PRELIMINARY DRAFT - SUBJECT TO REVISION

The Resources Agency

State of California

Memorandum

TO : William Imboden, Chief Dept. of Forestry & Fire Protection Date : December 27, 1988

FROM : Department of Fish and Game

SUBJECT : Timber Harvesting Plan (THP) 1-88-743 MEN, North Fork Schooner Gulch, Mendocino County

A preharvest inspection was conducted on December 12, 1988 from 1130 to 1530 hours. Participants included Russell Shively, RPF; Mike McKay, CDF; Julie Souma, Geologist; Marc Jamison, CDF; Pete Caferrata, CDF Hydrologist; Charles Greene, NCRWQCB; Mark Gary, Archeologist; Tom Schulz, RPF; Tom Daugherty, LP Fish Biologist; and Ted Wooster, ESS of DFG.

This plan will involve removal of timber from 610 acres using the shelterwood removal step. Harvesting will involve the use of tractors and long lining.

Questions have been raised as to what fish and wildlife resources are associated with this plan and how will the harvesting of timber, as proposed, affect these resources.

In order to address these questions, Tom Daugherty and Ted Wooster electrofished the North Fork of Schooner Gulch from the upstream end of the 48-inch culvert under the road up until no fish were found. The upstream limit of resident fish is shown in Figure 1.

Biological information gathered is as follows:

1. Fifty-foot long station upstream of the culvert

First Pass steelhead and/or resident rainbow trout 82mm, 79mm, 78mm weight 21ml

Second Pass steelhead and/or resident trout 80mm, 75mm, 80mm weight 20ml

Third Pass one giant Pacific salamander 117mm

<u>Stream</u>	Widths	Depths
0 feet	48 inches	3", 5", 8"
15 feet	62 inches	1", 3", 6"
35 feet	56 inches	5", 4", 3"
50 feet	50 inches	9", 7", 6"

Water temperature was 47° Fahrenheit at 1200. Canyon was foggy and wet. Discharge estimated at ± 0.2 cfs. Stream bottom was covered with layer of iron bacteria. The south facing slope is covered with tan oak and redwood. The north facing slope is covered with tan oak and Douglas fir.

Next we electrofished random pools -

 One pool under a log jam (ten by four foot area). We recovered the following steelhead and/or rainbow trout 130mm, 117mm, 75mm

Above this pool, a marsh has formed in the trapped sediments. The vegetation consists of horsetails, sword grass, reeds, and in the stream, "Indian rubarb." The flood plain at this spot is 42 feet wide with the stream being 4 feet wide within the 42 feet. There is no shading of the stream from commercial-sized trees at this point. I took color prints above and below this area.

I also checked the leave trees just above this area which are marked with a red circle. No trees are being removed which provide shade from 10 a.m. to 4 p.m. when shade is most valuable for maintaining lower water temperatures. The majority of the shade on the water comes from aquatic vegetation, large alders, young conifers, and woody debris.

3. Another pool, 30 feet long by 3 feet wide, with overhanging reeds was sampled.

We recovered the following steelhead and/or resident rainbow trout.

205mm (±8 inches), 128mm, and 97mm.

The area was within the red flags depicting LP property.

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4. Pool in front of log jam. Log jam was 8 feet high, composed of logs and other debris.

We recovered a 109mm and a 121mm steelhead and/or rainbow trout, and a 140mm giant Pacific salamander. Just upstream from this point, on the right bank looking upstream, is a rock slide which is providing angular rock to the stream system. The rock ranges from 1/4 inch to 5 inches in diameter.

My general observation of the stream and its fishery at this point is that the stream is cutting its way through a mass of historical silt and debris (± 10 feet in depth) and has stabilized at a lower productivity due to a lack of good aquatic insect production areas. (Clean gravel riffles are almost nonexistent.) The fish have handled so far large heads and thin bodies.

5. Six-foot diameter plunge pool below rocky bottom section of stream. The bottom of the pool was silt laden but also had sword grass and reeds overhanging into it.

One 175mm steelhead and/or resident rainbow trout.

6. Pool just below log jam marked as end of the Class I on the first preharvest inspection.

The following steelhead and/or resident rainbow trout were captured:

65mm, 78mm, 65mm, 39mm (1.6 inches), 102mm, 38mm (The 39mm and the 38mm fish could be from resident rainbow trout that had spawned in late August-early September after low flows had uncovered gravels in the riffles). These fish were fat compared to the previously observed ones. They were also very dark and matched their background.

7. Pool above log jam.

Steelhead and/or rainbow trout - 56mm, 138mm, 113mm, 52mm

Above this point, we only recovered young giant Pacific salamanders. The blue and white flagging that was hung across the stream is definitely above the point where we ran out of fish.

On the return trip, we again observed the trees to be left and the trees to be removed. None were noted that would result in direct loss of shade to the stream. Heavy browsing of small

William Imboden, Chief

Douglas firs (less than 3 feet high) by deer was noted, as well as 2 pole-size alders that bucks had been rubbing their antlers on. One rough skinned newt was also observed on the trial.

We also examined the water system above the culvert, which draws water from the ground adjacent to the creek and the two-inch line that draws water directly from the creek below the culvert. Both these water systems could adversely affect the fishery if they result in lowering further the low flow in the summer and fall.

The majority of the stream is protected from future side influxes of light sediments by a filter of marsh grasses, riparian vegetation (alders and willows), and duff. If <u>no</u> new slides and/or large sources of sediments to the Class II and III streams occur, through the recommendations of the geologist and CDF inspector, it is my professional judgment that the stream will continue to recover and, in turn, result in higher standing crops of salmonids. This process, however, may take additional years to recreate a V-shaped stream since the existing road and culvert act as a dam during high flow periods.

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Theodore Wooster Environmental Services Supervisor Region 3

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