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PROTECTING REDWOOD NATIONAL PARK

FIRST REPORT

BY THE

COMMITTEE ON GOVERNMENT OPERATIONS

together with

ADDITIONAL AND DISSENTING VIEWS

U.S. GOVERNMENT PRINTING OFFICE

MARCH 23, 1977.—Committed to the Committee of the Whole House of the State of the Union and ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

WASHINGTON : 1977

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(II)

LETTER OF TRANSMITTAL

HOUSE OF REPRESENTATIVES,
Washington, D.C., March 23, 1977.

HON. THOMAS P. O'NEILL,
Speaker of the House of Representatives,
Washington, D.C.

DEAR MR. SPEAKER: By direction of the Committee on Government Operations, I submit herewith the committee's first report to the 95th Congress. The committee's report is based on a study made by its Environment, Energy, and Natural Resources Subcommittee.

JACK BROOKS, *Chairman.*

(III)

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FORE

PROTECTING REDWOOD NATIONAL PARK

MARCH 23, 1977.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. Brooks, from the Committee on Government Operations, submitted the following

FIRST REPORT

together with

ADDITIONAL AND DISSENTING VIEWS

BASED ON A STUDY BY THE ENVIRONMENT, ENERGY, AND NATURAL RESOURCES SUBCOMMITTEE

On March 17, 1977, the Committee on Government Operations approved and adopted a report entitled "Protecting Redwood National Park." The chairman was directed to transmit a copy to the Speaker of the House.

I. SUMMARY

Redwood National Park was established in order to protect and preserve significant examples of primeval coastal redwood forests and adjacent ecosystems, and to provide for public appreciation of these resources.

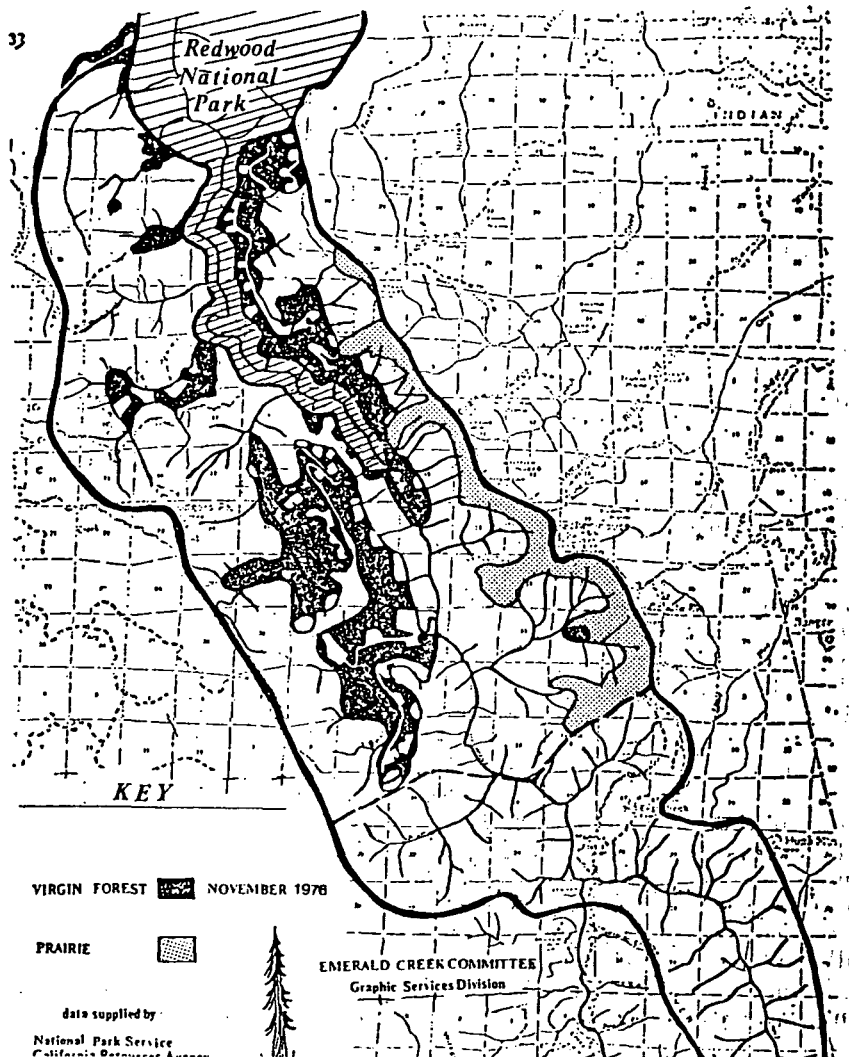
Unfortunately, the park's boundaries were created as a result of a series of political compromises. The result is that the primary scenic attractions within the park are included in an area known as the "worm," an eight-mile-long, one-half mile wide section of the park along Redwood Creek. The Tall Trees grove, containing the world's first, third and sixth tallest known trees, is located along the "worm." (See map on p. 2.)

It has become increasingly clear that timber cutting, associated road construction and other harvest activities have had a serious adverse impact on the timber, water and soil resources within the park. If this damage continues unabated, the very existence of the park is in jeopardy. Unlike other outstanding examples of America's natural heritage such as the Grand Canyon, Yosemite and Mt. Rushmore, the great virgin coastal redwood forests are an endangered resource rapidly on their way to becoming extinct.

Numerous scientific studies carried out by the Department of the Interior through the National Park Service and the U.S. Geological

Survey have documented that the naturally occurring erosion process in the Redwood Creek basin has accelerated due to logging activity. The Tall Trees grove is now threatened by the soils and sediment which have accumulated upstream; a serious storm could cause extensive damage to the Tall Trees, or literally destroy them.

The three lumber companies which harvest timber in close proximity to the park—Arcata Redwood Co., Louisiana Pacific Corp., and Simpson Timber Co.—argue that existing data does not prove any relationship between timber cutting and erosional activity in the Redwood Creek basin. It would be surprising if the highly disruptive logging of old-growth redwoods did not result in significant soil disturbance and sediment run-off. The Committee believes that available evidence establishes with some certainty that timber activity in the basin accelerates pre-existing erosion processes.



A July, 1975 court decision held that the Interior Department had neglected to fulfill its responsibilities under the law to protect Redwood National Park. In response to that decision the Committee believes the Department began a good faith effort to halt the damage to the park. It proposed legislation to (1) increase the National Park Service's authority to regulate timber cutting; and (2) expand Redwood National Park, but the Office of Management and Budget under President Ford blocked both efforts. The Department also began negotiations in an effort to impose more restrictive timber cutting guidelines in the Redwood Creek basin.

Nevertheless, the problem remains unresolved, and the use and enjoyment of Redwood Park continues to be adversely affected by problems associated with timber cutting. The large expected visitation to the park has not resulted because access to many of the outstanding park features, including the Tall Trees Grove, is limited, and also because of the adverse impact of heavy logging activity along the park boundary.

More than \$170 million has been invested in land acquisition for Redwood National Park by the Federal Government to date. The Committee is convinced of the necessity for the Congress and the Administration to take appropriate action to protect this investment and preserve as many of the magnificent coastal redwoods as possible.

The Committee recommends that Congress, through its appropriate committees, consider acquiring a substantial amount of land in the Redwood Creek basin for addition to Redwood National Park. Any land acquired should be for the dual purpose of protecting park resources from almost certain irreparable damage due to logging activity, and for enhancing visitor use and enjoyment of the park. Highest priority should be given to purchasing land on both sides of Redwood Creek upslope from the "worm" to the top of both ridges. In addition, acquisition of other areas of unusual ecological and aesthetic value, such as the old growth redwoods in the Devil's Creek basin, should be considered.

Whatever approach Congress takes in expanding the boundaries of Redwood Park, it is still necessary that further restrictions on timber cutting practices be imposed in the Redwood Creek basin. The legislation establishing the park allowed the Secretary of the Interior to negotiate voluntary agreements with private, adjacent landowners in order to assure their logging activity does not harm the park environment. Since this effort has not been successful, it is essential the Interior Department have the authority to enforce restrictions on timber cutting in the Redwood Creek basin. The Committee believes it makes little sense for the Federal Government to invest large amounts of money in land acquisition for the park without assuring that investment will be protected through stringent timber harvest guidelines. To assure this protection occurs on a long term basis, a more secure means of regulating logging practices than presently exists in the Redwood Creek basin is needed.

The State of California should take whatever action is necessary to preserve the uniqueness of the Redwood Creek basin. The Committee believes the Federal Government, the State of California and the timber companies should work cooperatively in an effort to rehabilitate cut-over land in order to prevent continued erosion damage to the

park, and to promote rapid reforestation. If necessary, the Interior Department should recommend litigation to the Justice Department in order to require appropriate land rehabilitation by the lumber companies.

The Committee recognizes that expansion of Redwood National Park would adversely impact the lumber industry in Humboldt County. Park expansion would accelerate the loss of jobs in the industry which has occurred since 1960 in Humboldt County, and would result in a loss of tax revenue. Certain segments of the county's timber industry would be quite seriously affected.

On the other hand, a larger Redwood Park would certainly increase visitation and help expand the already growing Humboldt County tourist industry. Congress and the Administration must work closely with the State of California and local authorities to offset the expected initial and interim loss of jobs and revenue to Humboldt County.

The Committee firmly believes an immediate moratorium on all logging in the Redwood Creek basin is essential for a period of time sufficient for Congress to act on legislation designed to protect Redwood National Park.

