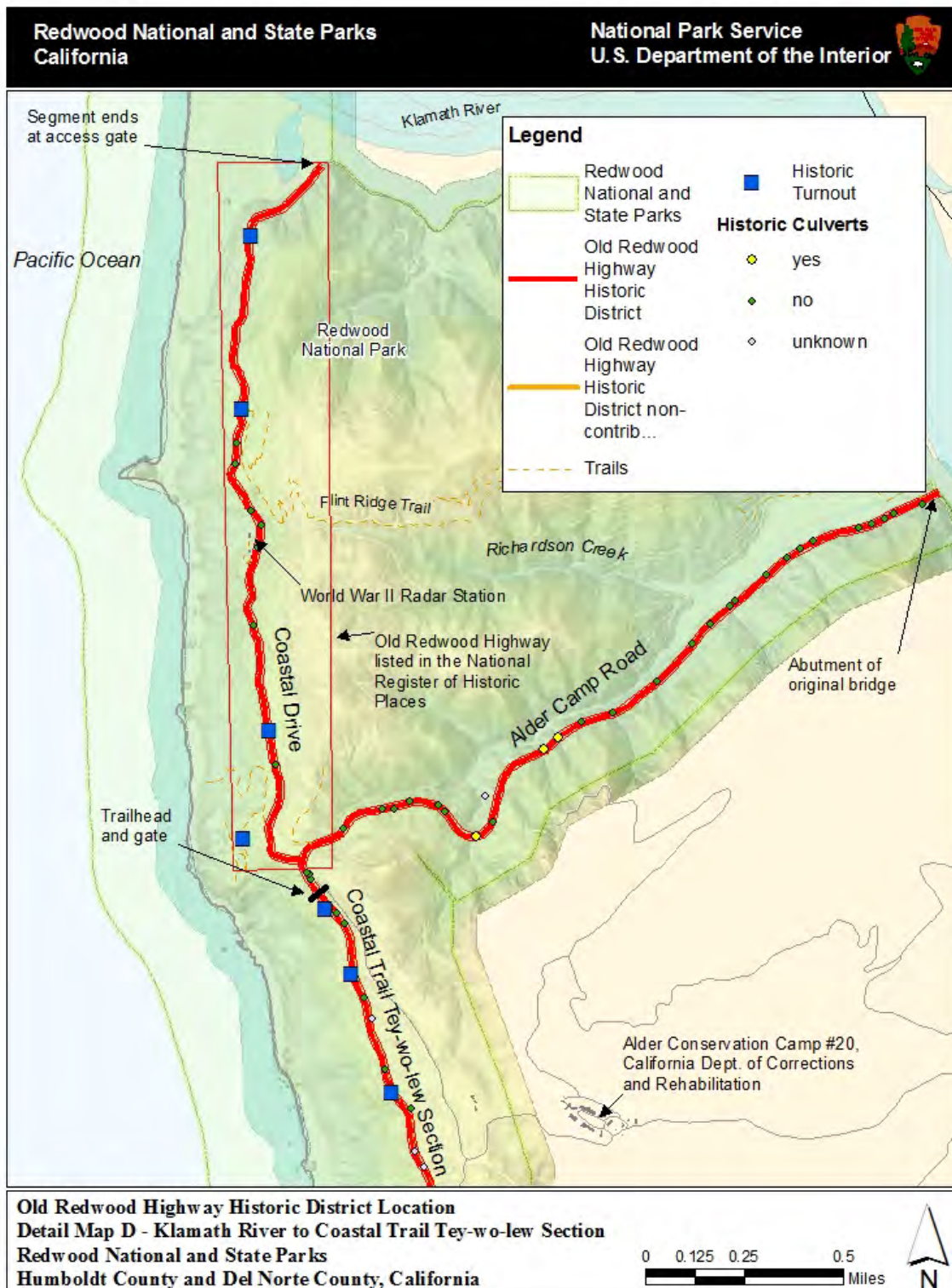
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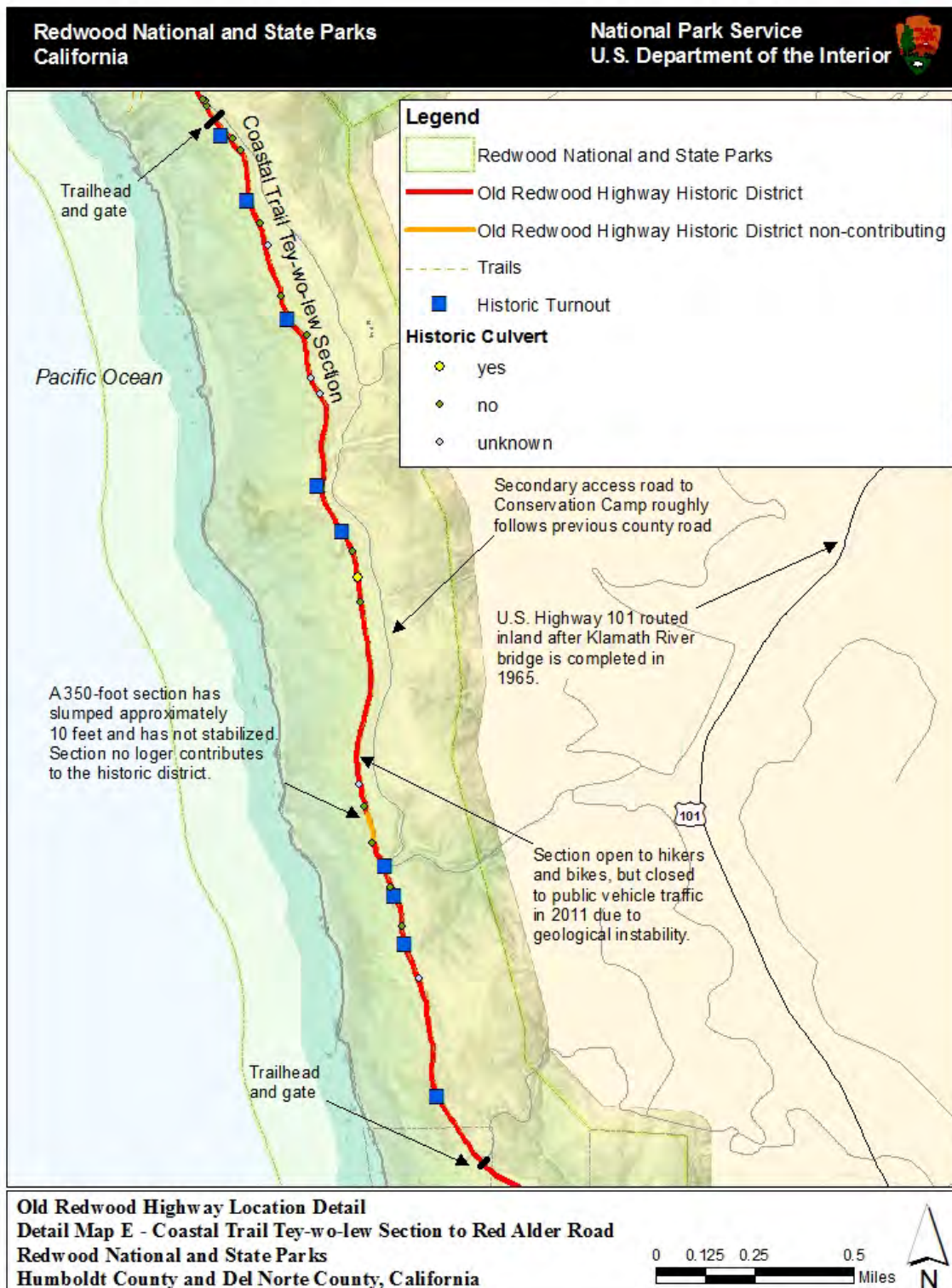
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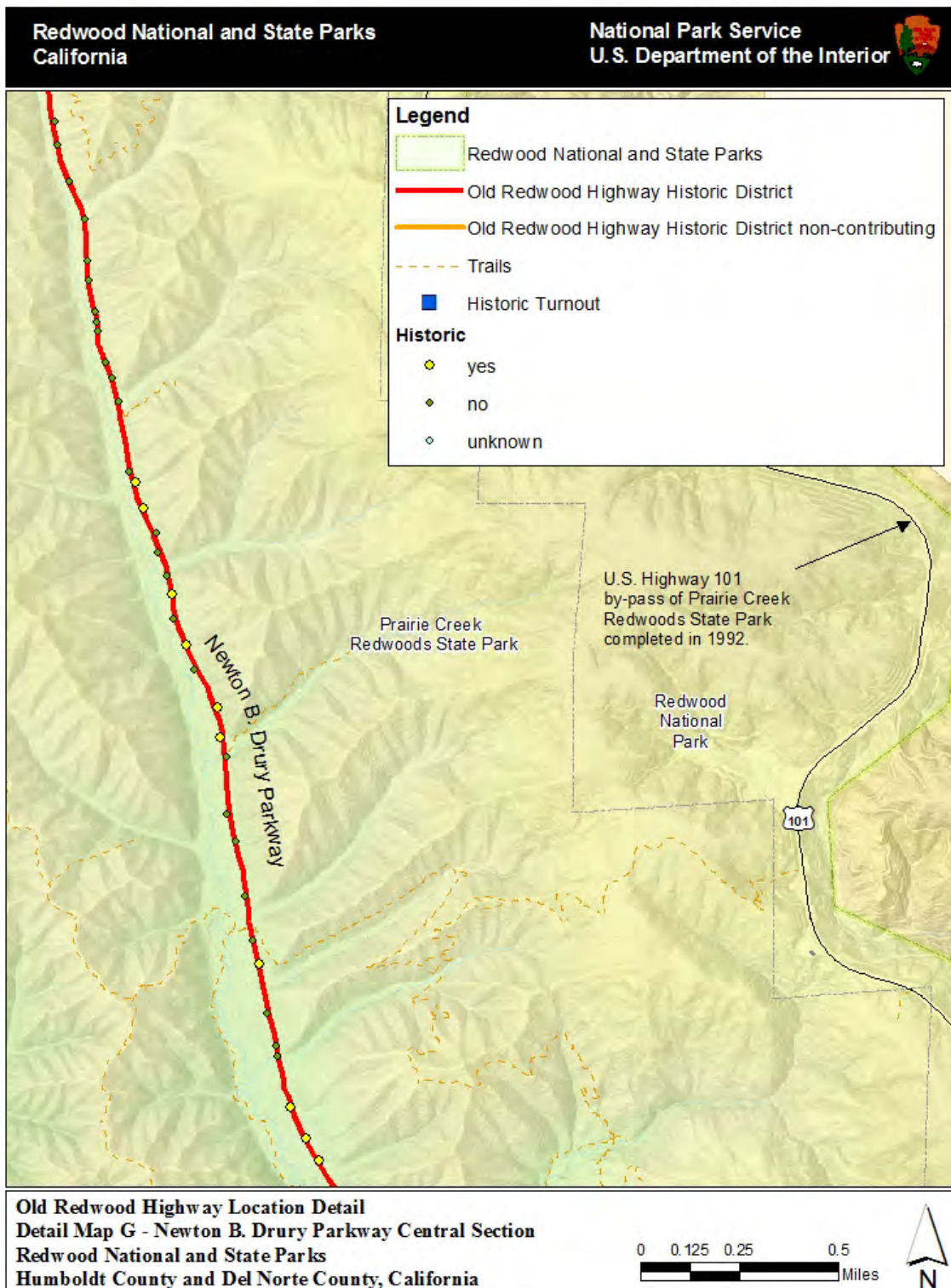
