

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of)
Northcoast Environmental Center,)
et al., for Review of Order)
No. 75-180 of the California)
Regional Water Quality Control)
Board, North Coast Region. A-121)

Order No. WQ 77-1

BY BOARD MEMBERS AUER AND DODSON:

On July 24, 1975, the California Regional Water Quality Control Board, North Coast Region (Regional Board), adopted Order No. 75-180, waste discharge requirements for Arcata Redwood Company (Company) for logging and associated activities to be conducted adjacent to Wier Creek in the Redwood Creek Basin, Humboldt County.

On August 26, 1975, the State Water Resources Control Board (State Board) received a petition for review of Order No. 75-180 filed by the Northcoast Environmental Center, Emerald Creek Committee, and the Sierra Club, North Group Chapter. On February 19, 1976, the State Board adopted Resolution No. 76-14 to review Order No. 75-180 on its own motion.

On May 7 and June 16 1976, hearing was held for the purpose of receiving evidence relative to the appropriateness and propriety of the requirements contained in Order No. 75-180.

I. BACKGROUND

The logging and associated activities covered by the requirements contained in Order No. 75-180 were conducted in an area of approximately 47.5 acres adjacent to Wier Creek in the Redwood Creek Basin, Humboldt County.

Redwood Creek Basin consists of an area of approximately 278 square miles. The Basin is characterized by very steep terrain and highly erodible soils. Tributary streams throughout the Basin have steep longitudinal profiles caused by landslides and accumulations of tree trunks and other organic debris. Wier Creek flows directly into Redwood Creek upstream from the "tallest trees", portion of Redwood National park. Only the lower quarter mile of Wier Creek is within the present park boundaries. The area adjacent to Wier Creek is dominated by old growth redwood and douglas fir timber on slopes averaging 50 percent. The soils are Hugo, the annual average rainfall is 80 inches and the erosion hazard rating is high.

The natural water quality of Wier Creek can be characterized as clear water flowing year around with very cold temperatures. Such characteristics have contributed to the presence of large numbers of amphibians and aquatic life in Wier Creek.

In 1968 Congress enacted legislation which established Redwood National Park to preserve examples of the terrestrial and aquatic ecosystems associated with coastal redwood forests in Northwestern California. The coast redwoods, with their associated vegetation, streams, seashore, and wildlife, provide esthetic and recreational enjoyment for visitors. Redwood Creek flows through Redwood National Park into the Pacific Ocean in an area designated by the State Water Resources Control Board as Redwood National Park Area of Special Biological Significance.

At the time of the hearing in May and June, 1976, the Company's logging operations near Wier Creek were substantially completed except for remedial work to be completed and continuing maintenance of the area. The record discloses that while portions of Redwood Creek Basin have already been logged, holdings exist in the Basin which probably will be subject to continued logging activities.

II. CONTENTIONS AND FINDINGS

1. Contention: The limitations in the requirements that the discharge shall not cause the turbidity and the suspended sediment of the receiving waters to be increased more than 20 percent above naturally occurring background levels should be more restrictive.

Discussion and Findings: The petitioners initially contended that a limitation of five percent above naturally occurring background levels should be imposed for turbidity and suspended sediment in the receiving waters. As the hearing progressed, however, this contention appeared to be of little concern to the petitioners, except as to the possible cumulative effects of these limitations due to other logging activity in the watershed.

The 20 percent limitation in turbidity is the minimum level which can be accurately measured. We find that it is inevitable that a certain amount of turbidity increase would accompany even the most careful and well-planned logging operation. Turbidity is an indicator of compliance with other limitations as well as a measurement for the protection of aesthetic beneficial uses. If the Regional Board finds that cumulative effects of turbidity and suspended sediment cause a water quality problem in this discharge or other areas, more stringent or basin-wide limitations would be appropriate.

We find that the turbidity and suspended sediment limitations contained in Order No. 75-180 are appropriate in this case. Further, we agree with the Regional Board's interpretation that "natural background level" is level that occurs upstream of any influence of the discharger.

2. Contention: The Regional Board should have applied more stringent requirements for this waste discharge.

Discussion and Findings: In the Notice of Hearing we raised the following issue: Do special facts and circumstances exist regarding this discharge which require the imposition of more stringent limitations? If so, what more stringent limitations should be required?

The hearing testimony disclosed that Company constructed a logging road to the Wier Creek area prior to 1973. This road was designed and constructed by a professional forester using aerial photographs, topographic maps and soil vegetation maps with the scale of two inches to a mile. At no time prior to the construction was an engineering geologist consulted or soil borings taken, or any road construction plan prepared. As a result of the construction of this road, a slide occurred near the bridge over Wier Creek (the Company became aware of the slide in the winter of 1973). The slide was caused by road excavation into a layer of Atwell soil ten feet or more below the ground surface.

Soil erosion from the road and particularly the slide area during high intensity rainfall has been and will continue to be discharged to Wier Creek unless continued maintenance is performed. The Arcata Redwood Company has hired a consultant engineering

firm, which is taking remedial action to minimize the slide problem. This road-building activity was conducted without waste discharge requirements and was completed prior to issuance of Order No. 75-180. The State Board's engineering geologist testified that if a detailed road alignment survey had been conducted by an experienced soils engineer and/or a knowledgeable engineering geologist, their expertise would have indicated that certain erosion control measures would have to have been implemented if this particular road alignment were to be used for this operation.