II. BACKGROUND

They were there long before mankind had known there was a Pacific, those immense, incredible forests. From the Big Sur country they extended northward four hundred miles along the wild, rocky, beautiful coast—crowding the broad river flats, clothing the steep slopes, and crowning the ridges. They were forests such as man had never seen, anywhere, with trees so huge it sometimes took a dozen men to circle one—trees so tall no one could know their height until they fell.¹

By 1879, when a redwood national park was first proposed by Secretary of the Interior Carl Schurz, logging of redwoods along the Pacific had become big business. There were small-scale attempts on a local level to save some of these great trees, but private entrepreneurs were moving even more quickly to acquire virtually all of the virgin redwoods. By 1900 the opportunity to create a redwood park from the public domain had disappeared.²

Proposals for creating a park by buying back redwood forests from the timber industry persisted throughout the 20th century. Finally, in 1968, Congress enacted and President Johnson signed a bill creating a 58,000 acre Redwood National Park. Approximately 27,500 acres of parkland were authorized to be donated by the State of California to the Federal Government; however, this donation has not taken place, and these several park units have remained part of the California State park system.

Redwood Creek is a 61-mile-long stream fed by 74 major tributaries and flows through much of the park. The entire watershed of this creek includes approximately 180,000 acres. Redwood National Park and the property of three timber companies—Arcata Redwood Co., Louisiana-Pacific Corp., and Simpson Timber Co.—are located along the lower, northern section of the Creek as it flows northwest to the Pacific Ocean. The upper portion of the watershed includes 53 miles of Redwood Creek and 120,000 acres of land dispersed among many owners. The timber in this southern part of the watershed has been cut at a rapid rate over the last three decades.

When the park was established, approximately 90,000 of the 156,000 acres within the basin but outside the new park was already cut over; of the remaining land about 27,000 acres were prairie and brushland, leaving about 40,000 acres of old-growth.

There are something less than 12,000 acres of virgin redwoods left in the basin, including about 2,000 acres of Federal land under control of the Bureau of Land Management. At the present harvest rate, this old-growth timber will probably be gone in 12 to 14 years.

A major and very significant part of Redwood Park is included in the so-called "worm," an approximately eight-mile-long, one-half mile

¹ Sierra Club Bulletin, vol. 52, No. 8, October 1967, p. 48.
² Ibid.

wide section of the park along Redwood Creek. Within the "worm" is the Tall Trees Grove, containing the world's first, third, and sixth tallest known trees.

The concern for timber cutting on private lands adjacent to the park's boundaries has been evident ever since the park was created. The Congressional Conference Committee report accompanying the legislation establishing Redwood National Park specifically provided that "The intent is to assure, among other things, that clearcutting will not occur immediately around the park."³ In addition, section 3(e) of the Redwood Park Act allowed the Secretary of the Interior to enter into negotiations with the owners of land adjacent to the park for the purpose of assuring that proper forestry, land-use, and soil conservation practices are maintained in such a way as to protect the park environment.⁴

The Environment, Energy, and Natural Resources Subcommittee, chaired by Rep. Leo J. Ryan (D-Calif.), began its investigation last summer into the need for further Federal action to protect Redwood National Park. Field hearings were held in San Francisco in September, 1976 for the purpose of receiving testimony from environmental groups, timber industry representatives, and Interior Department officials. The subcommittee staff also participated in a field trip to the Redwood Creek basin to look at the impact of logging on the park. Further hearings were held in Washington this past February.

It is generally agreed that the Redwood Creek basin is one of the most actively eroding watersheds in the country. Dr. Richard Janda, Water Resources Division, U.S. Geological Survey, who has been studying erosion and soil movement in the Redwood Creek basin since 1973, testified before the subcommittee that:

On the basis of suspended-sediment records collected since 1970, the Redwood Creek basin is one of the most actively eroding, nonglaciated drainage basins of comparable size in the United States. During five years of available records, water years 1971 through 1975, Redwood Creek transported an average annual suspended sediment load of 2,346,500 tons, or 8,440 tons per square mile.

The physical setting and land use patterns of the Redwood Creek basin have both contributed to this high rate of erosion. The basin consists mostly of intricately dissected, moderately steep to steep hillslopes. . . . The area annually receives about 80 inches of rainfall which supports a dense vegetative cover. However, the rain comes mostly during prolonged, moderately intense winter storms which make the area highly susceptible to erosion by running water once the vegetal cover is disrupted. This terrain is also highly susceptible to various forms of landsliding.⁵

There is some controversy, however, as to the degree to which timber cutting contributes to and accelerates the natural erosion process in the Redwood Creek basin. The lumber companies insist it has

³ "Forest Management and Redwood National Park," hearings before a subcommittee of the Committee on Government Operations, House of Representatives, Sept. 18, 1976, p. 626. (Hereinafter referred to as "Hearings.")

⁴ "The Redwood National Park: Issues and Controversies," Robert K. Lane, Congressional Research Service, Library of Congress, Dec. 21, 1972, p. 2.

⁵ Hearings, p. 408.

not been proven their logging activity has increased erosion and stream sedimentation in the basin. Given the vast amount of data indicating that removal of vegetation and disruption of the ground surface inevitably leads to accelerated erosion, it would be surprising if the highly disruptive logging of old-growth redwoods did not increase natural erosion processes and the resulting impact on Redwood Park. Indeed, environmental groups and Interior Department officials believe that recent logging has resulted in accelerated erosion that is continuing to damage timber, water and soil resources in the park. (For further discussion on this point, see Chapter III.)

The timber companies have been logging redwoods and Douglas fir in the Redwood Creek basin since long before the park was established. California Department of Conservation Director Lew Moran described the history of logging activity in the Redwood Creek basin to the subcommittee:

In the past, most of the land in the basin was logged and attempts were made to convert the area to grazing land. Much of the logging in the upper drainage was carried out by small ownerships in the 1940's and 1950's.

Many roads have been constructed within the basin during past years, both for logging and other purposes, and for the most part those roads have not been well designed to avoid erosion effects.

Until 1973, the three companies conducted adjacent clearcuts, often with no intervening buffers, moving progressively through the drainage. In addition, substantial seed tree removal operations were undertaken. Most logging employed yarding by tractor.

Since 1974, logging has been by alternative small patch cuts with cable rather than tractor yarding on some steeper slopes—the cable-yarding method, which employs a cable from which the felled trees are suspended and transported to the log landing, generally causes significantly less land disturbance than tractor-yarding.

In the past the official position of the National Park Service was that timber cutting in the Redwood Creek basin did not pose a significant threat to park resources. At oversight hearings on Redwood Park held by the Senate Interior Committee in May, 1971, spokesmen for the Park Service and the Bureau of Outdoor Recreation told the subcommittee they had no problems in protecting park resources from the impact of logging.

Ever since the park was established, however, the Sierra Club has expressed grave concern about the impact of timber cutting on the Redwood Creek basin. As early as 1969, the Club wrote to Under Secretary of the Interior Russell Train, informing him that "time is running out quickly for Redwood National Park. Once again we face legislation by chainsaw. The logging companies are moving to define the character of the land before park boundary surveys are even completed."⁶

⁶ It is common for these species to share the same land area in the northcoast California region.

⁷ Hearings, p. 81.

⁸ Hearings, p. 65.

In 1974 the Sierra Club sued the Interior Department in an effort to establish (1) that substantial continuing damage to the timber, soil, water and aesthetic resources of the park had resulted because of logging adjacent to, upstream and upslope from the park boundaries, and (2) that the Interior Department had failed to carry out its obligation to protect the Park. In July, 1975 U.S. District Court Judge Sweigert determined that "the defendants [the Interior Department] unreasonably, arbitrarily, and in abuse of discretion have failed, refused and neglected to take steps to exercise and perform duties imposed upon them by [the law]"⁹ to protect Redwood Park.

The Interior Department did not appeal this decision. Rather, the Park Service embarked on an active effort to halt the damage to Redwood Park. It began negotiations with the three lumber companies in an attempt to impose more restrictive timber cutting guidelines in the Redwood Creek basin. The Department also submitted legislation to the Office of Management and Budget (OMB) designed to increase the Park Service's authority to regulate timber cutting adjacent to the park, and it also proposed legislation to expand Redwood Park. OMB refused to allow either of these bills to be submitted to the Congress.

In June, 1976 in a subsequent decision, Judge Sweigert ruled that "The Department of the Interior has now in good faith and to the best of its ability attempted to exercise those powers and to perform those duties as far as possible [to protect Redwood National Park] within the limits of powers and funds provided by the Congress." He went on to state: "It follows that primary responsibility for the protection of the Park rests, no longer upon Interior, but squarely upon Congress to decide whether and, if so, when, how and to what extent new legislation should be passed to provide additional regulatory powers or funds for protection of the Redwood National Park."¹⁰

In hindsight it is obvious the Congress erred in ignoring the advice of the Sierra Club and other conservation groups in determining the boundaries of Redwood Park. According to the Emerald Creek Committee, an activist environmental group in the California north coast region, the creation of the park resulted in a series of ecologically unmanageable, disconnected jigsaw pieces of land."¹¹ Representative Ryan stated that "Congress is responsible for the gerrymandered park boundary which is the unfortunate result of a political compromise."¹²

⁹Hearings, p. 75.

¹⁰Hearings, p. 80.

¹¹"Redwood National Park: The Final Assault," prepared by the Emerald Creek Committee, August 1976.

¹²"Forest Management and Redwood National Park, Pt. 2," transcript of hearings before a subcommittee of the Committee on Government Operations, House of Representatives, February 9, 1977, p. 5. Report printed prior to hearing record. (Hereinafter referred to as "Hearings transcript," Feb. 9, 1977), which is available for review in subcommittee office.

