DEPARTMENT OF FISH AND GAME POST OFFICE BOX 47 YOUNTVILLE, CALIFORNIA 94599 (707) 944-5500



September 29, 1989

Mr. Kevin McCoy c/o Gualala River Alliance P. O. Box 484 Gualala, CA 95445

Dear Mr. McCoy:

This is in response to your letter concerning human activities in the Gualala-Garcia river watersheds and their effects on fish and wildlife. The Department of Fish and Game is actively gathering background fishery information on these drainages to enable us to make informed recommendations on future proposed land activities.

Our files indicate the Garcia and Gualala river systems were subjected to some of the most damaging logging shows in the early 1950's and periods previous to the 1950's. In some cases, the streams were buried in ten feet of silt and cull logs. For example, in the notes taken of an August 18, 1964 stream survey of the South Fork of Fuller Creek it states, "The stream is almost a total log jam consisting of large logs, slash, and debris from logging operations. There are over 40 partial barriers present. The entire South Fork is heavily polluted by logging damage." Since that time, the streams have begun to recover. In some areas, the streambed has cut through up to ten feet of sediment, etc.

On August 2 and 3, 1989 Associate Fishery Biologist Bill Cox and Environmental Services Supervisor Theodore Wooster carried out electrofishing efforts on the South Fork, North Fork, and the Main Branch of Fuller Creek.

One electrofishing station was located on the mainstem of Fuller Creek just upstream of the ford on the entrance road from the Hollowtree store and the county corporation yard. A second station was located on the South Fork of Fuller Creek upstream of the confluence of the North Fork. A third station was located on the South Fork just upstream of the falls (a complete barrier to the passage of steelhead), and a fourth station was located on the North Fork just upstream of the confluence with the South Fork.

In all the stations, except upstream of the falls on the South Fork, they found young-of-the-year and age 1+ steelhead, western roach, and three-spined stickleback. In the South Fork upstream of the North Fork, they found one prickly sculpin. Above the falls on the South Fork, they found only resident rainbow trout. Yellow legged frogs were abundant at all the stations as were a variety of aquatic invertebrates, including freshwater snails, water striders, water pennies, stone flies, and caddis flies. Aquatic food production appeared to be very good.

Throughout most of Fuller Creek, the banks are relatively unstable and support very little riparian vegetation. As mentioned earlier, surveys in the early 1960's found a large number of log jams in the stream. Most of the log jams have washed out or been removed, and the trapped sediment in mid-channel has washed downstream. Much of the stream bank, however, still shows signs of the trapped sediment which forms the unstable and sparsely vegetated bank. The few remaining logs from the old jams now form the primary structure for fish habitat in the stream.

A significant feature of Fuller Creek is the old logging road which now provides the only access to the development in the Fuller Creek watershed. This road is built immediately adjacent to the bank of the creek and severely limits the potential for development of streamside vegetation. Maintenance of the road probably contributes significant quantities of fine sediment to the creek.

The steelhead population estimates, per 100 feet of stream, based on this survey are: 82.7 in the mainstem of Fuller Creek, 53.3 in the South Fork of Fuller Creek upstream of the North Fork confluence, 17.5 in the South Fork above the falls, and 82.2 in the North Fork just upstream of the South Fork confluence.

These population data represent only the specific sites sampled which may, or may not, be representative of the entire reach. It is also important to point out that the young steelhead were found mostly in close association with structural elements (usually large pieces of wood) which were found at irregular intervals along the stream. Most of the space between these structural elements were shallow, unshaded, and populated mainly by the western roach and stickleback. Any particular location could have more or less habitat than the sites chosen for sampling.

Because of the importance of large woody debris as fish habitat (there is virtually no other fish habitat in Fuller Creek) and because of the benefits provided by the large woody debris in slowing the downstream movement of the trapped sediments and stabilizing the banks of the stream, very careful consideration should be given to the potential impacts of removing any "log jams."

The Department will be continuing to monitor Fuller Creek to assess any impacts from the current logging. In addition, permanent sampling stations are being set up in the North Fork Garcia River in cooperation with R&J Lumber Company and the North Coast Water Quality Control Board. In 1990, we plan on re-examining and expanding the stations that were not set up in the remainder of the Garcia drainage in the summer and fall of 1987. We appreciate the concern which you and your organization have shown in this watershed and hope to involve you and/or other private individuals in our future sampling programs.

Sincerely,

Brian Hunter Regional

Manager Region 3