The Regional Board conducted a field inspection and on April 10, 1974, requested that the Company file a report of waste discharge as it understood that logging would be conducted near Wier Creek. The Company responded that it would not be operating within 1,200 feet of Wier Creek at that time. Consequently, the Regional Board stated that requirements would not be necessary, however, the Regional Board staff requested that they be informed of any substantial changes from the operation contemplated at that time or if operations were to be conducted adjacent to Wier Creek.

In April 1975, the Company filed timber harvesting plans 175-2334 and 240H with the Division of Forestry. The Regional Board became aware of Arcata Redwood's operations through the THP review procedures and a report of waste discharge was requested. It was subsequently filed and Order No. 75-180 was adopted. Timber harvesting operations commenced prior to adoption of Order No. 75-180.

We find that special consideration should be given to any activity involving soil disturbance in the Redwood Creek Basin due to the geological, climatological, and highly erodible soil conditions in the area. Soil disturbance activities such as logging operations and road building have increased the rate of erosion in Redwood Creek and its tributaries which affects the beneficial uses of these receiving waters. These findings are substantiated in the Environmental Assessment to Redwood Creek, National Park Service, Redwood National Park Studies and the Water Quality Control Plan, North Coast Basin. Such special consideration should apply not only to the Redwood Creek Basin, but to any watershed where such hazardous conditions exist.

Order No. 75-180 contains the following prohibitions:

"B. PROHIBITIONS

1. The discharger shall not discharge soil, silt, bark, slash, sawdust or other organic and earthen material from any logging, construction or associated activity of whatever nature into Redwood Creek, Wier Creek or tributaries thereto, in quantities deleterious to fish, wildlife or other beneficial uses.
2. The discharger shall not place or dispose of soil, silt, bark, slash, sawdust or other organic and earthen material from any logging, construction or associated activity of whatever

nature at locations where such material could pass into Redwood Creek, Wier Creek, or tributaries thereto, in quantities which would be deleterious to fish, wildlife, or other beneficial uses."

Based upon the record and especially the testimony from the hearing, we find that special facts and circumstances such as those which are present in this case would have required the adoption of limitations more stringent than those contained in Order No. 75-180. The Water Quality Control Plan prohibitions as contained in Order No. 75-180 apply to all logging, construction or associated activity within the North Coast Basin regardless of whether waste discharge requirements are adopted or a waiver is granted for a particular activity. These Water Quality Control Plan prohibitions are not a limitation upon the authority of the Regional Board to must specify more stringent limitations where necessary. The Regional Board must specify and enforce more stringent waste discharge requirements where needed on a project-by-project basis.

In the small percentage of logging operations where a substantial threat to water quality exists, the waste discharger should submit or, in the absence of such submittal, the Regional Board should require the submission of a report of waste discharge. [Water Code Section 13260(a) and (e).] This may require submission of specific road construction plans, details of logging methods, practices to be employed and engineering or geotechnical reports and plans. The record demonstrates that if such information

had been requested, provided to the Regional Board, and mitigation measures implemented by the Company, serious water quality degradation could have been averted. Waste discharge requirements should not be adopted until such information is submitted.

On the basis of this information, the Regional Board should adopt waste discharge requirements which implement relevant water quality control plans, take into consideration the beneficial uses to be protected, water quality objectives, other waste discharges, and the need to prevent nuisance. [Water Code Section 13263(a).] A discharge of waste should not be initiated until such time as a complete report of waste discharge is submitted, and requirements have been adopted. The Regional Board must act expeditiously to prevent unreasonable delay to the applicant. In certain instances, the requirements may render impracticable or prohibit logging or road construction activities.

The method and manner of logging is specifically regulated by the California Division of Forestry pursuant to the Forest Practice Act and the Rules of Forest Practice. The Regional Board should continue its cooperative efforts with the Division to provide water quality information in the timber harvest plan review process. However, when the Rules of Forest Practice and timber harvest plans occasionally do not afford the degree of water quality protection required by the Porter-Cologne Water Quality Control Act, the Regional Board must act to provide such protection.

As we have noted above, the Arcata Redwood Company's logging and road construction activities regulated by Order No. 75-180 are substantially completed. Consequently the application of these findings to this particular operation at this time would have little, if any, effect.

3. Contention: The monitoring and reporting program is inadequate to ascertain compliance with requirements.

Discussion and Findings: Order No. 75-180 provides that when logging activities are conducted within 150 feet of Wier Creek or its tributaries, the discharger shall perform certain water quality monitoring. These monitoring and reporting requirements, however, expired on May 1, 1976. We find that because of the continuing threat of discharge to Wier Creek, these requirements should be continued.

The following should be added to the monitoring program:

1. The discharger shall be required to monitor and report the suspended sediment to show compliance with the discharge specification A.2.
2. The discharger shall be required to take photographs of certain critical erosion areas from location, directions and time intervals specified by the Regional Board's Executive Officer.
3. In conjunction with the continued maintenance of the area, the discharger shall be required to report the amount of soil and debris hauled from the area and the location of disposal.

4. The monitoring and reporting requirements shall remain in effect until the threat to water quality of Wier Creek and Redwood Creek as a result of this operation is terminated. The Executive Officer shall renew these requirements annually.

NOW THEREFORE IT IS ORDERED that Order 75-180 is remanded to the Regional Board to adopt a monitoring and reporting program consistent with the above recommendations.

Dated: January 6, 1977

We Concur:

/s/ Roy E. Dodson
Roy E. Dodson, Member

/s/ Jean Auer
Jean Auer, Member

/s/ John E. Bryson
John E. Bryson, Chairman

/s/ W. Don Maughan
W. Don Maughan, Vice Chairman

/s/ W. W. Adams
W. W. Adams, Member