III. DAMAGE TO PARK RESOURCES

A series of 14 reports prepared under contract for the National Park Service by the Water Resources Division, U.S. Geological Survey, documents the recent impact of man's activities on Redwood National Park. In the committee's opinion this joint research, which began in the autumn of 1973, represents an excellent cooperative effort by the two Bureaus involved to assess scientifically the result of intensive logging operations in the Redwood Creek drainage basin.

According to the Interior Department studies, the effect of timber cutting adjacent to the park's boundaries has adversely impacted the area along Redwood Creek itself, tributaries to Redwood Creek, and the hill slopes adjacent to the park boundary. The water and soil resources along Redwood Creek seem to experience the most damage; unfortunately, these resources are also the most accessible and interesting to park visitors.¹³

Recent deposition of soil, sediment, and water-carried woody debris along much of Redwood Creek from upstream and upslope areas has resulted in an enormous build-up of these materials along Redwood Creek, in some cases as thick as 14 feet. This process has also caused development of a wider, shallower stream channel which adversely affects vegetation and aquatic life along Redwood Creek within the park. USGS's Dr. Janda testified that "numerous streamside trees have been killed through direct toppling by bank erosion, burial by course-grained stream-bed material, and 'drowning' by elevated water tables."¹⁴

The potential for serious damage to the park resources because of erosion extends to the Tall Trees Grove itself. California Conservation Director Moran testified that:

The Tall Trees Grove is located on a peninsula in the main channel, so there is a real chance that the bedload of gravel will harm, and possibly topple some of the tall trees—coarse gravels are not a good medium for growth of the trees and, more importantly, expand the width of the main channel. In the event of a new flood, there is a possibility of substantial undercutting of the toes of unstable slopes and cutting action around areas supporting the tall trees.¹⁵

At the September hearing Subcommittee Chairman Ryan discussed with California Secretary of Resources Claire Detrick the potential of damage to the Tall Trees:

Ms. DEDRICK: The survival of those trees is really in the hands of weather. Ultimately, a guarantee could be made but not at this point. We have no way of knowing if we are going to get an 8- or 10-inch storm next year.

¹³Hearings, p. 412.

¹⁴Hearings, p. 413.

¹⁵Hearings, p. 81.

Mr. RYAN. If we do not do these kinds of things [to protect the park] immediately, what is the chance for survival of the tall trees?

Ms. DEDRICK. Very low.

Mr. RYAN. What do you mean?

Ms. DEDRICK. I mean that one or two heavy storms, the way we did not get them last year, would have a good possibility of wiping out the Tall Trees Grove. There is no guarantee one way or the other but the probability is very high.¹⁶

The question of whether this damage and threat of further damage to park resources is (1) primarily a result of natural processes or (2) significantly related to logging was addressed in the Interior Department studies. According to Dr. Janda:

This is a matter that has been subjected to intensive study by the National Park Service since 1973. Those professional results are now available. The evidence is clear that significant changes are being wrought in the Redwood Creek basin because of past and continuing timber harvest practices and that significant resource damage to the park has resulted and can be expected to continue in the future.¹⁷

In December, 1975 an independent scientific evaluation team assembled by the Park Service reported to the Park Service Director on the status of natural resources in the Redwood National Park. The team concluded as follows:

This report confirms the existence of accelerated erosion within Redwood Creek basin. The team attributes this erosion to large-scale tractor-yarded, clear-cut timber harvesting and associated road construction. . . . The consequences of these man-induced changes in hydrologic characteristics go against National Park Service policies for natural area management and the language of the act establishing Redwood National Park.

These consequences include:

- (1) direct tree losses from accelerated bank erosion;
- (2) tree mortality from overbank deposition of coarse gravel sediments;
- (3) filling of pools resulting in loss of low flow aquatic habitat; and
- (4) filling of gravels suitable for spawning anadromous fishes by fine sediments.¹⁸

The report goes on to discuss what future damage is likely to occur to Redwood National Park because of continued logging:

Accelerated erosion of Redwood Creek basin coincides with a period of intensive and extensive land disturbance. In comparable basins elsewhere researchers have observed serious adverse effects 6 to 15 years after timber harvesting ceased. Consequently, Redwood Creek watershed may not yet

¹⁶ Hearings, pp. 45-46.

¹⁷ Hearings, p. 438.

¹⁸ Hearings, pp. 437-438.

have reached its highest level of alteration. Considerable timber remains on highly erosive sites. Remaining old growth is concentrated on sites that are most susceptible to man-induced accelerated erosion.¹⁹

At the subcommittee's September hearing, Subcommittee Chairman Ryan questioned Dr. Janda about how timber cutting adjacent to Redwood Park has affected park resources.

Mr. RYAN. Would you say that the actions of the timber companies have resulted in significant damage to the park itself which exists at the present time?

Dr. JANDA. I mentioned in my summary, logging that went on in four frames: ancient logging, recent past logging, present logging and future logging.

Logging that went on in the recent past has clearly impacted upon park resources in an adverse manner. Present logging is continuing to impact upon it, but at a much lesser level.²⁰

The lumber companies involved do not agree that available data conclusively establishes the relationship between timber cutting and erosional activity in the Redwood Creek basin. Witnesses on behalf of the timber companies conceded that erosion and sediment run-off downslope and downstream into Redwood Creek presents a serious problem, but they testified that it could not be proven that timber harvesting operations in the basin were at all responsible.

Dr. Anthony Orme, Chairman, Department of Geography, UCLA, told the subcommittee on behalf of the lumber companies:

I contend that attempts to attribute high stream flows, high sediment yields, thalweg dislocations and other channel changes to clearcutting are, at the present level of our knowledge, both speculative and mischievous.

An adequate time series of baseline data recording these variables prior to timber harvesting is simply not available for comparative purposes.

Some persons may suspect that clearcutting does cause a significant increase in the magnitude or frequency of erosional and mass movement phenomena, but without background information defining the state of the watershed before and since clearcutting began, they cannot be sure.²¹

Dr. Orme also argued that timber harvesting actually contributes to the long-term healthiness of the redwood community, in that it promotes land disturbance similar to that resulting from natural processes, which in turn encourages the growth of young trees at the expense of older, less vigorous growth.²²

Reflecting a somewhat different judgment, the California Attorney-General filed suit against the three timber companies in 1974, alleging that timber company practices:

¹⁹ Hearings, p. 488.

²⁰ Hearings, p. 431.

²¹ Hearings, p. 216.

²² Id.

Not only represent an immediate and potential threat of serious proportions to the natural resources within the Park, but further endanger the waters and future productivity of the soils upon which these operations are being carried out and upon which the livelihood and well-being of so many depend.²³

Deputy Attorney General Zan Henson testified that:

We find it incomprehensible that the companies would, in light of this overwhelming evidence, still come before this committee and allege that no damage has occurred to the park as a result of timber harvesting.²⁴

The Committee believes the available evidence establishes with some certainty that logging in the Redwood Creek basin has, at the very least, accelerated pre-existing erosion processes. This has resulted in extensive damage to the timber, water and soils in Redwood Park. The potential for future damage appears to be even greater as more highly erodible, steep-sloped land areas in the basin are cut over. As Dr. Janda told the subcommittee, "Not only is the old growth forest concentrated on some of the steepest slopes in the basin, it is also concentrated on those slopes that have displayed the complex history of prior mass movement or have displayed many landslides."²⁵

The integrity of the park and the very existence of some of its resources may be in jeopardy, particularly if present and future plans for logging in the Redwood Creek basin are carried out.

²³ Hearings, p. 239.

²⁴ Id. The suit was settled in November 1976 with an agreement allowing the California Attorney General to conduct a field evaluation of any timber harvest plan, usually within 15 days after State approval of the plan. The Attorney General will seek litigation, if he considers it necessary to protect park resources. Thus far logging plans approved by the Park Service and the State have not been objected to by the State Attorney General's office.

²⁵ Hearings transcript, Feb. 9, 1977, p. 59.

IV. DEGRADATION OF THE PARK EXPERIENCE

Because of the problems associated with timber cutting and the inaccessibility of certain features of the park, Redwood National Park has never enjoyed the popularity that was anticipated.

The creation of the park in 1968 was expected by many to attract large numbers of visitors. This in fact has not occurred. Former Secretary of the Interior Stewart Udall estimated that establishment of the park would result after five years in an increase of 950,000 annual visitor days over the present visitation to the state parks within the proposed Park's boundaries. According to Park Service figures, however, visitor days in 1973 totaled only 210,491 in the National Park, though total visitation for all Redwood Park units has steadily increased. Only 2,863 visits were recorded in the Redwood Creek area within the park during that year.²⁶

The local timber industry believes this demonstrates that further expansion of Redwood National Park is not needed and would not be a sound public investment. In a recent critique of park expansion proposals, the industry concluded:

More than half of California's 100 million acres is government-owned and available for public recreation. The state has more acreage in the National Park system than any other and possesses 15.5 percent of the country's total national park acreage. No need has been demonstrated in California for additions to its national parks, certainly not at Redwood National Park, which is located in one of the least accessible portions of the state.²⁷

The industry, obviously, does not recognize the unique character of the coastal redwoods, nor does it acknowledge many of the reasons why the park has not attracted the number of visitors expected.

Much of the park, including the entire "worm" along Redwood Creek and the Tall Trees Grove, is not easily accessible. Because there is no access to the park through land owned by the lumber companies on both sides of Redwood Creek, a visitor desiring to see the tall trees must enter the park at the main entrance and hike in a distance of eight miles or 16 miles round trip. A similar problem exists in reaching other points of interest along Redwood Creek.

