#### CALIFORNIA COASTAL COMMISSION

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# **F12b**

#### STAFF RECOMMENDATION

#### **ON CONSISTENCY DETERMINATION**

Consistency Determination No.	CD-045-11
Staff:	LK-SF
File Date:	9/21/11
60th Day:	11/20/11
75th Day:	12/5/11
Commission Meeting:	12/9/11

**FEDERAL AGENCY:** National Park Service

<u>PROJECT</u>

**LOCATION**: South of the Klamath River, West of Hwy. 101,

Redwood National Park, Del Norte Co. (Exhibits 1-4)

**PROJECT** 

**DESCRIPTION**: Conversion of Coastal Drive to a pedestrian and biking trail

(Exhibit 5-6)

**SUBSTANTIVE** 

**FILE DOCUMENTS:** See page 18.

**Staff Recommendation:** Concurrence. Motion is on page 6.

#### List of Exhibits

Exhibit I	Project Area, Large Scale
Exhibit 2a	Project Area, Regional Scale
Exhibit 2b	Project Area, Regional Scale
Exhibit 3	Project Location
Exhibit 4	Project Location Detail Map
Exhibit 5	Project Area Photos from the Federal Highway Administration Report
Exhibit 6	Redwood National and State Parks General Management Plan (Draft)
	Excerpts

#### **EXECUTIVE SUMMARY**

The National Park Service (Park Service, or NPS) has submitted a consistency determination for converting a segment of Coastal Drive to a pedestrian and bike trail on the south side of the Klamath River, south of Requa, Del Norte County. The proposed project is located entirely within Redwood National Park. The intent of the project is to convert Coastal Drive to a trail to enable the Park Service to continue managing this area in a manner consistent with its resource protection goals. These goals include the protection, preservation, and interpretation of the natural and cultural resources of Redwood National Park and the provision of public access to these resources. The specific purpose of the closure is to reduce resource impacts, risks to life and property, and maintenance costs from retaining a vehicular road on an unstable slope. The Park Service does not intend to implement the recommendations of the Federal Highway Administration team (FHWA) in its report with respect to repairing the road bench to re-open it for vehicle traffic. PARK SERVICE is actively seeking funding to convert the closed section to a hiking and biking segment of the California Coastal trail (CCT).

The regulations implementing the Coastal Zone Management Act (CZMA) provide for phased federal consistency review in cases where federal decisions to implement an activity are also made in phases. Previously, the Commission found the PARK SERVICE' General Management Plan for Redwood National and State Park (GMP), where this project is located, to be consistent with the Coastal Act (CD-11-00). The potential conversion of Coastal Drive to a trail was addressed briefly in the GMP and in the Commission's review. In the GMP, the Park Service recognized that some of the park's infrastructure is located in geologically hazardous areas and that changes would be necessary to several public roads, including a section of Coastal Drive, to ensure public safety and visitor enjoyment of the park. The Park Service agreed at that time that the Commission would have the opportunity to review specific plans for the site when the design for converting the road to a trail is available.

The proposed project will close 2.9 miles of Coastal Drive located completely within Redwood National Park to vehicle traffic because of threats to public safety due to geological instability and unpredictable landslides. The proposed closure is within the ancestral territory of the Yurok Tribe, which has not expressed any concerns about the closure of Coastal Drive to motor vehicles. When more detailed plans for the trail conversion are available, the Park Service will conduct additional consultation with the Yurok Tribe and the California State Historic Preservation Officer under Section 106 of the National Historic Preservation Act (NHPA). Along with the results of these consultations, detailed plans for the conversion to a trail will be brought to the Commission or its staff for further consistency review. The Park Service provides the following details on the closure:

The NPS is seeking funding to convert the road to a hiking and bicycling trail by removing unstable portions of the old road and restoring the original landform to the extent possible, converting stable sections to the

trail, and rerouting portions of the trail to more stable locations along the current alignment.

#### The Park Service further states:

Lockable metal swing gates would be installed at either end of the closed section. The northern end of the closure would be about 0.1 mile south of the intersection with Alder Camp Road...[and] the southern closure would be about 0.3 mile north of the Carruthers Cove trailhead. The public would be adequately notified of the closure. Signs informing motorists would be placed at the intersection of Newton B. Drury Parkway in Humboldt County and in Del Norte County at the intersection of Alder Camp Road and Coastal Drive.

The proposed project would complement historic uses of the site (public access and recreation uses) and avoid adverse impacts on coastal zone resources, including the marine environment, environmentally sensitive habitat areas, land resources, and cultural resources. As explained by the Park Service, the project will accomplish the following:

...provide trail access to coastal resources while reducing the potential for adverse effects to resources from continued failure of the road bench. Trail design would take into account geologic hazards from land sliding to ensure long-term access to this area of the coast.

Thus, the closed area will remain available for non-vehicular public use and park-oriented recreation. Both the northern and southern ends of Coastal Drive will remain open to public vehicle traffic. In this manner, the Park Service can continue to provide a quality visitor experience and protect coastal resources without pursuing costly activities to maintain a road for vehicles that located in an area of geologic instability. Because it will serve as a link in the California Coastal Trail, the Commission has the expectation that if the proposed trail becomes no longer viable in the future, the Park Service will work with the Commission on a replacement trail or other public access in the area. Thus, the project is consistent with the public access and recreation (Sections 30210-30214, 30220, 30221, 30223), marine resources and water quality, 30230 – 30232), ESHA (30240), archaeology (30244), view protection (30251), and geologic hazards (30253) policies of the Coastal Act.

#### STAFF SUMMARY AND RECOMMENDATION

#### I. STAFF SUMMARY:

**A.** <u>Project Description</u>. The Park Service is planning to close approximately 2.9 miles of Coastal Drive in Redwood National Park in Del Norte County to vehicle traffic because of threats to public safety due to geological instability and unpredictable

landslides in this region. The Park Service decided to close Coastal Drive to vehicles and convert it to a pedestrian and biking trail after receiving a FHWA inspection report (see Exhibit 5 and substantive file document 3). The purpose of the FHWA report, quoted here from the report's background section, was to "(1) evaluate the scope and preliminary cost of roadway repairs required to reopen this scenic drive to designated vehicle traffic (high-clearance 2WD/4WD passenger vehicles), and (2) to provide information to evaluate whether roadway decommissioning should be considered per the proposed measures within the Park Asset Management Plan (PAMP)." The report illustrated major slide crossings and outboard shoulder failures and determined that continued maintenance costs for this section of Coastal Drive to remain passable by vehicles would be very high.

The proposed closure will occur entirely on federal lands within the Redwood National and State Parks in Del Norte County. The section of Coastal Drive to be closed is located approximately 600 feet above sea level on the seaward side of the coastal bluffs and its lowest point is about 200 feet above sea level where it meets Klamath Beach Road. No direct access is provided from Coastal Drive to the beach or ocean.

The Park Service further describes the characteristics of the project area:

The coastline below is generally inaccessible due to the steep topography of the cliffs and coastal bluffs. The only maintained public access to beach, coastline, or tidal areas from Coastal Drive is via Carruthers Cove Trail, a section of the California Coastal Trail (CCT).

Regarding the specifics of the closure, the Park Service states:

Lockable metal swing gates would be installed at either end of the closed section. The northern end of the closure would be about 0.1 mile south of the intersection with Alder Camp Road (about 3.3 miles north of the Carruthers Cove trailhead). The southern closure would be about 0.3 mile north of the Carruthers Cove trailhead. The public would be adequately notified of the closure. Signs informing motorists would be placed at the intersection of Newton B. Drury Parkway in Humboldt County and in Del Norte County at the intersection of Alder Camp Road and Coastal Drive.

The existing road bench that is failing would be converted to a hiking and bicycling trail. The Park Service elaborates on the conversion of the roadway to a trail:

The NPS is seeking funding to convert the road to a hiking and bicycling trail by removing unstable portions of the old road and restoring the original landform to the extent possible, converting stable sections to the trail, and rerouting portions of the trail to more stable locations along the current alignment. The NPS will engage in additional consistency review when the design for converting the road to a trail is available.

