Memorandum

To : File - Schooner Gulch

Date : January 9, 1990

From : Department of Fish and Game

Subject : Schooner Gulch, Mendocino County - Electrofishing Under and Above Highway 1 Bridge, November 9, 1989 with Bill Cox, Associate Fishery Biologist

We examined the stream below the Highway 1 Bridge first. Fresh deer and raccoon tracks were noted on the banks. In addition, two dusky footed woodrat houses were noted 25 feet from the north bank of the stream just 20 feet west Of Highway 1. We also heard an osprey. Water temperature at the Highway 1 Bridge was 11 degrees Centigrade at 1500 hours. The sky was clear with a light breeze.

We randomly sampled Schooner Gulch from the Highway 1 Bridge to 325 feet to the east. The following fish were recovered in one pass:

<u>Species</u>	<u>Fork</u> length	Condition <u>factor</u>	Species	Condition <u>Factor</u>
Steelhead	102 mm	average	Coast range sculpin	81 mm
"	110 mm	fat	" " "	72 mm
"	115 mm	lean	" " "	85 mm
"	91 mm	average	" " "	79 mm
"	144 mm	fat	" " "	79 mm
"	95 mm	lean	" " "	90 mm
"	105 mm	lean	" " "	
"	110 mm	average	3-spined stickleback	43 mm
"	95 mm	average		
"	90 mm	average		
"	92 mm	lean		

To depict a "condition factor" for the steelhead, we used the categories of lean, average, or fat.

We then proceeded downstream and electrofished a 170-foot section which starts 200 feet upstream from where Schooner Gulch joins the ocean. It is also just above the remains of an old log jam barrier that was removed in the early 1980's.

In one pass, we recovered the following:

Species	Fork length	Condition <u>factor</u>	Species	Fork <u>length</u>	Condition factor
steelhead	133 mm	fat	steelhead	117 mm	fat
"	210 mm	fat	"	102 mm	fat
"	145 mm	fat	"	200 mm	fat
"	115 mm	fat	"	137 mm	fat
"	178 mm	fat	"	111 mm	fat
"	127 mm	fat	"	100 mm	fat
"	138 mm	fat	"	130 mm	fat
"	115 mm	fat	"	113 mm	fat
"	150 mm	fat	"	134 mm	fat
"	138 mm	fat	"	103 mm	fat
"	143 mm	fat	"	117 mm	fat
"	149 mm	fat			

Also, one Pacific giant salamander - 76 mm

The condition of the fish was excellent. They were some of the fattest fish I have seen. We sacrificed the 111 ran steelhead to determine what they were eating. It had 50 saltwater scuds, 4 saltwater isopods, and 1 grub in its stomach. Throughout the section we shocked were piles of bull kelp, <u>Nereocystic leutkeana</u>, and sea palm seaweed, <u>Postelsia palmaeformis</u>. It appears that during high tides, uprooted seaweed is deposited in this estuary and generally trapped there in the pools. When the continuing flow of freshwater from Schooner Gulch turns the estuary back to freshwater, the marine organisms drop off and are fed on by the steelhead. Figure 1 illustrates the section shocked.

Theodor Whorth

Theodore Wooster Environmental Services Supervisor Region 3

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