The adverse impact of heavy logging activity taking place right up to the park boundary seriously degrades the park experience for the visitor. The noise pollution is significant; the whine of chain saws and the tooting of cable yarding machinery is especially noticeable and irritating to hikers along the "worm." This noise impact is likely to persist under present logging plans, particularly in areas where

²⁶ "Proposed Expansion of the Redwood National Park: The Industry's Views," April 1976, p. 15.

²⁷ Id.

intensive selective cutting takes place. The visual impact of ugly ridge-top clearcuts with deep gullies and scattered limbs, branches and stumps dotting the landscape is shocking to the typical park visitor.

The Committee believes the Federal Government has a clear and compelling responsibility to protect Redwood Park and the unique experience it offers to the park visitor. This can only be accomplished by expanding the park's boundaries and adequately protecting the park from the adverse impact caused by logging in the Redwood Creek basin.

EXPANSION OF THE EXISTING PARK

As the discussion in the previous chapters indicates, it is necessary and desirable to expand the existing boundaries of Redwood National Park in order (1) to protect the timber, water, and soil resources in the park; and (2) to improve the quality of the park experience for the visitor. Any permanent solution to these two problems must include land acquisition.

At the February hearing Subcommittee Chairman Ryan stated:

But as far as the Congress is concerned this year, the really tough problem is the question of acquiring additional land and getting this Congress to put the money up and buy it and pay for it and set it aside.

The problem which is recognized by all who are concerned, is the fact that Redwood National Park will be substantially damaged in its present condition if something more is not done in the way of acquisition of land.²⁸

The Department of the Interior now recognizes the need for a larger Redwood National Park. In one of his last official acts, former Assistant Secretary of Interior for Fish and Wildlife and Parks, Nathaniel P. Reed, stated:

Acquisition is necessary to create a viable management unit. Careful acquisition is necessary to add important areas to this park. Such acquisition will also diminish the burden imposed on the lands that will remain in private ownership and subject to more intensive regulation.²⁹

At the subcommittee's February hearing, Park Service Director Gary Everhardt reiterated this recommendation:

NPS is firmly convinced that further land acquisition is necessary. * * * we know that the existing boundaries of Redwood National Park place an impossible burden on the National Park Service to protect a resource in the downstream and downslope portion of an inherently unstable drainage basin and frustrates the intent of Congress to provide inspiration and enjoyment in one of the key areas of the park.³⁰

The Western Regional Office of the Park Service has prepared a proposed land acquisition program for Redwood National Park. Under this plan the Federal Government would purchase 21,460 acres of land in the Redwood Creek basin, at an estimated land and timber cost of \$168.9 million. (When all costs are included, it is estimated that the total cost of the proposal could exceed \$200 million.)

²⁸ Hearings transcript, Feb. 9, 1977, pp. 70-71.

²⁹ Letter from Nathaniel P. Reed, Assistant Secretary, Fish and Wildlife and Parks, to Senator Henry M. Jackson, Chairman, Committee on Interior and Insular Affairs, Jan. 10, 1977, p. 2.

³⁰ Hearings transcript, Feb. 9, 1977, p. 56.

Five separate units surrounding the present boundary of Redwood National Park would be acquired under this proposal, as represented in the map on page 17. Units 1 and 2, comprising more than 7,000 acres, are located adjacent to the northern portion of the park, and if acquired, would provide an unbroken park from the Pacific Ocean to the first major ridge. The acquisition of Unit 3, approximately 1,000 acres in size, would visually improve the landscape seen by the visitor entering the park in the Orick area. Units 4 and 5 flank each side of Redwood Creek along the "worm," and if added to the park would provide a screen around Redwood Creek. A total of 4,875 acres of virgin redwoods would be included in this proposed acquisition.³¹

John Amodio, President of the Emerald Creek Committee, agrees these areas need to be acquired, but he does not feel the Park Service proposal is sufficient. According to Amodio:

Acquisition of the remaining old-growth forest in Redwood Creek is essential for the protection of the park. Fragmented as they are, old-growth areas do not, in themselves, constitute manageable additions. For immediate enhancement of the park's resources, plus adequate future protection, the ecological units of tributary watersheds must be acquired. Several of these side tributaries (most notably Devil's Creek, Emerald Creek and G- or Gem- Creek) are still scenic treasures that could provide new experience dimensions for the park visitors.³²

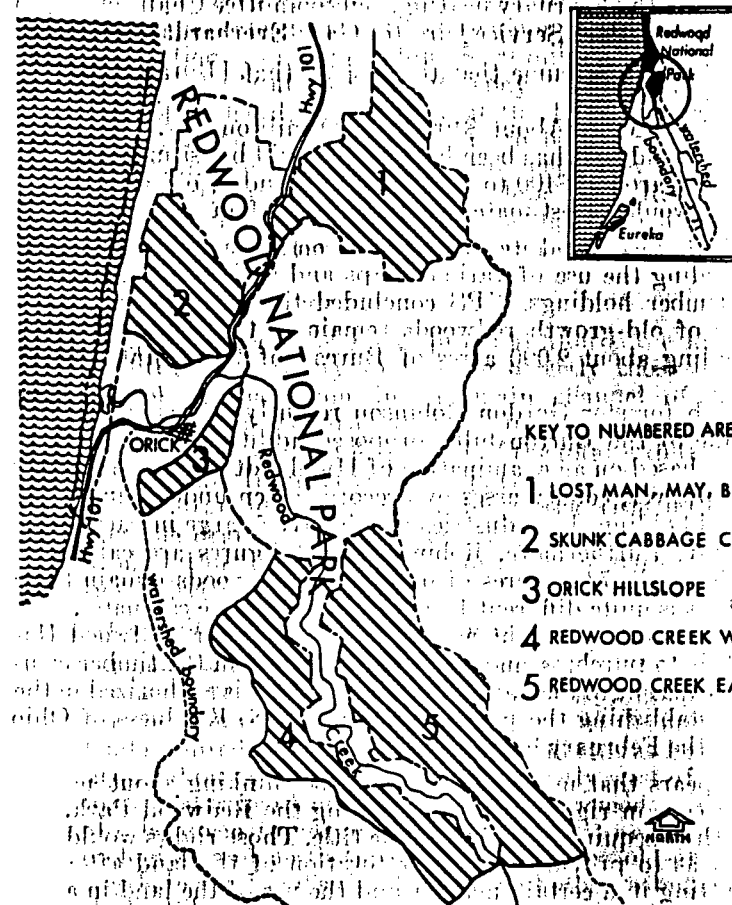
Indeed, in 1975 the Park Service's Western Regional Office proposed an environmental assessment of management options for Redwood Creek which included a land acquisition option. This option included lands totaling 47,840 acres upstream and upslope from the existing park. Tributaries included were McArthur Creek and Oscar Larson Creek on the north through the watersheds of Devil's Creek and Coyote Creek on the south.³³

³¹ "Proposed Land Acquisition, Redwood National Park," prepared by Western Regional Office, National Park Service, San Francisco, Calif., October 1976, p. 6.

³² Subsequent responses to questions of the Environment, Energy and Natural Resources Subcommittee, by John J. Amodio, Feb. 14, 1977, p. 1.

³³ "Environmental Assessment of Management Options for Redwood Creek, Redwood National Park," Western Region, National Park Service, 1975, p. 6-71.

ACQUISITION PROPOSAL



A bill introduced in the last Congress and reintroduced this Congress by Rep. Phillip Burton of California would add 74,000 acres to the park (H.R. 3813). All of the Park Service's 21,500 acres would be included in this acquisition, as would the entire Redwood Creek watershed along the western slope of the "worm," and several upstream tributary watersheds. If the Burton bill proposal became law, 59 percent of the entire watershed would be part of Redwood National Park, though much land producing large amounts of sediment would still remain outside park boundaries.³⁴

³⁴ Hearings transcript, Feb. 9, 1977, p. 72.

The Sierra Club and other environmental organizations generally favor this type of large-scale acquisition, which would undoubtedly be expensive. At the February hearing, Subcommittee Chairman Ryan discussed this with Park Service Director Gary Everhardt:

Mr. RYAN. I presume that the cost on that [Burton bill] is pretty high?

Mr. EVERHARDT. About \$400 to \$600 million, Mr. Chairman. The land that has been harvested would be estimated at somewhere around \$400 to \$500 an acre. Land of old-growth redwood would be estimated at up to \$25,000 an acre.³⁵

The Park Service based its cost estimate on a combination of techniques, including the use of various maps and aerial photographs to determine timber holdings. NPS concluded that a little more than 11,000 acres of old-growth redwoods remain in the Redwood Creek basin, including about 2,000 acres of Bureau of Land Management forests.³⁶

Sierra Club forester Gordon Robinson recently estimated the fair market value of the Burton bill's proposed addition to the park at \$150 million, based on an examination of Humboldt County Assessor's records.³⁷ However, county assessor's records often underestimate the value of land holdings by industries which have a large impact on the local economy. Furthermore, Robinson's cost figures are calculated assuming that only 7,000 acres of old-growth redwoods remain to be acquired. This is quite different from the Park Service estimates.

One alternative to outright acquisition of land for Redwood National Park is to purchase management easements in the timber company lands adjacent to the park's boundaries. This is authorized in the legislation establishing the park. Rep. Thomas N. Kindness of Ohio suggested at the February hearing that:

It appears that maybe we ought to be thinking about acquiring certain rights in land adjoining the Redwood Park, rather than acquiring the fee simple title. Those rights would be such as to provide for the restoration of the land after clearcutting in a certain manner and the use of the land in a certain manner during logging operations.³⁸

While acquisition of management or scenic easements are an attractive alternative to purchasing land outright under certain circumstances, this is often nearly as costly as acquisition of fee simple title. In its environmental assessment of management options for Redwood Creek, the Park Service proposed as one option the acquisition of management leases for a period of 20 years.³⁹ The cost of purchasing these leases appears to be almost as great as outright acquisition. However, the Committee believes that easements should be purchased in situations where sufficient park protection can be achieved and where significant cost savings can be realized.