Conversion of the road to a trail will require compliance with the National Historic Preservation Act of 1966. The Park Service has indicated that the segment to be closed is not currently listed on the National Register of Historic Places. Additionally, the Park Service clarifies that this segment will be permanently closed to vehicular traffic:

The Park Service does not intend to perform slope stabilization work at any location along the closure section, take other actions to reduce future landslides, or implement any of the additional recommendations made by the Federal Highway Administration team (FHWA) that may be necessary to repair the existing road bench and re-open it for vehicle traffic.

**B.** <u>History/Phased Review</u>. The regulations implementing the Coastal Zone Management Act (CZMA) provide for phased federal consistency review in cases where federal decisions to implement an activity are also made in phases. Section 930.36 (d) of those regulations states:

... in cases where major Federal decisions related to a proposed development project will be made in phases based upon developing information, with each subsequent phase subject to Federal agency discretion to implement alternative decisions upon such information (e.g., planning, siting, and design decisions), a consistency determination will be required for each major decision. [15 C.F.R. Section 930.36(d)]

While the Commission found the Draft GMP to be consistent with the Coastal Act, many of the activities identified in the management plan were in the early stages and the Park Service agreed to additional Commission consistency review and the provision of supporting environmental documents, as plans are finalized for specific projects. The Commission's analysis of the consistency determination for the draft GMP included identification of activities that could require additional consistency review, such as the conversion of Coastal Drive from a vehicular road to a pedestrian and biking trail (see Exhibit 6).

Specifically, the Park Service elaborates:

The Commission unanimously approved CD-011-00 for the General Management Plan (GMP) on the condition that the NPS prepare additional consistency determinations or negative determinations for specific projects which the NPS intends to implement under the GMP. The GMP proposes minor changes to several public roads located in the coastal zone in Del Norte County, including Endert's Beach Road, Alder Camp Road, and Coastal Drive.

The staff recommendation for CD-011-00 noted that site-specific planning resulting in proposed changes to any of these roads will be subject to additional consistency review.

The GMP stated the NPS intent to close Coastal Drive to vehicles and convert it to a trail in the event of major road failure. The new trail would become a segment of the CCT open to hiking and bicycling. In Hiking the California Coastal Trail, Volume One, Oregon to Monterey by Bob Lorentzen and Richard Nichols (2nd ed., 2002, Bored Feet Press, Mendocino CA and Coastwalk, Sebastopol CA), Coastal Drive is identified as the route of the CCT in this location.

- C. <u>Federal Agency's Consistency Determination</u>. The National Park Service has determined the project to be consistent to the maximum extent practicable with the California Coastal Management Program.
- **II.** <u>Staff Recommendation</u>. The staff recommends that the Commission adopt the following motion:

**MOTION:** 

I move that the Commission concur with consistency determination CD-045-11 on the basis that the project is fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the California Coastal Management Program (CCMP).

#### **STAFF RECOMMENDATION:**

Staff recommends a **YES** vote on the motion. Passage of this motion will result in an agreement with the determination and adoption of the following resolution and findings. An affirmative vote of a majority of the Commissioners present is required to pass the motion.

#### **RESOLUTION TO CONCUR WITH CONSISTENCY DETERMINATION:**

The Commission hereby **concurs** with consistency determination CD-045-11 by the Park Service on the grounds that the project is fully consistent, and thus consistent to the maximum extent practicable, with the enforceable policies of the CCMP.

- **III.** Findings and Declarations. The Commission finds and declares as follows:
- **A.** <u>Public Access and Recreation.</u> Sections 30210-30212 of the Coastal Act provide for the maximization of public access and recreation opportunities, acknowledging that such access needs to be managed to take into account natural

resource protection needs. Section 30212.5 provides that where appropriate and feasible, public facilities, including parking areas or facilities, "shall be distributed throughout an area so as to mitigate against the impacts, social and otherwise, of overcrowding or overuse by the public of any single area." Section 30213 provides for the protection of lower cost visitor and recreational facilities. Section 30214 provides that:

- (a) The public access policies of this article shall be implemented in a manner that takes into account the need to regulate the time, place, and manner of public access depending on the facts and circumstances in each case including, but not limited to, the following:
- (1) Topographic and geologic site characteristics.
- (2) The capacity of the site to sustain use and at what level of intensity.
- (3) The appropriateness of limiting public access to the right to pass and repass depending on such factors as the fragility of the natural resources in the area and the proximity of the access area to adjacent residential uses.
- (4) The need to provide for the management of access areas so as to protect the privacy of adjacent property owners and to protect the aesthetic values of the area by providing for the collection of litter.

#### Section 30220 provides that:

Coastal areas suited for water-oriented recreational activities that cannot readily be provided at inland water areas shall be protected for such uses.

#### Section 30221 provides that:

Oceanfront land suitable for recreational use shall be protected for recreational use and development unless present and foreseeable future demand for public or commercial recreational activities that could be accommodated on the property is already adequately provided for in the area.

#### Section 30223 provides that:

Upland areas necessary to support coastal recreational uses shall be reserved for such uses, where feasible.

The Park Service's overall goals for Redwood National Park are synonymous with those of the Coastal Act, which are to maximize public access and recreation in a manner balancing competing recreational uses, distributing recreational opportunities to avoid overcrowding of any single area, and managing access and recreation in a manner

protecting sensitive habitat and other coastal resources. The Park Service believes the proposed vehicular closure most appropriately balances protection of coastal resources, public safety, and access, stating:

Redwood National Park provides opportunities for visitors to enjoy park resources consistent with NPS laws, regulations, and policies to protect resources and public safety.

The NPS would provide trail access to coastal resources while reducing the potential for adverse effects to resources from continued failure of the road bench. Trail design would take into account geologic hazards from land sliding to ensure long-term access to this area of the coast.

Furthermore, while the Local Coastal Program is not the standard of review for federal consistency review, since it can be used as guidance, with reference to the coastal policies in the 1983 Del Norte County LCP, the Park Service states the following:

Public Access: The public access policies listed on pages 14-17 in the 1983 LCP are not directly applicable to the proposed action because the access policies discuss shoreline access. The segment of Coastal Drive proposed for closure and conversion to a segment of the CCT is located approximately 600 feet above sea level and does not have maintained trails or routes that provide direct access to the shoreline. The LCP (page 34) lists Caruther's Cove [sic] as a shoreline access point in Redwood National Park. The Carruthers Cove trailhead is located in Del Norte County south of the proposed closure; the trail reaches the shoreline in Humboldt County. Hikers may access the coast in Del Norte County by walking north along the beach until high tide blocks further access. This route north is not advised during high tide or during periods of high surf or storm surges. The proposed action is consistent to the extent practicable with the public access policies of the 1983 LCP.

The Park Service describes the effects on recreation of closing a segment of Coastal Drive to vehicles as follows:

The proposed closure would not affect water-oriented recreational activities because Coastal Drive is located at elevations ranging from 560 to 640 feet above sea level with no direct access to the beach or the ocean. Recreational activities available along Coastal Drive include hiking access to the CCT at Carruthers Cove in Humboldt County and the Flint Ridge Trail and backcountry camp in Del Norte County. The historic World War II radar site and scenic views at High Bluffs Overlook would continue to be accessible to visitors from sections of Coastal Drive that would be open to vehicles.

Coastal Drive through Redwood National and State Parks will remain available for public use and park-oriented recreation consistent with the laws, regulations, policies, and guidelines for management of national and state parks.

Recreational use and development and public access in the parks are outlined in the 2000 RNSP General Management Plan/General Plan.

Coastal Drive is located in an upland area about 600 feet above the shoreline. Some portions are on the edge of the bluffs and others are inland a few hundred yards. In the area of the proposed closure, Coastal Drive will remain open to hikers and bicyclists for park-oriented recreation. The northern and southern ends of Coastal Drive will remain open to public vehicle traffic. The southern end of Coastal Drive from the intersection with Newton B. Drury Scenic Parkway will continue to provide vehicle access to the trailhead for Carruthers Cove Trail.

