

DROUGHT EVALUATION REPORT  
ANADROMOUS FISHERIES  
REGION 1EXHIBIT  
TRINCO 36

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INTRODUCTION

TRINITY COUNTY PLANNING

A great deal was learned regarding the impact on fish during the 1976-77 drought, the worst in history. Various strategies were employed to ease the impact and considerable information was acquired to cope with future similar conditions. However, the overall effects of the drought won't be known for several years, particularly on anadromous fish. A spirit of cooperation and helpfulness prevailed between the Department and other agencies and concerned individuals.

ANADROMOUS HATCHERIES

The Trinity River Hatchery was beset by extremes in water temperature in 1977 which adversely affected both steelhead and king salmon. Temperatures reached a high of 71°F, compared to 55 to 57 degrees, which is the normal range. Losses of steelhead and salmon is usually minimal but in 1977 mortalities were about 500,000 yearling salmon and 200,000 advanced steelhead fingerlings. King salmon were mostly affected by gill bacteria while Columnaris was the principal disease contributing to the loss of steelhead. Aggravating an already trying situation was the lack of space into which fish could be thinned. Half the rearing ponds were dewatered because of construction work on the settling pond. During the second week in September cooler water was released into Lewiston Lake by the Bureau of Reclamation reducing water temperatures to about 60° and thus eliminating the disease and loss problems. Drought conditions affected the spring run of king salmon to the extent that low river flows made the fish much more vulnerable both to legal sport fishing and the ever present illegal poaching.

Preparations for planned 1977 king salmon trapping and tagging operations in the upper Trinity River were completed as scheduled.

A paneled, V-type weir, consisting of wooden frames overlaid with 5-cm (2-inch) square welded wire fencing material, and a 3-m (10-ft) square, 1.2-m (4-ft) deep fyke trap, framed with wood and overlaid with 5-cm (2-inch) chain link fencing were constructed. The fyke trap was designed to fit the upstream apex of the

It was feared that substantial losses of spring-run kings holding in the upper Trinity could occur if river temperatures reached or exceeded the predicted highs, and that following through with the planned spring trapping activities might add to the problem. Since the Task objectives could not be met fully by tagging only fall-run king salmon, it was decided to postpone that phase also and reschedule the entire program again in 1978.