FISH HABITAT IMPROVEMENT COMPLETION FORM $\mbox{REGION 3}$

Stream or Lake NameS.B.N.F. Navarro River Tributary toNavarro River_
CountyMendocino Township15N Range 14W Section 19, 18 ¼S
Section of stream workedvarious
Sponsor Fish And Game Work crewNew Growth Forestry
Landowner name, address, phone #Timber Realization Company
Calpella, CA
Project duration11-83 - 5-84 Man-days expended(dates)
Source of fundingAFB Project 175 Total cost\$25.000.00
Project benefit Fish Passage Species affectedSH
Number of jams removedApprox 30 Number that were barriers15
Cubic yards of material removed Amount of sediment
Miles of stream opened Miles improved
Methods usedChainsaws and hand work, Burning
Further action recommendedfollow up
Location of maps and photos
Additional comments, explanations, or details:

FINAL REPORT – NAVARRO RIVER, SOUTH BRANCH, NORTH FORK

All work has been successfully completed on this project. The major barriers along the main stem were removed in November and December of 1983. Work in the upper portion of the drainage was completed in May and June of 1984. Approximately 2/3 of the work was not accessable by winched vehicle. Most of these sites were in the lower main stem. Although the river is near a forest haul road for most of the project area, the distance above the river to the road was prohibitive for mechanized winching systems on all the larger main stem barriers, with one exception.

Rainfall in November and December of 1983 was heavy and consistent. Work had to be timed precisely around storms and high water. For the most part, the high running water was helpful in loosening logs from barriers. All materials on the sites that were worked by hand were burned except for the very lowest jam where the river is large enough to handle some flushed material.

Despite heavy storm events, marginal road conditions and a very soggy camp, work continued right up to the December 15, 1983 cut off date which had been established by the Department. The average size crew for the winter work period was six people. Wet suits were regular attire for up to half the crew at most sites. The two largest barriers required full crews five days to complete, including burning. A base camp was established on site to take maximum advantage of short daylight hours, and to avoid the long commute from Ukiah.

Work resumed in the upper Navarro watershed in May 1984. The main stem branches into several tributaries in its upper reaches namely, Rose Creek, McGarvey Creek, Hardscrabble Creek, Low Gap Creek, Soda Creek, and what is referred to as the main stem. The main barriers in this upper region were in a 3/4 mile stretch along the main stem, and also two on Low Gap Creek. Most of these barriers were accessible four wheel drive winched vehicle. Utilizing various cable rigging systems, all barriers were removed or

modified in accordance with Fish and Game specifications. These modifications were disigned to be sufficient to allow passage, but also to leave as much secure wood material as possible in the. stream. Most material was winched well above high water line. Some burn piles were made at the least accessible sites, and these were burned in November 1984 to complete the entire project.

The Navarro project has opened the largest amount of habitat of any of our barrier removal projects to date. The main stem flow at the lowest barrier is larger, but comparable to the flow at the lower barrier on the Garcia River. However, accessible habitat on the Navarro above the project site is many times greater than the Garcia. Landowners in the upper reaches were well aware of the barriers that existed and were enthusiastic about the potential of the project to restore historic runs. New Growth received cooperation in this project from Louisiana Pacific Corporation, Timber Realization Corporation, and access rights from one private land owner.

LITTLE NORTH FORK, NAVARRO RIVER C-455

The Little North Fork is a major tributary to the North Fork of the Navarro River. Access to this system had been completely shut off by a massive slide near the mouth which had existed for several years prior to 1982. High flows of 1982 washed out the base of the slide and re-opened the upper watershed which enabled this project to occur.

Work was performed at several entries in summer and fall of 1984, with final burning taking place in November 1984. Most barriers were easily accessible by four wheel drive winched vehicle. For this reason, dry season was the ideal time for work on this project. The close proximity of the road to the river, allowed for rapid cable pulling without elaborate rigging in most cases. All barriers were removed or modified to allow passage thereby opening some five miles of habitat.

New Growth received the cooperation of Timber Realization Corporation in undertaking this project.