Furthermore, with reference to the coastal policies on recreation in the 1983 Del Norte County LCP, the Park Service states the following:

Recreation—Page 76 of the LCP identified the national park along with several state parks as dominating coastal recreational opportunities. LCP goals for recreational development on page 77 are well-distributed facilities, maintenance of areas for future recreation, low-cost facilities, and protection of fragile coastal resources.

The LCP policy on page 82 is to encourage improved access in the national park while preserving and enhancing scenic and environmental values. Management of federal lands and waters under the NPS statutory mission to preserve resources while providing for visitor enjoyment of those resources is maximally consistent with these policies.

The proposed action is maximally consistent with these goals and with the recreation policies listed on pages 83 and 84 of the LCP to the extent that the goals and policies apply to the project action.

The Commission agrees with the Park Service that the project protects and supports coastal public access and recreation in a manner balancing conflicts between competing recreational uses and protecting environmentally sensitive habitat and other resources, and reflects the factors enumerated in Section 30214 of the Coastal Act as to how public access should be implemented. The alternative of keeping the road open for public access and recreation by vehicle would not minimize risks to life and property in this high hazard area and could necessitate the construction of protective devices that would substantially alter the natural landforms of the cliffs and bluffs. The Commission has the expectation that if the proposed trail becomes no longer viable in the future, PARK SERVICE will work with the Commission on a replacement trail or other public access in the area. With

this understanding, the Commission concludes that the proposed project is consistent with the public access and recreation policies (Sections 30210 – 30214, 30220, 30221 and 30223) of the Coastal Act.

#### **B.** Marine Environment. The Coastal Act provides:

#### Section 30230:

Marine resources shall be maintained, enhanced, and where feasible, restored. Special protection shall be given to areas and species of special biological or economic significance. Uses of the marine environment shall be carried out in a manner that will sustain the biological productivity of coastal waters and that will maintain healthy populations of all species of marine organisms adequate for long-term commercial, recreational, scientific, and educational purposes.

#### Section 30231:

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface water flow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural streams.

#### Section 30232:

Protection against the spillage of crude oil, gas, petroleum products, or hazardous substances shall be provided in relation to any development or transportation of such materials. Effective containment and cleanup facilities and procedures shall be provided for accidental spills that do occur.

In previously reviewing the Park Service's GMP with respect to impacts on coastal resources, the Commission noted:

Along with maximizing recreational opportunities the primary purpose for establishing and managing Redwood National Park is the protection and restoration of the park's wildlife values. The legislation establishing Redwood National Park set aside the park in part to preserve seashores associated with the primeval redwood forests, for purposes of public inspiration, enjoyment, and scientific study. The Pacific coastal, nearshore, and littoral environments and waters are considered

significant attributes of the parks, and the Park Service recognizes that the marine environment in the Park is dominated by intense physical forces and any allowable uses must account for these forces.

The Park Service describes the effects on coastal waters and the marine environment as follows:

The proposal to close a portion of Coastal Drive to vehicles does not directly affect coastal waters or the marine environment because the road is about 600 feet above the ocean. There are no permanent streams or watercourses along the section that would be closed. There are intermittent streams and seeps, which contribute to the instability of the road corridor. There is potential for very minor cumulative long-term beneficial effects on coastal waters and the marine environment from closure of Coastal Drive to vehicles and conversion to a trail. Over the long-term, the likelihood of catastrophic failure of sections of road would increase. There is a slight potential for some sections of the old asphalt surface to slide down the cliff into the ocean. When funding becomes available, the closed section of road would be converted into a trail. Unstable road fill and old asphalt would be removed. Old asphalt would be removed from the closed section of road and recycled into base for road projects elsewhere in the park. Unstable road fill would be moved to stable locations where it would not erode into streams, watercourses or ocean waters. Closure of the road to vehicles would prevent any accidental petroleum spills in the future, including spills or leakage from equipment associated with road maintenance as well as from private vehicles. No part of Coastal Drive is used for commercial transport of petroleum products or hazardous materials.

Based on phone conversations with Park Service staff, this section of Coastal Drive is located on areas of differing geologic stability. Assuming that this section will not be listed on the National Register of Historic Places, Park Service staff indicates that efforts will be made to remove asphalt from areas of lesser stability before a catastrophic event further dislodges the road bed and sends any material down the bluff to the ocean below.

The Commission finds that the alternative of keeping the road open to vehicle traffic would not minimize risks to the marine environment in this high hazard area and could necessitate the construction of protective devices that would substantially alter the natural landforms of the cliffs and bluffs. Thus, the Commission agrees with the Park Service and finds that the proposal to convert Coastal Drive to a trail will not directly affect coastal waters or the marine environment and is therefore consistent with Sections 30230, 30231, and 30232 of the Coastal Act.

#### C. <u>Environmentally Sensitive Habitat Areas.</u> The Coastal Act provides:

Section 30240:

- a. Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.
- b. Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

The Park Service maintains that the project is consistent with the sensitive habitat policies of the Coastal Act, stating that:

The proposed closure area is located on federal parklands within Redwood National and State Park. This area along with the rest of Redwood National and State Parks are managed for the preservation of all natural resources and for visitor use and enjoyment consistent with the preservation of those resources under the laws, statutes, regulations, policies, and guidelines that apply to national and state parks. Recreational activities are allowed to the extent that these activities do not impair resources or opportunity for enjoyment of these resources, and are consistent with statutes and policies governing appropriate recreational activities in national parks.

Furthermore, with reference to the coastal policies in the 1983 Del Norte County LCP, the Park Service states the following:

Sensitive Coastal Habitats. The proposed action is maximally consistent with the policies for protection of sensitive coastal habitats described on pages 57-59 of the 1983 LCP. Of the sensitive habitats listed on page 47 in the LCP, riparian vegetation systems, wetlands, and sea cliffs are within the project area. Several other habitats listed can be reached from or are within the view shed of the project area including offshore rocks and intertidal areas. These sensitive habitats are protected by laws, regulations, policies and guidelines governing NPS areas. Closure of Coastal Drive would not affect any of these habitats directly. Conversion of the road bench to a trail would be implemented under NPS requirements for protecting park resources.

The LCP notes on pages 67-68 that sea cliffs and bluffs are inherently unstable and potentially hazardous when associated with development. Coastal Drive south of the mouth of the Klamath River is one of two NPS

developments along unstable coastal cliffs and bluffs. The other facility on the coastal bluffs, the Nickel Creek/Last Chance Grade, section of Coastal Trail south of Endert's Beach, is another original segment of the Redwood Highway abandoned by the state highway department due to the expense and difficulty of maintaining a highway on steep erodible ocean cliffs and bluffs. The 2000 GMP called for closure of Coastal Drive and conversion to a trail when a significant failure of the road bench occurred. Removing the road bench and converting it to a narrower trail that conforms to the natural landforms and has adequate drainage would minimize on-going erosion of steep coastal bluffs exacerbated by continual road maintenance and repair activities. No new direct access to the coast from unstable sea cliffs or bluffs would be provided as part of the proposed action. The proposed action is maximally consistent with the LCP with respect to policies for sea cliffs and bluffs.

The alternative of keeping the road open to vehicle traffic <u>would not</u> minimize risks to land resources and environmentally sensitive habitat areas and could necessitate the construction of protective devices or other engineering practices that would degrade sensitive habitat in the vicinity of the road. Therefore, the Commission agrees with the Park Service and finds that the proposal will not adversely affect environmentally sensitive habitat areas and is therefore consistent with Section 30240 of the Coastal Act.