³⁵ Hearings transcript, Feb. 9, 1977, p. 70.

³⁶ Conversation with James Agee, Western Region, National Park Service, Feb. 22, 1977.

³⁷ Information supplied for the Feb. 9, 1977 hearing transcript by Linda Billings, Sierra Club.

³⁸ Hearings transcript, Feb. 9, 1977, p. 49.

³⁹ "Proposed Expansion of the Redwood National Park: The Industry's Views," April, 1975, p. 18.

The decision as to the amount of land which should be added to the park depends on a number of factors, including what is needed to adequately protect and enhance park resources, cost of acquisition, and socio-economic impact on the local community. It may well be that land acquisition costs approaching \$500 million are simply too great a price for the Federal Government to pay.

On the other hand, it appears that the Park Service's 21,500 acre preliminary recommendation appears to be less than the minimum needed for park protection and improvement. Key areas are left out, including a large portion of the west slope along Redwood Creek, as well as certain significant tributary watersheds, which are particularly beautiful and without which erosion and deterioration of the park would likely continue.

According to Dr. Janda:

The proposed 21,500 acre proposal affords the Park Service little opportunity to manage directly those lands that control sedimentation in the main channel of Redwood Creek or in the western tributaries to the Creek. For example, 118,400 acres or about 66 percent of the total watershed would lie upstream from the southern park boundary. The omission of the drainage areas of Bridge Creek (the largest, most erodible drainage basin tributary to the present park) and Tom McDonald Creek appears inconsistent with park protection objectives.⁴⁰

The Committee therefore recommends that:

Congress consider acquiring no less than 21,500 acres and up to the 74,000 acres included in past legislative proposals for addition to Redwood National Park. At the minimum the land acquired should include all five units in the Park Service proposal on page 17, plus the area directly west of Unit 4 up to the watershed boundary. In addition, consideration should also be given to acquiring certain critical areas of unusual ecological and aesthetic value, such as the old-growth redwoods in the Devil's Creek basin, and other tributary watersheds. Whenever purchase of management easements, rather than fee simple title, would result in sufficient protection of park resources, significant cost savings, and little or no additional difficulty in park management, acquisition should be in the form of such easements.

The Committee recognizes that Congress last year authorized large increases in the Land and Water Conservation Fund over the next decade for the express purpose of acquiring more Federal and state park land. The expansion of Redwood National Park should be a top priority for Land and Water Conservation funds.

⁴⁰ Subsequent responses to questions of the Environment, Energy, and Natural Resources Subcommittee by Richard J. Janda, pp. 8-9.

VI. CONTROLS ON TIMBER CUTTING

No matter how Congress decides to expand the boundaries of Redwood Park, it is necessary that further restrictions on timber cutting practices be imposed on land in the Redwood Creek basin.

The timber remaining in the Redwood Creek basin is generally located on the steepest slopes and in areas which have a prior history of soil movement and numerous landslides. This is because the lumber companies, quite understandably, harvested timber first in areas most accessible to logging roads and where they were least likely to cause erosion problems. Future logging in the basin, to the extent it occurs, is likely to cause even more damage to the park than has resulted from past timber cutting. This is especially true since much of the remaining old-growth is located near streams which provide a channel down to the park and into Redwood Creek.⁴¹

For decades, the timber companies logging in the Redwood Creek drainage built access roads, harvested timber, and removed the trees without controls being imposed on them by Federal or state authorities. This, of course, was the case for the lumber industry throughout the country until recent times.

There have been increased efforts by both the Interior Department and the State of California in the last several years to more carefully regulate and control timber cutting in the Redwood Creek basin. This is due to increased anxiety about the adverse impacts of logging on the resources in the basin and better availability of information concerning those impacts.

The State of California requires that all logging plans on private land throughout the state be submitted for approval. A new state law went into effect in 1974 mandating timber cutting rules, requiring consideration of resource values such as fisheries and wildlife in approving logging plans, and allowing for special protection of unique or critical areas. This law is considered to be the toughest State timber regulation statute in the country,⁴² and the Department of Forestry has used its discretionary authority under the law in an attempt to minimize erosion and land disturbance.

The forestry rules are made by the State Board of Forestry and carried out by the State Forester, who is responsible for reviewing individual logging plans. Denials of plans by the State Forester are appealable to the Board of Forestry, but approvals are not.

In the Fall of 1975 the Board began hearings on special regulatory practices and a moratorium on logging along Redwood Creek. In July 1976, by a 3-3 vote, the Board, in effect, rejected a moratorium, and also left it to the State Forester's discretion as to whether to apply more restrictive practices to protect the park.⁴³ As a result, timber harvest plans filed by the three companies for the Redwood Creek

basin are normally approved, though often in a somewhat modified form.

What should the future course of regulation be? In testimony submitted to the subcommittee, State Forester Larry Richey stated:

It would appear to me that the question before the Subcommittee is not one of additional regulatory practices to protect the park—the question really is one of public policy as to whether the park should be expanded.⁴⁴

For the most part the three timber companies have resisted efforts by Federal government officials to regulate their harvesting operations more closely. In March, 1976, following extensive discussions with the timber industry, then Secretary of the Interior Kleppe formally proposed timber harvest requirements to the companies designed to protect the Redwood Creek portion of the park. These proposed restrictions included a prohibition on tractor operations on steep slopes, a limit on size of clearcuts in extremely erodible areas, a restriction on location and rate of cutting within tributary drainage basins, and a deferral of all cutting in special critical zones.⁴⁵

The lumber companies would not agree to these controls, and instead chose to adopt their own special harvesting practices.

Dr. Janda compared these self-imposed guidelines with those requested by the Interior Department:

I am impressed by the extent to which the companies are now willing to modify their practices in order to afford the park a higher level of protection than that afforded by the so-called Cooperative Agreements. I, nonetheless, detect ten major areas of difference between the companies' proposed restrictions and the Park Service position. Unfortunately, the issues involved in these differences are crucial if the risk of future damage to park resources is to be reduced to the level desired by the Park Service.⁴⁶

The Interior Department proposed legislation which would have allowed it to impose timber cutting guidelines on the companies by regulation, but the OMB rejected this approach. At this point, a decision was reached to attempt to solve the problem by litigation. The Justice Department was requested to intervene and it began negotiations with the companies involved.

Assistant Attorney General Peter Taft, after having visited the Redwood Creek area personally and reviewing all the available evidence, described the Government's position during these negotiations at the September hearings:

I believe that if there is a plan that is filed that has a streamside which they propose to cut, and we say cannot be, then we will sue. It is that simple, and I think we will win.

We will sue, if required. If we cannot get agreement, we will get what we are entitled to under the law. What the court

⁴¹ Hearing transcript, Feb. 9, 1977, pp. 59-60.

⁴² Hearings, p. 34.

⁴³ Hearings, p. 49.

⁴⁴ Hearings, p. 57.

⁴⁵ "Land Use Requirements for Protection of Redwood National Park, Redwood Creek Watershed," Department of the Interior, Mar. 1, 1976, pp. 1-2.

⁴⁶ Memorandum to the record from Richard J. Janda, Mar. 12, 1976, p. 1.

upholds will be the same guidelines which the Secretary intended to impose through the courts. I believe we can get that through the courts. And I believe that we will if we do not get agreement beforehand.⁴⁷

In November, the Justice Department reached an agreement with the three timber companies to permit inspection of proposed timber harvest plans for 1977 and 1978 prior to the time these plans are submitted to the state for approval. The plans are inspected by a Park Service multidisciplinary team applying the Interior Department's March timber harvest guidelines. If the company involved refuses to adopt the Park Service's recommendations for a deferral or modification of their plan, the Park Service then requests the State to act to protect the park. If the state approves a timber plan, which the Park Service believes would harm the park resources, the Justice Department can bring a lawsuit against the companies.

It is important to recognize this is only a procedural agreement. It does not represent a substantive agreement between the companies and the Park Service on how to cut timber. The agreement is designed to provide only an interim protection for the park.

It is significant that this Park Service review is only based on potential resource damage, and does *not* include consideration of whether an area about to be logged should be included in an expanded Redwood National Park, or whether it adversely affects visitor enjoyment of the park.

Since the agreement went into effect, the Park Service has reviewed 29 timber harvest plans. In three instances it has requested the timber companies to withdraw their plans because of potential damage to park resources if logging occurred;⁴⁸ in all other cases the Park Service approved the plans with modifications. Thus far, 11 of these plans have been approved by the state, with the result that the requirements already imposed by the Park Service are often strengthened. Logging has commenced on most of these plans.

It should be noted, however, that the areas scheduled for cutting over the next two years are the most accessible, least erodible sites remaining in the Redwood Creek basin. In future years, if old-growth logging continues in the basin, cutting could take place on the steepest sloped, most highly erodible areas. The present level of agreement between the Park Service and the timber companies about what can be logged without damaging the park would likely break down under such circumstances.

The Committee believes that additional regulatory controls are needed to protect an expanded Redwood National Park from further damage to resources or interference with visitor enjoyment. In addition to regulatory authority, the Federal government needs access to timber company lands in order to study, among other things, the effectiveness of recent damages in timber cutting practices in mitigating the erosional impact on the park. This type of access has not been granted in the past by the timber companies.