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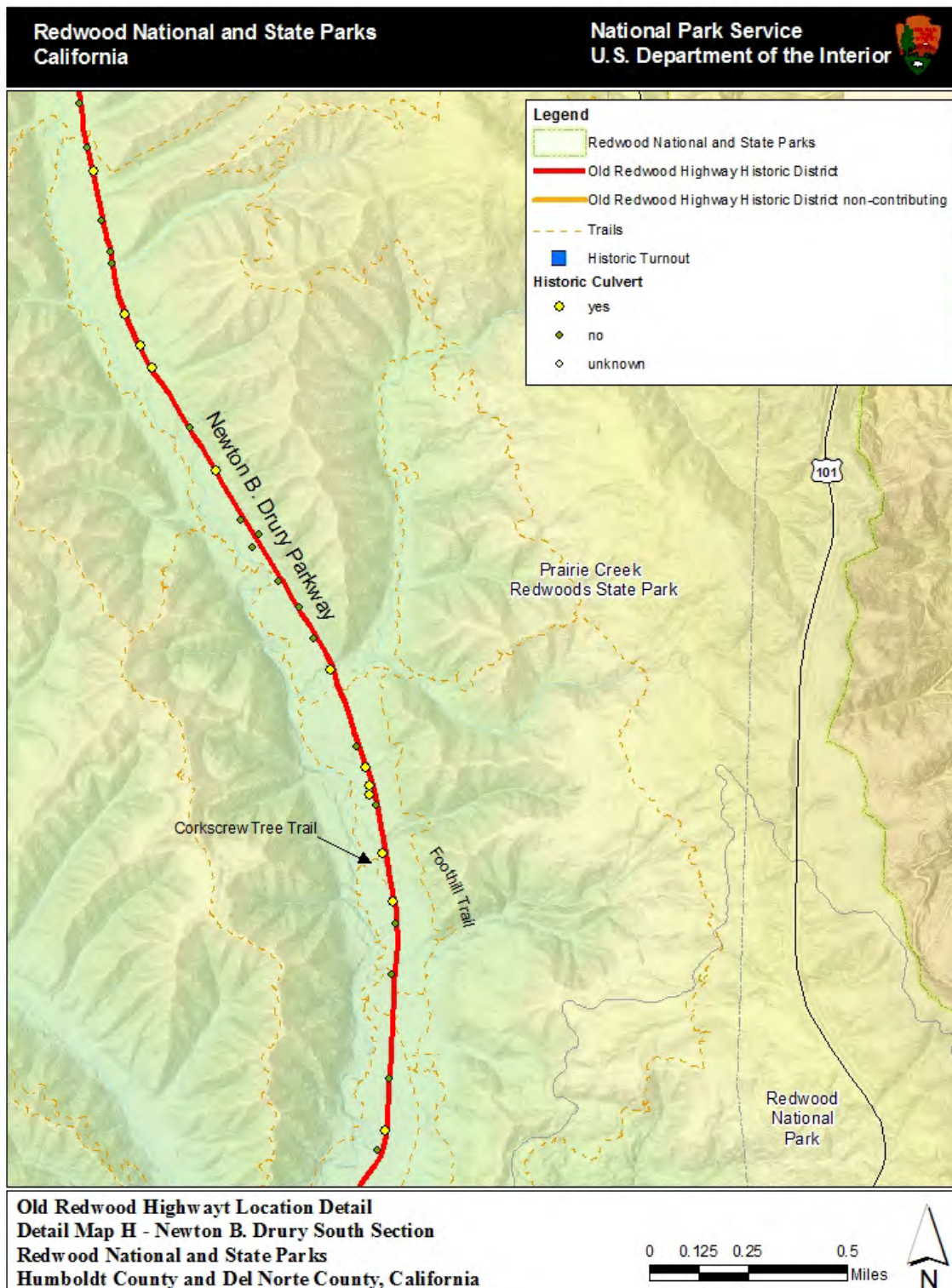
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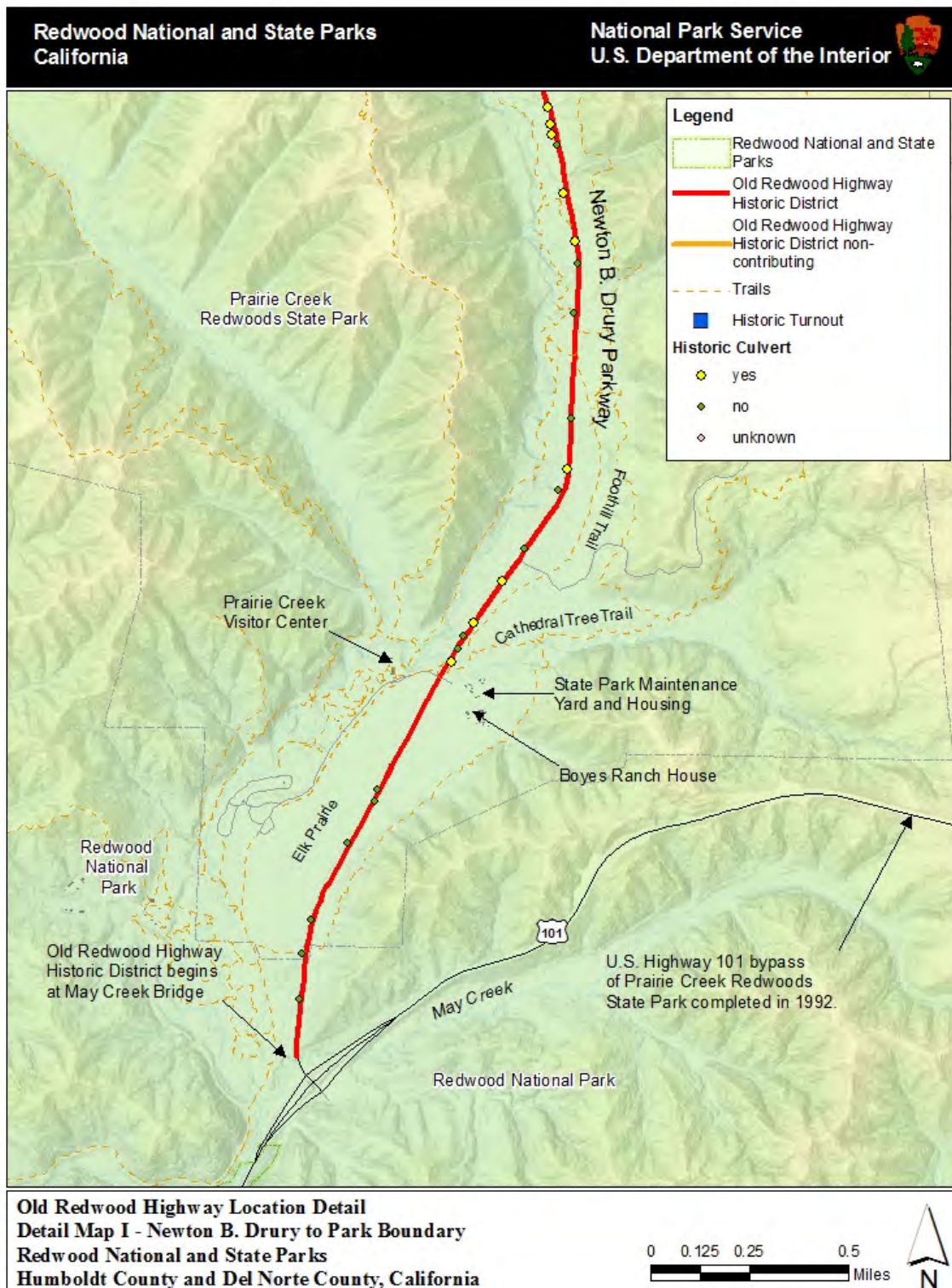
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Photo 1. Present day view of Coastal Trail Damnation Creek Section in Del Norte Coast Redwoods State Park. The Old Redwood Highway and has changed very little from historic conditions when abandoned in 1935 (NPS, 2017).



Photo 2. Coastal Drive looking north to the mouth of the Klamath River with expansive and distant views above the ocean. This section is listed on the National Register of Historic Places (NPS 2017).

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Photo 3. Coastal Trail Tey-wo-lew Section used as highway until 1964 and closed to vehicle traffic in 2011 (NPS 2013).



Photo 4. Old-growth redwood forest surrounds the Old Redwood Highway, currently Newton B. Drury Parkway, through Prairie Creek Redwoods State Park (NPS, 2013).