#### **D.** Archaeology. The Coastal Act provides:

Section 30244:

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

The Park Service maintains that the project is consistent with the cultural resource policies of the Coastal Act, stating that:

Laws, policies and guidelines governing management of national parks require that the NPS actively protect and preserve natural and cultural resources including archeological and paleontological resources. The proposed closure is within the ancestral territory of the Yurok Tribe, a federally recognized tribe with whom the NPS has established a government-to-government relation under the provisions of a memorandum of understanding first signed in 1996 and renewed as needed. The NPS met with the Yurok Tribe Culture Committee on July 22, 2011; the Committee members expressed no concerns about the proposed closure of a portion of Coastal Drive to motor vehicles or the installation of gates to

enforce the closure. All ground-disturbing activities needed to install the gates will be monitored by both an NPS archeologist and a Yurok monitor to ensure that any previously unknown cultural resources will be protected if encountered.

Based on phone conversations with Park Service staff, this section of Coastal Drive is potentially eligible for listing on the National Register of Historic Places, which may have an impact on the removal or retention of asphalt that is part of the old road bed. If the road is not listed, it is most likely that funding will be found to remove the old asphalt or recycle it for use in creating the trail.

Furthermore, with reference to the coastal policies in the 1983 Del Norte County LCP, the Park Service states the following:

<u>Cultural Resources Goal 5.H.</u> To encourage identification, protection, and enhancement of Del Norte County's important historical, archaeological, paleontological, and cultural sites and activities, and their contributing environment.

Policies 5.H.1 (surveys and site investigations), 5.H.2 (identify and protect cultural resources), 5.H.7 (solicit Native American input), and 5.H. 9 (mitigate impacts to significant cultural resources) are applicable to the proposed action... Conversion of the road to a trail will require additional consultation with the Yurok Tribe and the California State Historic Preservation Officer under Section 106 of the NHPA. Results of these consultations will be disclosed when the trail conversion is brought to the Commission for further consistency review.

In conclusion, the Commission agrees with the Park Service and finds that the proposal will not adversely affect cultural resources and is therefore consistent with Section 30244 of the Coastal Act.

#### **E.** <u>View Protection</u>. The Coastal Act provides:

Section 30251:

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting.

The Park Service describes scenic and visual qualities at the project site as follows:

Aesthetic values along Coastal Drive include occasional glimpses of ocean through the forest and views of offshore rocks. Views of mouth of the Klamath River and the ocean from the scenic overlook at High Bluff along Coastal Drive will be available to visitors in small vehicles.

The scenic and visual qualities of the coast line will not be affected by the proposed closure of a section of Coastal Drive. The concrete barriers that were placed as a temporary closure will be removed. Metal swing gates similar in appearance to other park gates in the Coastal Zone will be installed at either end of the closure. Gates will be painted white with small reflectors to alert drivers. Signs will be placed announcing the closure.

NPS policies require that visual quality be protected and enhanced in areas identified as scenic drives and along trails. The conversion of the road to a trail would include restoration of landforms to the extent possible. Native vegetation would naturally recolonize disturbed soils within 1-2 growing seasons.

Hiking the California Coastal Trail, Volume One, Oregon to Monterey... describes this section [of Coastal Drive as follows]: "Of course you CAN drive the road portion of this CCT section, barring closures for slip outs and other acts of nature, but walking reveals breathtaking vistas of a rugged and elusive coast that you're not likely to notice from your vehicle. I've driven the road many times but walking it revealed unexpected treasures ...."

Closure of a section of Coastal Drive to vehicles and conversion to a hiking and bicycling segment of the CCT is maximally consistent with applicable parts of Section 30252.

The alternative of keeping the road open to vehicle traffic <u>would not</u> enhance visual or scenic resources in this high hazard area and could necessitate the construction of protective devices that would substantially alter the natural landforms of the cliffs and bluffs. In conclusion, the Commission agrees with the Park Service and finds that the proposal will not affect the scenic and visual qualities of the coast and will minimize risks to life and property and is therefore consistent with Sections 30250-30252 of the Coastal Act.

#### F. Geologic Hazards

Section 30253 of the Coastal Act provides:

*New development shall:* 

- (1) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.
- (2) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
- (4) Minimize energy consumption and vehicle miles traveled.

The Park Service recognizes that areas of the Park, such as sections of Coastal Drive, are located in areas subject to geological hazards. In previously reviewing the Park Service's GMP for the Park (CD-11-00), the Commission found that "the Park Service understands the need to relocate facilities in the event they are damaged by natural disasters." Due to the hazards present, the Park Service has proposed to close a section of Coastal Drive to motorized vehicles and describes the minimization of adverse impacts at the project site as follows:

The segment of Coastal Drive proposed for closure is located on a large landslide plane on a steep coastal bluff with unstable soils in an area of high rainfall and seismic activity. The proposed closure to vehicle traffic is needed to protect public safety on the road corridor that is unsafe for vehicle travel because land sliding and related geologic processes have resulted in excessively steep grades, narrow lanes, and an uneven surface. Road hazards are unpredictable due to the unstable geology of the area. The road corridor will remain open to hikers and bicyclists until construction begins to convert the road to a trail. Trail conversion would include restoration of landforms to the extent possible as the old road bench is narrowed to accommodate a hiking and bicycling trail. Air quality would improve when the road is closed to vehicles, but the benefits would be negligible, Energy consumption and vehicle miles traveled would be reduced. Visitor destination points (privately owned campgrounds) along Klamath Beach Road would not be affected by the road closure and conversion to a trail.

The Commission concurs with the geological assessment by the Park Service and finds that with adequate maintenance and drainage, the road could potentially remain open to bikers and hikers until a proper trail can be constructed. Based on phone conversations with Park Service staff, additional data is still to be collected by the Park Service on any possible re-routing of the trail, should the original road bed eventually fail for continued use as a trail.

Furthermore, with reference to the coastal policies in the 1983 Del Norte County LCP, the Park Service states the following:

Hazard Areas—LCP policies listed on pages 230-233 are similar to NPS policies and guidelines for managing risk in coastal high hazard zones and geologically unstable areas. The NPS acknowledged in the 2000 GMP that geologic instability along Coastal Drive would inevitably result in road failure.

Policy 1.A.1 states that the County shall seek to maintain and where feasible enhance the existing quality of all marine resources. Marine resources in the project area include sensitive habitats and ocean views. Sensitive habitats in the project area are riparian systems associated with the coastal streams and creeks, and sea cliffs and bluffs. These sensitive habitats are protected by laws, regulations, policies and guidelines governing NPS management of national parks. Ocean views would not be affected by converting the road to a trail using the existing alignment. The experience for some trail users would be enhanced by removal of failing road sections and a trail with a smaller footprint that conforms to the natural landscape.

Policy 1.A.11 states that the County shall require geologic studies for new construction within the area of demonstration on bluff tops to determine:

- i. their suitability for development; and
- ii. the necessary setbacks required to avoid hazards associated with bluff failure.

The attached FHWA report documents the geological instability associated with Coastal Drive and reinforces the need for a county policy to require an adequate setback to avoid hazards associated with unstable coastal bluffs. The results of inadequate geologic analyses are demonstrated in the continuing failure of Coastal Drive which necessitates the closure.

