Hatzimanolis 1972 34971 eedimemo CALIFORNIA FOREST PROTECTIVE ASSOCIATION NTY 1127 - 11th Street - Room 534 Sacramento, California 95814 ugh September 15, 1972 Ted Hatzimanolis 9/19/75 Īο Date to U.S. 299. Redwood National Park, Crescent City ugh September 22, 1972 -Dear-Teds Here is a copy of Dave Rogers' report on your hike down Redwood Creek in 1972. tzimanolis Note the www.xxxxxxx last paragraph. This is the quote picked up by Bob ZJones in the LA Times article. He made a couple very subtle changes in it -- you might want to compare this withthe articl.e. Do I recall correctly that you told me Rogers wrote his report independently of you? How come he put your name on it? e land adjacent to the Dennis Lee, fisheries biologist at Edureka office of state Fish and Game Dept. has a set of your photos that e timber companies. go along with your report, so I got a look at them there. 0% is owned by the U.S. ational Park Service. Fred passed along information that there are early studiessefremereributaries of Redwood Creek. I'm checking on them. d to the U.S.F.S. incerely ow Camp Mt., U.S. 299 ream, Redwood Valley C. R. Batten y Road parallels the U.S. 101, and Redwood e mouth of the creek. possible within Redwood foot travel the length ream bed. posed of easily eroded is occurring along about Date Signed Rediform Erosion other than 4S 465 SEND PARTS 1 AND 3 WITH CARBONS INTACT. PART 3 WILL BE RETURNED WITH REPLY. d except the upper two Poly Pak (50 sets) 4P465 wned by the National

Park Service and U.S.F.S. The total watershed comprises 278 sq. miles.

Vegetation: Cover for the most part consists of second growth timber and brush.

Condition: In much of the water shed reforestation is slow. Poor logging practices has and is causing severe damage to the watershed.

### REDWOOD CREEK - HUMBOLDT COUNTY

Date of Survey: September 12, 1972 through September 15, 1972 from Board Camp Summit to U.S. 299. September 18, 1972 through September 22, 1972 to the mouth.

Name of Surveyors: David Rogers and Ted Hatzimanolis

Stream Section: All

Tributary to: Pacific Ocean

Mouth Location: T.11N., R.1E., Sec. 32

- Ownership: Approximately 90% of the land adjacent to the stream is owned by large timber companies. Most of the remaining 10% is owned by the U.S. Forest Service or the National Park Service.
- Access: Public access is limited to the U.S.F.S. Friday Ridge Road on Snow Camp Mt., U.S. 299 where it crosses the stream, Redwood Valley where the Redwood Valley Road parallels the creek for seven miles, U.S. 101, and Redwood Creek County Park at the mouth of the creek. Legal access by foot is possible within Redwood National Park.

Source of Data: Personal observation by foot travel the length of the stream in the stream bed.

# Drainage Description

Topography: The slopes are steep and composed of easily eroded material of sedimentary origin. Sliding is occurring along about 50% of the slopes adjacent to the stream. Erosion other than sliding is general to the entire watershed except the upper two miles and a few isolated unlogged areas owned by the National Park Service and U.S.F.S. The total watershed comprises 278 sq. miles.

Vegetation: Cover for the most part consists of second growth timber and brush.

Condition: In much of the water shed reforestation is slow. Poor logging practices has and is causing severe damage to the watershed. Stream Conditions

Gradient: From the source to about 10 miles downstream the gradient varies from 60% in a roughs area near the mouth of Snow Camp Creek to 15% in the area outside the roughs. Average gradient for the upper 10 miles is about 25%. The remaining 55 miles average about 3% with long reaches of only 1% or less.

Flow: 6.5 c.f.s. in Redwood Valley was determined using the float method.

Altitude: From 4,700 feet where the stream originates near Board Camp Butte to the mouth at sea level.

Width: The stream averaged 15 feet wide in a 125 ft. channel.