It makes little sense for the federal government to invest large amounts of money in land acquisition for the park without some assur-

ance that special protection will be provided through adequate timber harvest guidelines. Redwood National Park and the resources in the Redwood Creek basin are a resource of national significance and deserve a level of protection no less than that afforded to Grand Canyon, Yosemite and other National Parks which are an integral part of the American heritage.

The Solicitor's Office of the Interior Department has considered the question of whether Congress could amend the Redwood National Park Act to provide for the creation of a regulatory zone outside of the boundaries of the park and to authorize the Interior Secretary to adopt reasonable regulations for land use within such an area. Assistant Solicitor Peter Raynor concluded that:

Congress has the requisite power under the property clause (of the Constitution) and the great weight of scientific and professional evidence now available to legislate for the protection of Redwood National Park through establishment and regulation of critical zones adjoining the park without regard to the approval of the State of California or cession of jurisdiction by the State.⁴⁹

The Solicitor's opinion indicated that such regulations would not constitute a legislative taking for which compensation would have to be paid.

The Committee agrees with the Solicitor's opinion and recommends that:

Congress consider legislation which provides the Interior Department with the authority to enforce restrictions on timber cutting in the Redwood Creek basin which are considered necessary to protect park resources.

In any event, the Committee believes the State of California should regulate timber cutting practices to the extent necessary to preserve the unique character of the Redwood Creek basin. It is encouraging that the State has recently been willing to implement the regulatory requirements sought by the Federal Government for the Redwood Creek basin.

National Parks and Conservation Association (NPCA) spokesman Destrly Jarvis told the subcommittee at its September hearings that:

We believe that that phrase "ability to acquire interest in land" [in section 3(c) of the Redwood Park Act] enables the Federal Government, with no further Congressional authorization or appropriation, to acquire the management interest in these lands through a declaration in taking that would cost the Federal Government no money. And we believe that with proper management—which we would define as single-tree or small-group selection methods of harvesting over the rotation and regrowth period of the redwood forest—which we believe to be 80-100 years—that the profits of the timber companies would be virtually the same over that long rotation period as in the short term and then land left idle to regrow for that length of time.

Therefore, there should be no cost to the companies for the management interest to be acquired. Therefore, they should

⁴⁷ Hearings, p. 537.

⁴⁸ Meeting between subcommittee staff and the National Park Service, Feb. 7, 1977.

not be deserving of any great Federal donation to their coffers.⁵⁰

NCPA has urged that a study be done to compare the profitability to the timber companies of longer rotation cutting compared to clear-cutting in the Redwood Creek basin. The Committee agrees that such a study could provide the Federal government with valuable information prior to formulating a comprehensive program for regulating timber cutting in the basin.

The Committee therefore recommends that:

The Interior Department proceed with a study of the economic impact on the lumber companies of alternative approaches to regulating timber cutting operating in the Redwood Creek basin.

⁵⁰ Hearings, p. 141.

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VII. LAND REHABILITATION

Acquisition of additional areas for inclusion in an expanded Redwood National Park, together with the necessary restrictions on timber cutting in the remainder of the Redwood Creek basin, are essential for protection of the park resources. However, there remain the major problems of (1) reducing, to the extent feasible, the risk posed to the Tall Trees Grove by the existing bedload of soil, gravel and debris in Redwood Creek and (2) rehabilitating lands previously cut over or otherwise disturbed to lessen the amount of new sediment being added to the creek and to promote rapid vegetation of logged areas.

In a November, 1976 letter to Subcommittee Chairman Ryan, former Interior Assistant Secretary Reed pointed out:

The Geological Survey study clearly indicates that accelerated erosion is the greatest threat to the trees and streams within the park. Although the application of our guidelines should slow this process to the extent possible through litigation with regard to new cuts, it will do nothing for those areas previously cut in an unsatisfactory manner. The issue there is land rehabilitation.⁵¹

Dr. Janda discussed the benefits of land rehabilitation in his testimony submitted at the September hearing:

Watershed rehabilitation efforts in the 60 percent of the Redwood Creek basin that has been logged over the past 25 years could probably significantly reduce stream sediment loads. Much of this area displays active erosional land forms that appear to have resulted from logging and associated road construction. Many of these erosional features are relatively small and probably can be successfully controlled by a work force utilizing hand tools and small motorized equipment. The two principles that should be kept foremost in mind during watershed rehabilitation efforts are (1) to reestablish a reasonably close facsimile of the original hillslope drainage configuration, and (2) to revegetate all areas of bare mineral soil.⁵²

Dr. Janda subsequently indicated that some heavy equipment would also be needed in the rehabilitation work, but it still should be primarily a labor intensive effort.⁵³

The California Department of Conservation has prepared a draft study of land rehabilitation measures which could be taken in order

⁵¹ Letter from Nathaniel P. Reed, Assistant Secretary, Fish and Wildlife and Parks, to Representative Leo J. Ryan, Nov. 24, 1976, p. 2.

⁵² Hearings, p. 425.

⁵³ Subsequent responses to questions of the Environment, Energy, and Natural Resources Subcommittee by Richard J. Janda, pp. 5-6.

to reduce the amount of sediment reaching Redwood Creek. The draft report identifies numerous remedial actions which, if carried out, would reduce the sediment load reaching Redwood Creek by an estimated 52 percent. The interim study covers only the upper third of the Redwood Creek drainage, but the information is being applied to an assessment of what could be involved in a rehabilitation plan for the entire watershed.⁵⁴

Park Service Director Gary Everhardt told the subcommittee at the February hearing that:

The [Interior] Department and the National Park Service are working closely with the State of California to address the second problem confronting the park. This is the problem of rehabilitating those adjacent lands that have been previously harvested in an unsatisfactory manner. The area that is now being addressed is the upper one-third of the watershed, the area of the oldest logging and furthest away from the park * * *

While the implementation mechanism for such a program is unclear, our position has been that the responsibility for requiring necessary rehabilitation rests with the State of California. We have and will continue to provide technical assistance to the state, and have asked the Department of Justice to consider the possibility of litigation, if necessary, to address this aspect of the problem at Redwood National Park.⁵⁵

The Committee believes the federal government, the State of California, and the timber companies should work closely together on land rehabilitation efforts in the Redwood Creek basin.

Therefore, the Committee recommends that:

The Interior Department take whatever action is appropriate, including recommending litigation to the Justice Department, if necessary, to require the timber companies to prevent further damage to the park resources from erosion caused by past and future logging on their lands. The Justice Department should insist that the companies carry out proper land rehabilitation and reforestation so that future erosion damage to the park is minimized. The National Park Service and the U.S. Forest Service should cooperate in providing technical assistance to the lumber companies on how to achieve good land rehabilitation and reforestation.

The Interior Department and other appropriate Federal agencies, including the Environmental Protection Agency, should work with the State of California in developing and funding a comprehensive land rehabilitation program for the Redwood Creek basin. Lands acquired by the National Park Service for addition to Redwood National Park should receive particular attention in this effort.

⁵⁴Letter from Claire T. Dedrick, Secretary of Natural Resources, State of California, to Representative Leo J. Ryan, Feb. 1, 1977, pp. 2-3.
⁵⁵Hearings transcript, Feb. 9, 1977, pp. 55-56.

VIII. IMPACT OF PARK EXPANSION ON THE LOCAL ECONOMY

The creation or enlargement of any large federally-managed natural resource area out of what was formerly productive private land usually has a significant impact on the regional or local economy. It often results in a loss of jobs in a particular industry and can also reduce employment in other industries directly dependent on the exploitation of the resource involved. Taxable land is removed from the property tax base. Furthermore, in an area where a particular industry employs a substantial portion of the local population, the establishment or expansion of a federal park or similar resource can have a particularly serious impact.

However, it also should be recognized there are off-setting benefits associated with creation or enhancement of a national park. Area tourism is almost always boosted, often creating many new jobs and new businesses to provide services to visitors. The improvement in quality of life can itself result in local or regional population and economic growth, and may also attract other business to the area.

The expansion of Redwood National Park should result in this type of economic trade-off to the local community.

The lumber industry is very important to the economy of Humboldt County, and the industry would suffer if a significant increase in the size of Redwood National Park becomes a reality. The preservation of the remaining old-growth redwoods in the Redwood Creek basin would cause a loss of jobs in the timber products industry, from both reduced logging and milling operations. Substantial property would be removed from Humboldt County's tax base, amounting to perhaps 10 per cent of the total assessed value of all real property within the county.⁵⁶

This would be offset to some extent by Federal payments in lieu of taxes, which are available to local governments wherever Federally-owned lands are located. In addition to these payments, a law passed by the last Congress (Public Law 94-565) requires Federal payments for the next five years to local governments to compensate for all land that has been acquired for Redwood National Park.