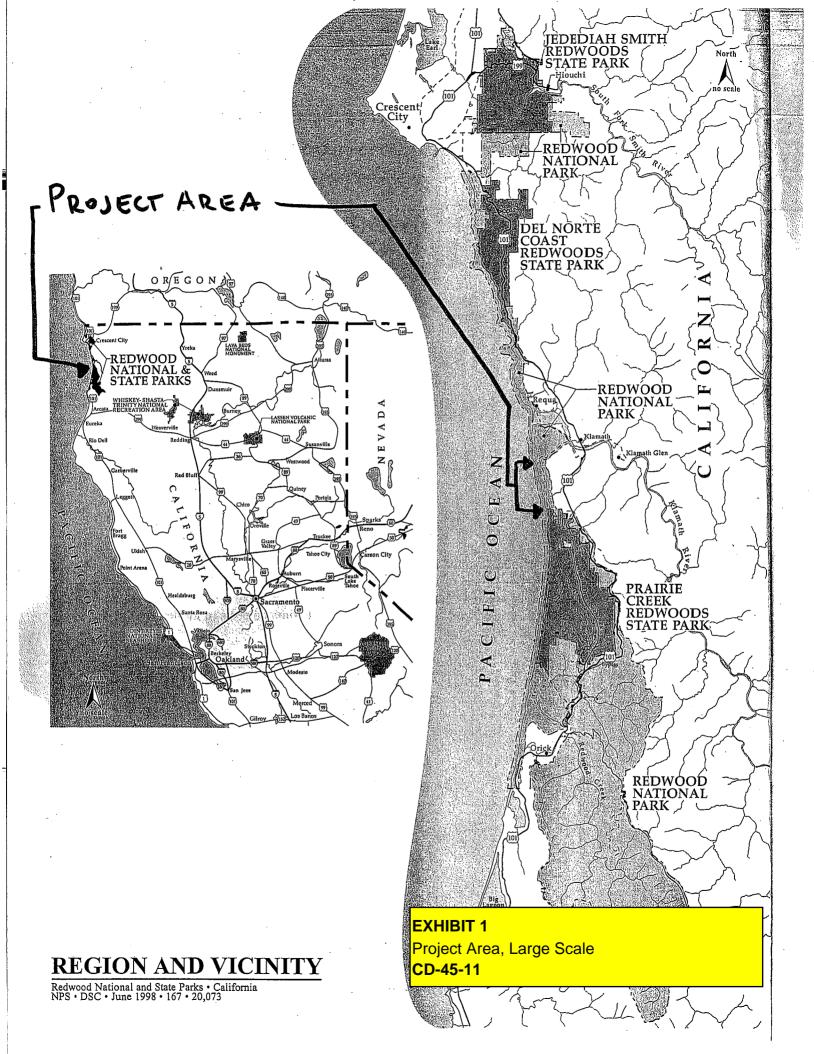
The proposed action is maximally consistent with the marine resources and coastal hazard policies under Goal 1.A. No other policies under Section 1 Natural Resources/Conservation are directly applicable to the proposed closure of a section of Coastal Drive.

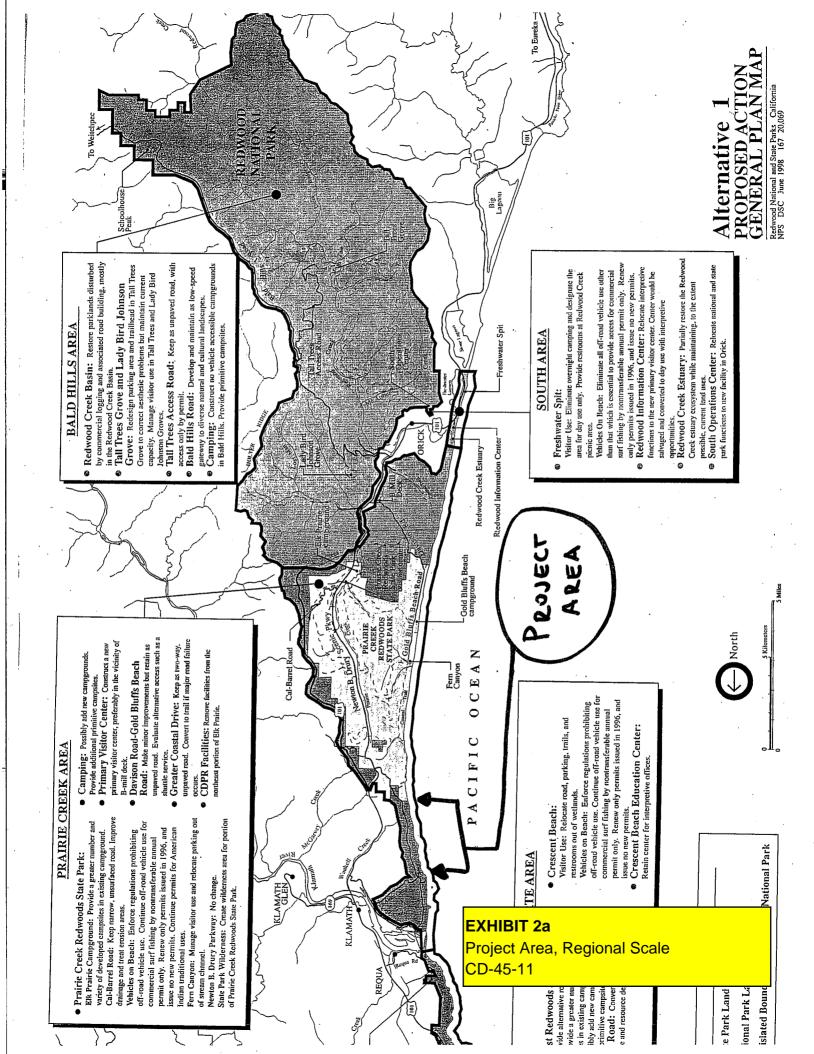
The alternative of keeping the road open to vehicle traffic <u>would not</u> minimize risks to life and property and could necessitate the construction of protective devices. The Commission found that the project will minimize risks to life and property in this geologically hazardous area and will avoid the need for the construction of protective devices that will substantially alter natural landforms along the bluffs and cliffs. In

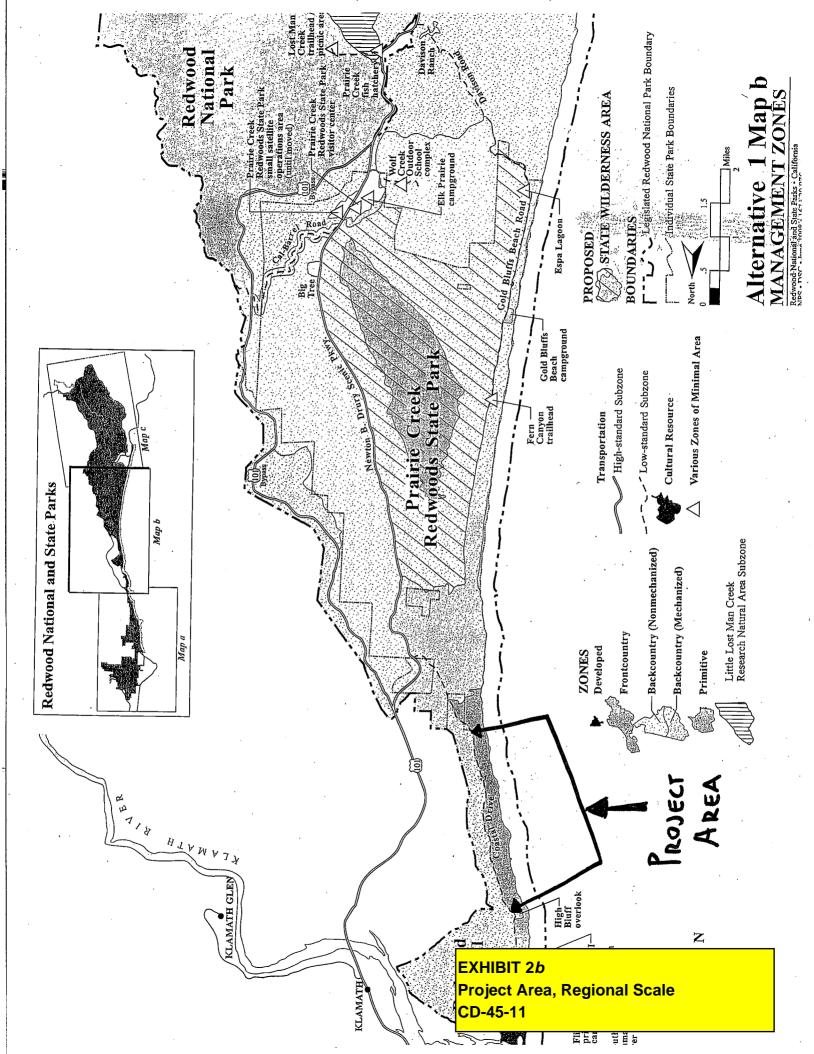
conclusion, the Commission agrees with the Park Service and finds that the proposal is in an area of geologic hazard but will minimize risks to life and property, and is therefore consistent with Section 30253 of the Coastal Act.