Depth: 4 inch average

Water Chemistry: On September 14 at 0915 both the air and water temperature was  $60^{\circ}$ F. The results of a water chemistry test is as follows:

Dissolved Oxygen	9 p.p.m.
pH	9.1
Total hardness	239.4 p.p.m.
Phenol alkalinity	0.0
Free acid	0.0

Turbidity was not discernable except in a one mile reach below a logging operation near Pardee Creek. The above tests were made daily during the survey with no significant change from the headwaters to the mouth except a diurnal change in temperature.

# Habitat Suitability

Pools: Due to the tremendous amount of sediments pools are almost nonexistent except in the few roughs areas and where the creek impinges on bedrock or a rock outcrop. These pools seldom exceed three feet in depth and offer little cover to the few fish present. The riffle-pool ratio is probably no better than 50:1.

Food Organisms: A few small caddis fly larvae and beetles were seen. The main source is probably from terrestrial insects. The amount of fine sediments and unstable nature of the bottom precludes the production of large amounts of aquatic insects.

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Aquatic plants: Filamentous green algae, carax, juncas, willow, and alder were seen in small isolated patches.

Shelter: Almost none. There are no cut banks or overhanging vegetation. The few pools are shallow and generally have bottoms of sand and fine gravel. The best shelter noted was in the rough areas among the boulders.

Bottom: In the upper 10 miles boulders and rubble interspersed with gravel dominated the bottom. From 10 miles down to the vicinity of Redwood Valley cobbles and gravel set in sand and silt was the rule. Below Redwood Valley the sediments became finer until sand, silt, and pea gravel covered the channel for the lower 15 miles.

Spawning areas: Adequate.

Pollution: None, unless logging debris and logging caused erosion are considered pollution.

### Fish Life

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About .5 mile below the barrier salmonids were seen in a few isolated pools. These fish were six to eight inches long and usually one per pool. They may be resident trout.

About 1.5 miles above Pardee Creek the stream became constant flowing and more salmonids (about 20/100 feet) were seen. These fish were from 2.5 to 5 inches long and were assumed to be juvenile steelhead.

Below the upper 10 miles of stream fish sightings became fewer. In the mid and lower reaches there are mile long sections where no salmonids were seen. Just above and in the upper portion of Redwood National Park salmonid numbers increased slightly. In this area two 16 to 18 inch salmonids were seen. These were assumed to be land locked winter steelhead.

Over all Redwood Creek has little to offer resident trout or juvenile salmon and steelhead. A few suckers and sticklebacks were seen in the mid and lower portion of the stream.

#### Other Vertebrates

Observation of the animal or of the animals sign was made for: bear, dicamptodon, frogs, deer, elk, beaver, otter, racoon, squirrel, mice, great blue heron, buzzard, merganser, pintail,

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woodduck, kingfisher, quail, ravens, bluejays, woodpeckers, and various song birds.

# Fishing Intensity

No sign of trout fishing was noticed although it is known that fishing for steelhead and salmon occur in Redwood Valley and near Orick during the time when these fish are present.

# Other Recreational Use

Swimming as evidenced by summer dam use near U.S. 299 and in Redwood Valley. occurs. Camping in Redwood National Park was occurring.

Diversions: Several small pump diversions remove water for domestic use, tanker fills, and in Redwood Valley one pump diverts water for agriculture. When combined these diversions are not removing a significant portion of the flow.

Barriers: In T.4N., R.4E., Sec. 10 and 15, a 45 foot cascade, falls and a rough area comprise a complete natural block. Also above this point there is water in the stream only in the upper headwaters. Below the falls for the next three or four miles are debris jams which may be barriers at certain flows. The total volume of all the jams above U.S. 299 has been estimated to be two million board feet.

Winter Conditions: Extreme fluctuation with almost constant turbidity and an extremely heavy bed load. The flow on December 12, 1964 was 50,500 cfs.

# Comments

Redwood creek is not suitable as a trout stream. Steelhead production is severely limited and salmon production is reduced. The upper 10 miles is choked with logging debris, collapsed bridges, and sediment. In the remainder of the stream, aluvial deposits up to 30 feet deep were observed. All but about 5% of the original stream bank is buried. About 60% of the adjacent slopes are unstable or sliding. Approximately 80% of the immediate watershed has been logged in a manner detrimental to the stream.

Written by: David Rogers and Ted Hatz(manolis DR, TH:ah

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