It is important, however, to understand the present status of the lumber industry as part of the Humboldt County economy. A recent report by the city of Eureka (the county seat for Humboldt County) Department of Community Development points out that:

The history of Humboldt County has been closely related to the lumber industry. Even as late as 1960, 32.5 percent of the total work force was directly associated with the lumber industry. As a result of increased mechanization, depletion of resources, and other factors, the lumber industry in Humboldt County has been in a state of gradual decline for more

⁵⁶"Proposed Expansion of the Redwood National Park: The Industry's Views," April 1976, p. 14.

than fifteen years. In 1970, only 19.3 percent of the total work force was employed in lumber and related activities. This employment is, moreover, highly seasonal in nature. Even though employment may continue to decline, with reforestation and the creation of a more stable supply of timber in the future, the lumber industry will continue to be an important base industry.⁵⁷

Humboldt County has experienced a consistent economic decline in the last 15 years. In the lumber industry alone over 4,600 jobs were lost between 1960 and 1970. The number of unemployed persons in Humboldt County has risen from 3,400 in 1960 to 6,400 in 1975; the rate of unemployment has increased from 8.4 per cent to 14.5 per cent.⁵⁸

A study done under contract with the State of California by Professor William McKillop of the Department of Forestry and Conservation, University of California (Berkeley), and now being circulated for review, analyzes the impacts of three alternative park expansion proposals on income in Humboldt and Del Norte counties. McKillop concludes that the 21,500 acre Park Service proposal discussed previously would raise the 1970-1976 unemployment rate for the two counties from 12.1 to 14.2 percent; the 48,000 acre option mentioned earlier would raise the unemployment rate 3.4 percent; and the 74,000 acre expansion in the Burton bill would raise it by 4.6 percent.⁵⁹

In evaluating these results it is important to note (1) the preliminary nature of the conclusions in the study; (2) the fact that some of the data necessary to perform the research was only available from the timber companies themselves; and (3) the fact that McKillop was not asked to estimate any potential benefits to the economy of Humboldt and Del Norte Counties resulting from park expansion. The results of the study have been questioned by some, partly because of the fact that McKillop has done a great deal of work in the past for timber companies.

In recent years there has been a noticeable growth in tourism in Humboldt County. The Department of Community Development report states that:

Tourism is certainly another important, though also seasonal, base industry of Eureka and its environs. The numerous tourist oriented land uses along Highway 101, such as hotels, motels and restaurants and the heavy vehicle or traffic generated during the summer months, are strong indicators of this industry's importance to Eureka.⁶⁰

As to overall employment trends, the report concludes:

In summary, approximately 5,000 jobs were lost in the basic resource oriented industries of Humboldt County over the 1960-1970 decade (lumber, food processing and agriculture), while other basic industries accounted for a gain of not more than 2,000 jobs. The result of this is that there has been a net loss in basic employment of nearly 3,000 jobs. Since the net loss in total employment during the decade was approximately 500 jobs, it may be concluded that approximately

2,500 jobs were created in the local population serving sectors, in spite of decreasing income and population levels. These 2,500 jobs created are believed to be the main product of the tourist related industry.⁶¹

These employment trends are likely to be accelerated in the event Redwood National Park is significantly expanded. Further losses of jobs in the timber industry would result at an earlier date than would occur if the remaining old-growth redwoods in the Redwood Creek basin were cut. Certain segments of the local timber industry would be adversely affected in that their projected timber harvest plans would be altered.

On the other hand, removing redwood forests from timber production would certainly result in a future increase in price for redwood lumber.

The employees of the Arcata Redwood Co. would be more seriously affected by expansion of the park than the employees of the other companies involved. The company does not appear to have the resource base needed to log on a long-term sustained yield basis. Park expansion would put the company out of the timber business at an earlier date than may otherwise occur, since most of its prime timber holdings would be included in any park acquisition proposal.

A larger Redwood National Park, with more logically drawn boundaries, would probably increase visitation and help expand the Humboldt County tourist industry. Additional overnight lodging and other facilities designed to accommodate tourists would be needed in the local communities because they are not available inside the park.

It is reasonable to expect that these benefits would be disproportionate to the increase in the size of the park, since opportunities for use of the existing park's resources would be significantly enhanced, and visitation should increase accordingly. It could very well be that, in the long term, expansion of Redwood National Park would benefit the Humboldt County economy. The State of California has asked the Department of the Interior to study the economic benefits of park expansion.

In addition, land rehabilitation efforts in the Redwood Creek basin should provide new employment opportunities for local citizens in the near future.

Nevertheless, the more immediate impacts are real, and must be considered and acted upon quickly.

As California Secretary of Resources Dedrick told the subcommittee, in discussing the projected economic impact of park expansion:

Admittedly, not very many people are involved. There is great debate as to possible effects of park expansion. But even if there is a short-term effect, to the man who loses his job, it is a serious and drastic effect.⁶²

Subcommittee Chairman Ryan expressed similar concern for the local community at the February hearings:

I think it is important to point out also, this Congress has got to realize that the impact on local communities must be considered. There would be a substantial change in the tax base for schools, for county and city government.

⁵⁷ "Technical Background Information to the General Plan: Economic Conditions," City of Eureka Department of Community Development, 1976, p. 2.

There will be a substantial number of jobs lost to people in that area. There will be an economic loss to the entire community from the industry that is in that area now. This is not to say that it will not be compensated for in other ways; it should be.

Part of this committee's responsibility is to recognize these facts and to deal with them concurrent with, hopefully, acquisition of land for the park.⁶⁵

Consistent with these views, the committee recommends that:

Congress should consider and assess the impact on the economy of Humboldt County of any legislation expanding Redwood National Park. The Committee urges that Congress and the Administration work closely with the State of California to determine what legislative and executive action is needed, including payments in lieu of taxes, job training and community employment programs, to offset the expected initial and interim loss of jobs and revenue to Humboldt County. The Committee believes that, in the long run, expansion of Redwood National Park should prove to be an asset to the economy of Humboldt County.

⁶⁵ Hearings transcript, Feb. 9, 1977, pp. 79-80.

IX. NEED FOR A MORATORIUM ON LOGGING

As the debate continues over what further protection is necessary for Redwood National Park, it should be remembered that timber cutting in the Redwood Creek basin continues. Areas which ought to be included in an expanded park are being permanently altered, while damage to park resources and the potential for future catastrophe continues to mount.

As Subcommittee Chairman Ryan stated at the February hearings: "The problem grows worse day by day. Since the September hearing logging has continued at a rapid rate near the park's boundaries. The State of California persuaded Arcata Redwood to delay cutting one area near the tall trees grove which is a prime candidate for addition to the park. However, ever, warm, dry winter weather has permitted logging to continue at an accelerated rate in other parts of the Redwood Creek basin."

John Amodio, representing the Emerald Creek Committee and the NPCA, expressed his concern to the subcommittee about the immediate prospects of timber cutting in the proximity of Redwood Park:

"From September 18, 1976, the date of the last hearing, until last Friday, twelve plans for clear-cutting upslope and up-stream from the 'worm' portion of Redwood National Park had been submitted. Nine of these plans comprising 205 acres have already been approved for winter operations. Three plans comprising 77 acres are still pending decision, and there is no doubt that the State Department of Forestry will approve them. Plans for 65 acres are in the misnamed 'buffer zone,' which means that clear-cutting would again occur directly down to the Park's boundary."

This past winter Save the Redwoods League, a California-based conservation organization dedicated to saving Redwoods through acquisition, offered to purchase two tracts of old-growth redwoods near the Tall Trees Grove from Arcata Redwood for \$1,000,000. The company declined to sell these properties, though they had previously agreed not to log them until April 1 of this year.⁶⁶ Both tracts are included in all park land acquisition proposals presently being discussed.

It would seem senseless to allow a substantial portion of the remaining virgin redwoods to be cut while Congress and the Administration decide what action to take. Yet, that is likely to happen unless the timber companies are persuaded to defer cutting temporarily.

⁶⁶ Hearings transcript, Feb. 9, 1977, p. 5.

⁶⁷ Hearings transcript, Feb. 9, 1977, p. 15.

⁶⁸ Letter to John B. Dewitt, Save the Redwoods League, from J. Frank Leach, President, Arcata National Corp., December 13, 1976.

The need for such a moratorium was stated by Subcommittee Chairman Ryan during the February hearings:

It is my personal conviction that an immediate moratorium on all logging in the Redwood Creek basin is essential in order to protect park resources and preserve areas to be considered by Congress for park expansion. I intend to do whatever I can to convince Congressional leaders and the Carter Administration, including the Interior Department witnesses here today, of the necessity for a moratorium.⁶⁷

On February 9, the subcommittee Chairman wrote to President Carter to inform him that:

The need for immediate action to preserve the status quo until Congress acts is essential. During the campaign you suggested that a moratorium on logging in the Redwood Creek basin would be in order.

I earnestly and respectfully request that you ask the three lumber companies involved . . . to institute such a moratorium for not less than 120 days. This request, whether based on existing legal authority or a simple appeal to the collective good will of the three companies, would allow Secretary Andrus to put together a sound legislative proposal to deal with the Redwood National Park problem. It would also permit Congress an opportunity to take whatever legislative action is necessary to protect the park.⁶⁸

The committee agrees and recommends that: The Congress and the Administration, in consultation and cooperation with the State of California, seek a moratorium on logging in the Redwood Creek basin for a period of time sufficient for Congress to act on legislation designed to protect Redwood National Park.

⁶⁷ Hearings transcript, Feb. 9, 1977, p. 5.

⁶⁸ Letter from Rep. Leo J. Ryan to President Jimmy Carter, Feb. 9, 1977, p. 1.

