State of California The Resources Agency

Memorandum

To : Mary Coburn **Date** : September 18, 1984

From : Department of Fish and Game

Subject: Notes on Virgin Creek, Tributary to New River, Trinity County - September 12-13, 1984.

About 1.5 miles of Virgin Creek was inspected from Six Mile Creek upstream to a large log jam downstream from trail crossing below Soldier Creek. The estimated flow above Six Mile Creek was about 6 cfs and the water temperature was 55°F at noon and 58°F at 1600 within the area surveyed. The ten pools encountered were inspected by face plate. Half of the pools were over 6 feet deep and the other half ranged from 2 to 5 feet. The substrate was clean and there was no evidence of dredging. Yearling steelhead appeared to be fairly numerous (5-20 per pool, 3"-4" long). Relatively few fish above this were observed. Three trout, perhaps residents ranging from 10 to 12 inches, were observed. Only one adult steelhead was noted, a fish about 17 inches long. Some fry were observed in shallows.

This reach of stream hadn't been surveyed since the early 1970's when the stream bed was severely aggraded by landslide debris from the 1964 flood.

Few pools existed during time of last survey and no adults were observed. Aerial photos indicate that much of landslide debris comes from the headwaters of Six Mile and perhaps Soldier Creek. The photos also indicate the presence of good habitat above the 2 story high log jam situated below Soldier Creek. There is an abundance of gravel, some good pools and a fairly low gradient channel above the jam, This reach needs to be surveyed to determine whether the jam is a barrier to adult fish and whether removal is warranted.

During the survey we observed that several large permanent camps occurred below Six Mile Creek and that a truck road crosses at the creek at this point. We also noted many recent tire tracks on the road.

Eric Gerstung
Associate Fishery Biologist

The New River tributaries of Virgin and Slide Creeks (including Eagle Creek) were visually surveyed on foot and by skin diving during the period of September 13-14, 1984.

The purpose of the survey was to assess summer steelhead habitat conditions, population abundance and distribution patterns. Two survey crews participated: Crew A – Kenneth Coop, Forest Fish & Wildlife Staff Officer; Joe Zustak, Fisheries Biologist; Crew B - Mary Coburn, Fisheries Biologist; Eric Gerstung, California Department of Fish and Came Biologist; Steven Coburn, Volunteer.

On September 12, 1984, Crew A surveyed the stream reach of Virgin Creek extending from Four Mile Creek downstream to New River. A total of 31 adult summer steelhead were counted, 25 of which were in a single deep pool (see attached map). Numerous juvenile rainbow trout - steelhead were seen in each pool, ranging from 3-l 2 inches in length, averaging about 4 inches length. Crew B surveyed approximately 1.5 miles of stream reach on Virgin Creek from Six Mile Creek upstream to a point below Soldier Creek, where an enormous log jam (25-30 feet high) was encountered. The log jam may be a complete barrier to upstream anadromous fish migration. A reconnaissance trip should be scheduled to assess the barrier to determine whether removal is warranted and feasible. Aerial photos indicate the two partial bedrock/boulder barriers, approximately 4-6 feet high (see attached map) should also be assessed to determine the desireability of removal. Crew B inspected about ten pools by faceplate and sighted one 17 inch adult summer steelhead, one 12 inch fish (possible half-pounder) and abundant juvenile rainbow trout - steelhead, similar in size to those noted by Crew A.

On September 13, 1984, Crew A surveyed a 2,000 ft. reach of Eagle Creek (see attached map). One pool in the reach was examined by faceplate. Several juvenile rainbow trout,-steelhead were observed and no adult steelhead were seen. Crew B surveyed Slide Creek from its confluence with Eagle Creek to a point upstream approximately 1 mile (to a point 0.3 miles below the mouth of Brushy Creek). About 18 pools, 3-6 ft. deep, averaging about 4 ft. deep, were examined with a face mask. One 12 inch rainbow trout - steelhead (possibly a half-pounder) was observed. Juvenile rainbow trout - steelhead (average 4 inches) were common (approximately 5-10 per pool), indicating that the area is used as nursery habitat.

The information from the aforementioned survey will be combined with data collected by the California Department of Fish and Game to estimate the total 1984 run of adult summer steelhead in the New River drainage.

The New River summer steelhead population appears to be the second largest in California, only surpassed by the Middle Fork Eel River population of approximately 2,000 adults per year. Because of its significance to summer steelhead, a Forest Service Region 5 sensitive species, New River should be monitored annually to assess habitat, population numbers, management concerns, and opportunities to restore and enhance the population through habitat improvement projects such as fish barrier removals.

Mary E. Coburn

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