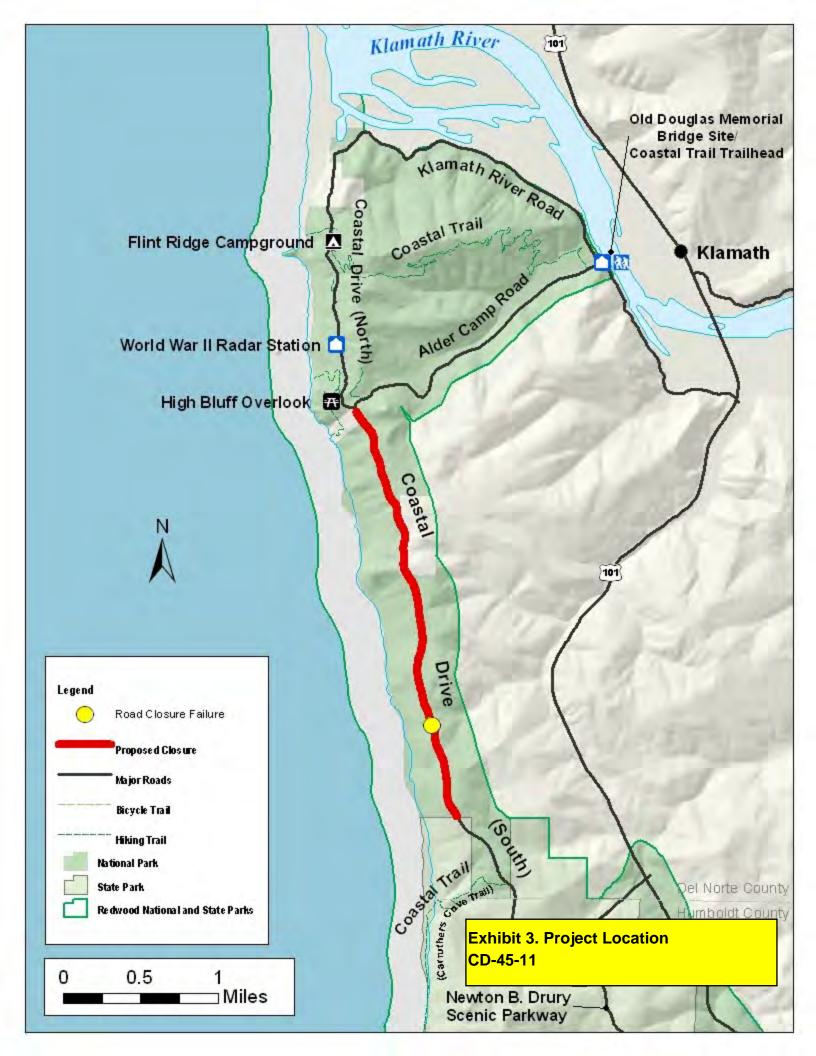
#### IV. SUBSTANTIVE FILE DOCUMENTS:

- 1. Draft General Management Plan, Redwood National and State Parks, Humboldt and Del Norte Counties, California, Draft EIS/EIR.
- 2. Consistency and Negative Determinations for prior National Park Proposals at Redwood National Park: 2000 General Management Plan (CD-11-00), 1979 General Management Plan (CD-017-79); the 1983 Redwood Creek estuary management plan (CD-031-83) and estuary management and wetland enhancement projects for the mouth of Redwood Creek (CD-018-84, CD-020-85, CD-007-86, ND-116-94, ND-020-95 and ND-82-97); the 1990 Freshwater Spit management plan (CD-022-90); access for persons with disabilities (ND-015-94); enhancement of day use picnic area (ND-095-94); and entrance sign relocation (CD-64-89).
- 3. U.S. Department of Transportation Federal Highway Administration (FHWA) Inspection Report. Report on Coastal Drive, Redwoods National Park, Crescent City, CA. Inspection by Matt DeMarco, Geotechnical Group Lead, CFLHD. Date: 11 Jun 2011.









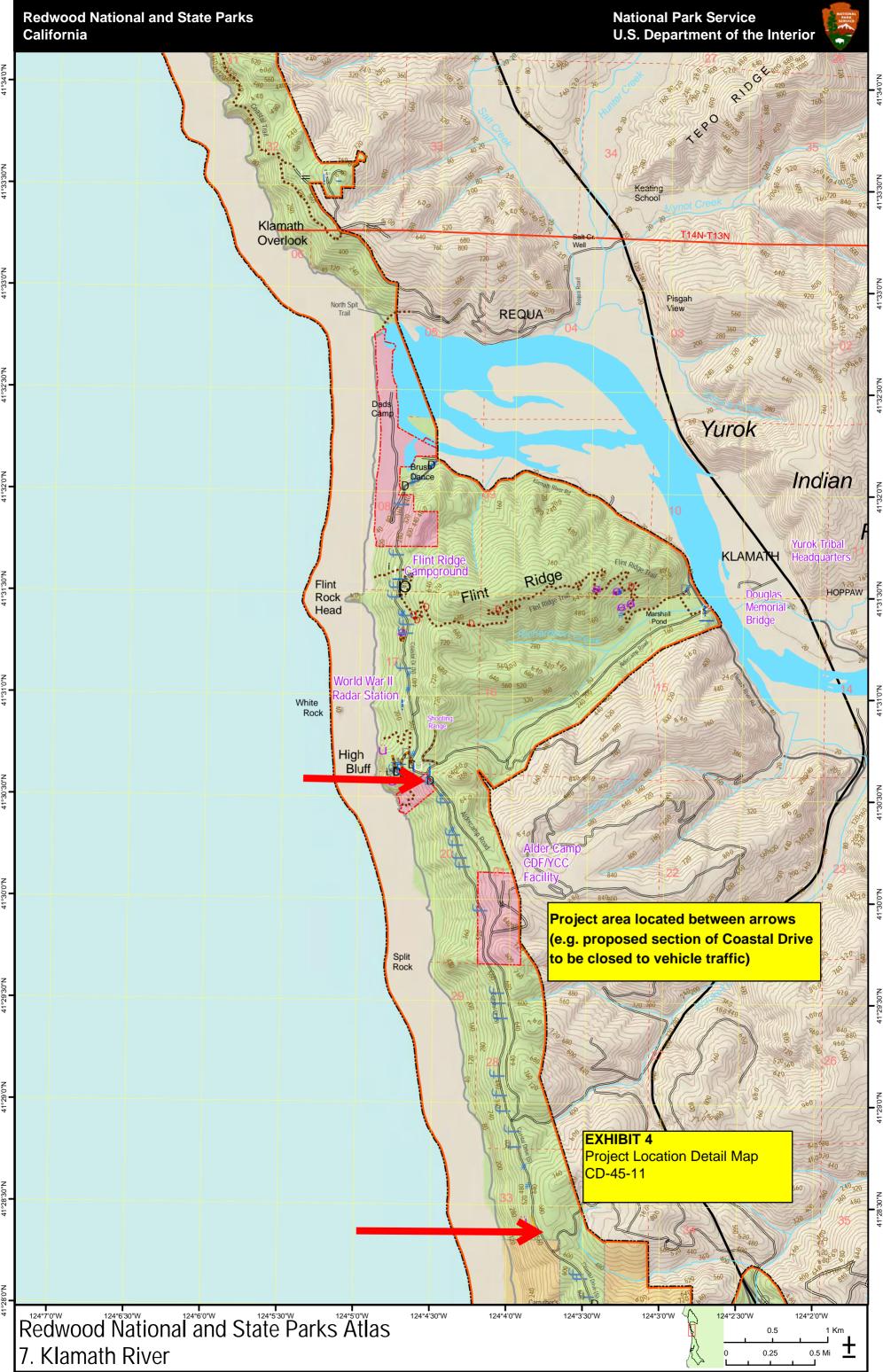




Figure 1. Looking south along the Coastal Drive slide failure. The slide scarp is along the inboard ditchline, with ground movement toward the right and downslope.