RECOMMENDATIONS

The Committee recommends that:

1. The Congress and the Administration, in consultation and cooperation with the State of California, seek a moratorium on logging in the Redwood Creek basin for a period of time sufficient for Congress to act on legislation designed to protect Redwood National Park.
2. The Congress consider acquiring no less than 21,500 acres and up to the 74,000 acres included in past legislative proposals for addition to Redwood National Park. At the minimum the land acquired should include all five units in the Park Service proposal on page 17, plus the area directly west of Unit 4 up to the watershed boundary. In addition, consideration should also be given to acquiring certain critical areas of unusual ecological and aesthetic value, such as the old-growth redwoods in the Devil's Creek basin, and other tributary watersheds. Whenever purchase of management easements, rather than fee simple title, would result in sufficient protection of park resources, significant cost savings, and little or no additional difficulty in park management, acquisition should be in the form of such easements.
3. Congress considered legislation which provides the Interior Department with the authority to enforce restrictions on timber cutting in the Redwood Creek basin which are considered necessary to protect park resources.
4. The Interior Department proceed with a study of the economic impact on the lumber companies of alternative approaches to regulating timber cutting operating in the Redwood Creek Basin.
5. The Interior Department take whatever action is appropriate, including recommending litigation to the Justice Department, if necessary, to require the timber companies to prevent further damage to the park resources from erosion caused by past and future logging on their lands. The Justice Department should insist that the companies carry out proper land rehabilitation and reforestation so that future erosion damage to the park is minimized. The National Park Service and the U.S. Forest Service should cooperate in providing technical assistance to the lumber companies on how to achieve good land rehabilitation and reforestation.
6. The Interior Department and other appropriate Federal agencies, including the Environmental Protection Agency, should work with the State of California in developing and funding a comprehensive land rehabilitation program for the Redwood Creek basin. Lands acquired by the National Park Service for addition to Redwood National Park should receive particular attention in this effort.
6. Congress should consider and assess the impact, on the economy of Humboldt County of any legislation expanding Redwood National Park. The Committee urges that Congress and the Administration

work closely with the State of California to determine what legislative and executive action is needed, including payments in lieu of taxes, job training and community employment programs, to offset the expected initial and interim loss of jobs and revenue to Humboldt County. The Committee believes that, in the long run, the expansion of Redwood National Park should prove to be an asset to the economy of Humboldt County.

ADDITIONAL VIEWS OF HON. PAUL N. McCLOSKEY, JR.

The Report's view that Redwood National Park ought to be enlarged is presently under serious study by the House Interior Committee, and I am hopeful that these Government Operations Committee comments will be of some assistance to the Interior Committee's deliberations. The action of Congress in creating the present park boundaries, in retrospect, was clearly a political compromise with built-in errors of tragic proportions. We owe the nation a completely fresh congressional evaluation and determination of new policies. Whatever we may do by congressional action, it may be impossible to save the world's tallest trees in the so-called "worm" area. Nature is a greater force than even the United States Government.

There are two additions to the Committee's language which I would like to offer.

First, the Committee's statement on page one, that "the great virgin coastal Redwood Forests are an endangered resource rapidly on the way to becoming extinct" is somewhat of an exaggeration.

Virgin coastal redwoods are not extinct and will not become so, primarily because of the foresighted and dedicated action of California conservationists, both public servants and private groups such as the Save the Redwoods League and Nature Conservancy, who saw to the creation and preservation of thousands of acres of redwoods in forty-one separate parks in the California State Park System, from Santa Clara north to the Oregon border, long before the Federal government acted to save a portion of the Redwood Creek watershed in 1968.

The California State Park System contains 41 parks where redwoods are found, 17 of which, containing approximately 100,000 acres, are primarily devoted to virgin redwood groves. Another 10 state parks, containing over 25,000 acres, have coastal redwoods as a secondary benefit, and there are an additional 14 parks which include a total of 2,400 acres of redwoods in a variety of natural conditions.

The total acreage of redwoods in various Federal, State and local parks and reserves in California is estimated to exceed 180,000 acres.

In contrast, the Federal park, acquired by legislative taking in 1968, totaled 28,000 acres, approximately 2,500 of which are included in the eight mile stretch of "worm" area along Redwood Creek containing the world's tallest trees.

The second point worthy of comment is that the National Park Service's record of management and decision-making since 1968 is abysmal.

The Service has never promulgated a master plan for managing Redwood National Park. It has built no Visitors Center, no campgrounds, and virtually no trails. It has, in short, made no effort to turn that portion of the Redwood Creek watershed which American taxpayers purchased at great expense into a park which the American people can enjoy.

Part of the problems of managing Redwood National Park, as suggested by the Member of Congress representing this area, Don Clausen, is traceable to the fact that three California State Parks which the Redwood Park Act made transferable to the Federal government are still being administered entirely separately from the Federal parklands. The State has quite reasonably refused to consider transferring its well-established and developed parks to the Federal government until the Park Service has enunciated a management philosophy for the Federal park.

The Park Service has neither expressed a management philosophy nor made any arrangement with the State for joint management of the adjoining parcels.

While Congress is wrestling with the problems of park protection and/or expansion, I urge the National Park Service to come to grips with the problem of park management and development. Unless both Congress and the National Park Service can meet their respective responsibilities, the Redwood National Park will never become the national treasure so many people have so long sought to preserve.

Congress must finally try to squarely address the emotional issue of the world's tallest trees. They are threatened not so much by current logging practices as by the results of decades of prior logging activity in the upper watershed and a lack of adequate state forestry protection rules which was not corrected, even in part, until fairly recently.

Is the conjectural protection of these tall trees, at an uncertain cost and with an unpredictable result, as valuable as the alternative acquisition of the remaining groves in the Skunk Cabbage area and elsewhere, which are not threatened by natural destruction?

Congress did an inadequate job in 1968 because we sought a political solution rather than a comprehensive and usable park. I hope we can do better in 1977.

Respectfully submitted,

PAUL N. McCLOSKEY, Jr.

ADDITIONAL VIEWS OF HON. JOEL PRITCHARD

I believe that outdoor recreation offers many benefits to our citizens, and have since my election to the Congress consistently supported measures to provide Americans with places where they can enjoy the great outdoors. Just last year, I took two actions which demonstrate this conviction. First, I was a strong advocate of legislation to create a 393,000-acre Alpine Lakes Wilderness Area in Washington State (Public Law 94-357). Second, I supported all efforts to increase funding levels for the Land and Water Conservation Fund, not only voting for the measure which ultimately became Public Law 94-442, but also opposing all amendments to that bill which would have mandated lower funding levels than those which were adopted.

Despite my predisposition to favor parks legislation, I cannot support the recommendations of this report.

Deciding which areas to buy for parkland requires balancing many factors, including use potential, cost, and quality of the resource. The proposed Redwood Park addition may be high on resource quality, but it is far from centers of population and extremely costly. To create Alpine Lakes Wilderness Area, we set aside nearly 400,000 acres of superlative wilderness resource which is just an hour's drive from the heavily populated Seattle area—and at a cost of just \$57 million. The minimum land proposal recommended in this report for Redwood Park involves buying one-twentieth of the acreage for three and one-half times the money, and is located six times as far from the nearest major city.

All things considered, I think the American people can make a better investment in their parkland than spending hundreds of millions of dollars to enlarge the already-existing Redwood National Park. We can get more parks, and more useful parks, for the money in many other places.

JOEL PRITCHARD

DISSENTING VIEWS OF HON. THOMAS N. KINDNESS

Although the Report of the Subcommittee quite correctly states the problem that has been created by the establishment of the Redwood National Park, there is room for philosophical differences as to the manner of relieving the problem and the priority to be assigned to this project.

At a time when areas in many States of our nation are suffering severe economic consequences of extraordinarily cold and difficult weather in the Winter of 1977, it is difficult to consider the expenditure of a minimum of \$200 million for the acquisition of land to add to the Redwood National Park. Citizens experiencing the effects of unemployment and underemployment, and local and State governments experiencing severe revenue losses resulting therefrom and associated with the severe conditions already described, are going to find it difficult to justify the establishment of such a priority in advance of other very human needs.

On the other hand, it is very difficult to justify the position of the Subcommittee Report calling for the protection of the investment of the Federal Government in the Redwood National Park, while completely overlooking the private investment in huge timber holdings of the private investors and land owners in the Redwood Creek Basin. After all, our Constitution was established in order to create a government to serve the people, not to create a government to be served by the people.

Therefore, it appears that at least the following supplemental and dissenting views must be stated, coinciding with the numbering of the recommendations contained in the committee report:

(1) The recommendation to seek a moratorium on logging in the Redwood Creek Basin is like asking someone to stand still so that you can hit them squarely on the jaw. If action is to be taken by the Congress or by the Administration to protect Redwood National Park, it should be taken expeditiously and without asking private, taxpaying investors to withstand an economic loss in order to give the Congress time to move on the matter.

(2) Rather than considering the acquisition of "no less than 21,500 acres and up to the 74,000 acres . . .", the Congress should consider acquiring only the minimum amount of acreage necessary to protect the Redwood National Park. The more land acquired by the United States to add to Redwood National Park, the more economic adversity likely to be suffered by the residents of the area whose economy is based on the timber industry.

(3) The Committee Report recommends that the Congress consider legislation which provides the Interior Department with authority to enforce restrictions on timber cutting in the Redwood Creek Basin, but does not include the recommendation that such legislation

should provide for compensating the economic victims of such restrictions. Although it is argued to the contrary in the Subcommittee Report, it is also philosophically arguable that enforcing restrictions that would prohibit timber cutting or restrict it in considerable degree, is a form of legislative taking or condemnation, for which the Constitution provides that there shall be just compensation to the citizens adversely affected by such taking.

(4) The principle expressed in the recommendation that the Congress consider the impact of any such legislation expanding the Redwood National Park on the economy of Humboldt County is good. However, it should be borne in mind that there are many areas of the country and many citizens of the United States suffering adverse economic consequences of a harsh winter and of adverse general economic conditions leading to unemployment and underemployment whose dilemma cannot be readily avoided at this point in time, while the adverse economic impact of expanding the Redwood National Park can be avoided at this time, particularly by looking toward the possibilities of acquiring management easements or more limited rights on the part of the United States that could lead to the controlled logging of privately owned lands in the Redwood Creek Basin, while allowing the economic activity of the timber industry in Humboldt County to continue without severe setback. In other words, we are considering undertaking an intentional development of an adverse economic condition to be imposed upon the people of Humboldt County, California. Shouldn't we instead consider how to avoid such an adverse impact?

THOMAS N. KINDNESS.