Figure 2. Major cracking (to +4 ft depth) near outboard shoulder at southern limit of the slide. Granular material is from repeated attempts to re-establish grade in recent years.



Figure 3. Thick roadway aggregate accumulations within the failed outboard shoulder of the slide closure site.

Preliminary repair recommendations include (1) the removal of landslide debris and weak, plastic soil materials to a depth beyond the current slide plane (unknown depth – estimated to be 10-15 ft deep), (2) adding geocomposite sheet drains along excavation benches to lower groundwater, (3) replacing the excavated section with a geosynthetic-reinforced fill and rock buttress at the toe of the excavation, and (4) establishing inboard run-off collection measures that direct surface water away from the top and face of the slide (requiring possible modification of the nearby culvert).

Excavation quantities could be substantial to capture and stabilize the moving ground mass. Slide excavation may extend along the roadway alignment up to 50 ft beyond the southern slide failure limit to allow for sufficient excavation depth to capture the slide plane, and may extend up to 100 ft beyond the northern slide failure limit to include observed outboard shoulder slumping in the site repair. Downslope excavation may extend 30+ ft within the main slide dependent on where the toe of the slide is located. Geotechnical borings at the inboard head scarp, outboard roadway shoulder, and outboard edge of the lower abandoned roadway bench are required to help define the extent of the slide mass and required repair measures.

Embankment reconstruction would require placement of low-plasticity, unclassified borrow with less than 35% fines, conforming to an AASHTO A-1 or A-2 soil classification, to replace the wet,

clayey materials wasted from the site. It may fill with the excavated material. It is understoavailable from nearby commercial pits. Prima exeavation, extending up to 25 ft from the cor reinforcements would be installed between the

#### **EXHIBIT 5**

Project Area Photos from the Federal Highway placed on 2 ft to 3 ft vertical spacings within Administration (FHWA) Report. (Page 2 of 4) CD-45-11

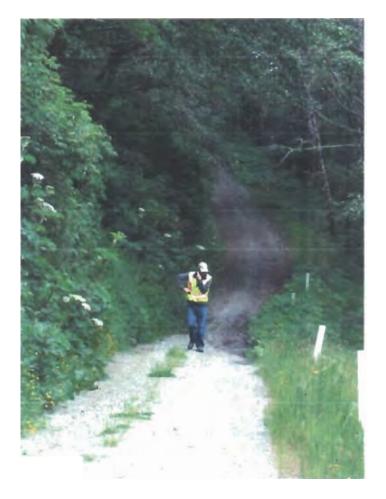


Figure 4. Looking down the northern flank of the large slide crossing just north of the current slide closure area.

#### Outboard Shoulder Failures

Many outboard shoulder failure locations were noted along the 2.1 mile segment inspected during the site review. In some cases, the failures were confined to 1-2 ft of shoulder material and terminated just below road grade at the abandoned 101 Highway bench. At other locations, arcuate failures extended into the travelway and appeared to carry for several feet downslope - mostly in areas where the lower abandoned roadway bench did not appear to be present (Figure 5). It is evident that this mode of roadway failure has been occurring for years and will certainly continue to drive roadway maintenance for the foreseeable future. The shallow shoulder failures can be easily repaired by placing compacted fill outboard to eatch on the lower bench. Revegetation should be easy to establish following shoulder repair. The deeper-seated outboard failures will require a geosynthetic-reinforced deep patch, extending to a depth of at least 10 feet and a minimum width of 10 feet. The construction requirements would be similar to that previously described for the slide closure location, with less emphasis on the internal drainage systems.

It is estimated that several hundred fee **EXHIBIT 5** reinforced earth deep patch would be re of slope face, or approximately \$750/li engineering, procurement or constructi CD-45-11

needed, at a cost of \$60/lineal roadway Project Area Photos from the Federal Highway Administration (FHWA) Report. (Page 3 of 4)

total cost.



Figure 5. Typical outboard failure requiring a reinforced earth deep patch repair to re-establish the travelway. Simply filling, compacting and regrading these locations will result in continued encroachment of the failure zone across the roadway width.

Site-specific information on the occurrence of landslides along Coastal Drive can be found in the October 2006 internal park memorandum from staff geologists Darci Short and Greg Bundros. Additional regional information can be found in the following references:

Smith, S.J., 1978. Coastal Slope Stability along 35 Miles of Northern California Coast: Orick to Crescent City. National Park Service, Redwood National Park, Arcata, California, 45 p.

Wills, C.J., 2000. Landslides in the Highway 101 Corridor between Wilson Creek and Crescent City, Del Norte County, California. Prepared for California Dept. of Transportation, New Technology and Research Program, Office of Infrastructure Research, Project F99TL34. Prepared by Dept. of Conservation, California Geological Survey, Sacramento, CA, 28 p.

#### **EXHIBIT 5**

Project Area Photos from the Federal Highway Administration (FHWA) Report. (Page 4 of 4) CD-45-11

#### DISTRIBUTION

- 4. The ability of resources to support concession services.
- 5. The economic viability of providing such services by private vs. public vendors.
- 6. The necessity and appropriateness of the service.

New, proposals would be sought from qualified bidders in accordance with applicable laws and policies.

## VISITOR ACCESS AND CIRCULATION / ROADS

### **Objectives**

- Administer the roads in the parks under NPS and CDPR jurisdiction to facilitate and enhance visitors' leisurely enjoyment of RNSP resources and public use facilities rather than catering to the needs of through traffic.
- Ensure that RNSP roads relate simply and harmoniously with the topography and surrounding environment; these roads would often be more narrow and winding and have lower speed limits than roads outside the parks.
- Provide safe opportunities for visitors to see scenic vistas and other points of interest, enjoy interpretive displays, and access trails, picnic areas, and other recreation facilities along RNSP roads.
- Provide distinctive and unobtrusive signs to orient, guide, and inform visitors.
- Provide bicycle lanes, alternative transportation systems, and one-way roads and set vehicle size limits, as appropriate, to ensure public safety and visitor enjoyment.
- Use methods such as limiting the size of parking facilities, using mass transit, or establishing public use limits and permit systems to limit the number of persons or vehicles that would be allowed access to sensitive sites where the protection of fragile resources is of concern.
- Depend on U.S. highways in the parks to serve as the primary access routes to the parks, to be managed and maintained by state and federal transportation agencies.
- Depend on Del Norte and Humboldt Counties to manage and maintain county roads within the parks that provide access to nonpark lands that

- serve the general public in addition to RNSP visitors.
- Work cooperatively with the agencies having primary jurisdiction on these U.S., state, and country roadways throughout the parks to promote public safety, to enhance opportunities for travelers to enjoy scenic vistas and gain access tp RNSP resources and facilities, and to protect RNSP resources that are adjacent to the roadways.
- Consider entering into agreements for RNSP management and/or maintenance of county roads that are in good structural condition, that provide access exclusively to park lands, and that serve primarily park visitors.
- Design, construct, and maintain RNSP roads that provide access from state highways or county roads to RNSP facilities so that they are sustainable, provide safe access for visitors and employees, and minimize the disruption of traffic on through highways.

#### Issue

There are numerous roads in the parks; proposals for operation and maintenance of these roads sometimes conflict with the protection of RNSP resources and values. A long-term strategy for the operation and maintenance of these roads that ensures the protection of RNSP resources and values needs to be developed.

#### Actions

#### Bald Hills Road

Humboldt County would be encouraged to maintain this road as a low-speed rural gateway to an area of diverse natural and cultural land-scapes where travelers could enjoy spectacular scenic vistas and numerous opportunities to pull off the road and hike or take in interpretive exhibits. The National Park Service would provide opportunities for visitors to observe and

#### **EXHIBIT 6**

Redwood National and State Parks General
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Page 1 of 4

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Klamath and Trinity River corridors and the Hoopa Reservation.

#### Newton B. Drury Scenic Parkway

The road would be kept in its current alignment through the prairie. The Newton B. Drury Scenic Parkway would continue to be operated by the California Department of Parks and Recreation, with special operational/maintenance requirements defined by Caltrans.

#### Davison Road-Gold Bluffs Beach Road to Fern Canyon

Depending on a carrying capacity study, minor road improvements (see glossary) would be made to facilitate access to Gold Bluffs Beach/ Fern Canyon. The road would not be paved. Other methods of access (e.g., a shuttle) to Fern Canyon would be evaluated. Note: All actions would depend on agreements with the county.

#### Cal-Barrel Road

This road would be kept as a narrow, unsurfaced dead-end park road. Drainage would be improved, and areas likely to fail would be treated to reduce the threat of erosion. No trailers would be allowed on the road.

#### Jedediah Smith Redwoods State Park Entrance

The park entrance would be relocated to the Hiouchi area as part of the proposed new visitor center.

#### Stout Grove

Based on the results of the monitoring efforts and a carrying capacity study, minor improvements would be made to the access road and parking area to better protect the resources.

#### Howland Hill Road

The two-way unsurfaced park road would be **EXHIBIT 6** retained and minor improvements would be made. This road would not be recommended large trailers and motorhomes.

#### Tall Trees Grove

This road would be kept as an unpaved road with public access by permit only.

#### Del Norte Coast Redwoods State Park Entrance

The access road would be replaced with a new road and entrance station at a more geologically stable and environmentally prudent location. The current access road would be removed or converted to a trail.

#### Greater Coastal Drive

Drainage and road surface improvements would continue to be made on this two-way unpaved park road. Major road failure would lead to its conversion to a trail.

#### Enderts Beach Road

Enderts Beach Road would be converted to day use if found to be necessary to resolve public use and resource degradation issues at those locations.

#### INTERDEPENDENCE OF PARKS AND COMMUNITY

### **Objectives**

- Support sustainable economic development, the preservation of community values, and the availability of appropriate visitor services in local communities that serve as gateways to the parks.
- Participate as partners with those communities and local organizations in projects and initiatives that have mutual benefit, that enhance the quality of the overall experiences of visitors to the parks, or that enhance the levels of public appreciation and protection of RNSP resources.
- Encourage the development of appropriate sustainable visitor service facilities in the vicinity of

Redwood National and State Parks General Management Plan (Draft) Excerpts

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## Excerpt from Table 8. Summary of Alternative Actions

BALD HILLS ROAD EN	IRCULATION / ROADS  Encourage. Humboldt Coumy to maintain is low-speed gateway to good thinking and to see scenic visitors to observe, various natural and cultura; resource management projects.  No change.  No change.  Make munor improvements but retain as unpaved road. Evaluate alternative access to Fern Carryon, such as a shuttle service.  Keep narrow, unsurfaced road. Improve drainage and treat erosion areas. Do not galow traiters.	Same as alternative 1.  Same as alternative 1.  Keep two-way, unpaved road. Do not allow trailers.  Keep narrow, unsurfaced road. Do not allow trailers.	Same as alternative I except with fewer opportunities for hiking and seeing scenic vistas and interpretive exhibits.  Relocate road section to restore integrity of the prairie.  Provide less intrusive access, such as a shuttle service, to Ferr Canyon.  Remove road and convert to trail.  Retain existing entrance and make access improvements to enhance	Same as alternative 1.  Same as alternative 1.  Pave, widen, and straighten the road.  Pave and improve road.  Same as alternative 1.
	new information center.  Make minor improvements to access road and parking to better bot resources.	Retain existing entrance and parking.	circulation into the park. Same as alternative 2 only reduce size of parking area.	Pave access road and enlarge parking area.
XHIBI Redwoo	AT THE REAL PROPERTY.	Retain two-way, unsurfaced road.	Make into one-way road during peak visitor season. Treat eroded areas.	Pave road and provide additional pullouts.
T 6	b impayed foad, with access by permit	Same as alternative 1.	Remove road and provide trail access only.	Pave and improve road and expand parking, no restrictions on vehicle access.
	ide alternative road access and ince station. Remove road or er to trail	Retain existing access and entrance station.	Same as alternative 2 plus improve drainage and treat crosion potential.	Same as alternative 1.
	ALTERNATIVET PROPOSED ACTION	ALTERNATIVE 2 NO ACTION	ALIERNATIVE 3 PRESERVATION EMPHASIS	ALTERNATIVE 4 VISITOR USE EMPHASIS
	p two-way, unpaved road nwert to trail if major road failure urs	Same as alternative 1.	Remove road and convert to trail.	Realign, widen, and make drainage and surface improvements.
	nvert to day use if necessary to olve resource degradation issues.	Same as alternative 1.	Convert to day use.	Same as alternative 1.

Impact Lopic	Alternative 1, Proposed Action	Alternative 2, No Action	Alternative 3	Alternative 4
Excerpt fr	Under this alternative there would be relatively minor negative impacts on visual and scenic resources. Most negative impacts would be short term and ultimately result in long-term visual benefits. Removing overnight camping at Freshwater Spit would enhance the landscape character and result in major long-term visual and scenic benefits.	Under this alternative there would be moderate negative impacts on visual and scenic resources. Most long-term negative impacts would be from maintaining current visitor impact levels, retaining facilities in visually sensitive areas, and continuing to allow camping at Freshwater Spit.	Same as alternative 1.	Under this alternative there would be moderate to possible major negative impacts on visual and scenic resources. Most long-term negative impacts would be associated with increased visitor activities and use levels, extensive development of recreational facilities and roads, and allowing overnight camping (except tent camping) at Freshwater Spit.
om Table 10. of Impacts of	Although harvested areas in Redwood Creek basin would be restored and the lower basin would have a more natural appearance for RNSP visitors, revegetation to the appearance of an old-growth redwood forest would take decades or more to occur, a minor beneficial impact.	Although harvested areas in Redwood Creek basin would be restored and the lower basin would have a more natural appearance for RNSP visitors, revegetation to the appearance of an old-growth redwood forest would take decades or more to occur, a minor beneficial impact.	This alternative would result in the most complete restoration of landforms and hydrology of all of the alternatives and over time, Redwood Creek basin would have a more natural appearance for RNSP visitors. Revegetation of the area would occur soon after restoration activities were completed, but restoration of the visual appearance of an oldgrowth redwood forest would take decades or more to occur, a minor beneficial impact.	Although harvested areas in Redwood Creek basin would be restored and the lower basin would have a more natural appearance for RNSP visitors, revegetation to the appearance of an old-growth redwood forest would take decades or more to occur, a minor beneficial impact.
Visitor Access and Circulation	There could be minor impacts on visitor access if the Coastal Drive failed and was converted to a trail.  Because this alternative maintains the internal road system in its current condition, impacts on circulation would generally be minor. Only minor improvements on selected roads are proposed. These would result in a slight improvement in circulation.	There could be minor impacts on visitor access if the Coastal Drive failed and was converted to a trail.  No other impacts would be anticipated under this alternative.	Impacts on access and circulation under alternative 3 would be mixed. Many of the internal roads would be converted to trails, which would restrict significant areas of the parks to nonmotorized activities. This would consolidate vehicle access to the major roads and the highways causing some increased traffic and congestion. Implementing this alternative would result in major changes in the visitor use patterns. The opportunity for and the quality of pedestrian activities would be greatly enhanced. Some popular old-growth areas of the parks would become accessible only by hiking, equestrian use, or mountain bikes.	Impacts on access and circulation under alternative 4 would be major. The internal roads would be paved and widened. This change would result in more vehicles on the roads. This would allow access to larger vehicles such as buses and motor homes. Many of these roads are in sensitive resource areas.

EXHIBIT 6: Redwood National and State Parks General Management Plan (Draft) Excerpts Page 4 of 4, CD-45-11