

PROGRESS REPORT - November 1987

Fish Management Plan - Mann Lake

- Management plan adopted by the Commission 1980

- Objectives are being met:

(1) The egg take is biennial.

(2) Legal trout must be in excess of 16 inches.

L2-20/j

1980 adopted

FISH MANAGEMENT PLAN

MANN LAKE

Oregon Department of Fish and Wildlife
Fish Division
November 1980

TROUT MANAGEMENT PLAN

MANN LAKE

INTRODUCTION

Mann Lake is a shallow, productive, natural lake on the east side of Steens Mountain, about 38 airline mi north of Fields and 65 airline mi southeast of Burns (Fig. 1) at an elevation of 4,200 ft. Road access is via east Steens County Road. The Bureau of Land Management (BLM) manages the land surrounding the lake, except for a small tract on the southern end.

In September 1980, the Oregon Fish and Wildlife Commission accepted the Department's recommendation to continue to manage Mann Lake with hatchery cutthroat trout. They also adopted regulations restricting terminal tackle to artificial flies and lures with barbless hooks and a daily bag of 2 trout, minimum length of 18 inches.

HABITAT

Surface acreage of Mann Lake fluctuates from 275 downward to 0. All of the lake is shallower than 15 ft and averages about 8 ft. Mann Lake is productive but the water is in the 70's during the summer and the aquatic vegetative growth may be luxuriant. It is possible to lose trout during the summer due to high temperatures and low dissolved oxygen.

FISH POPULATIONS

The Department began stocking cutthroat in 1957; two subspecies of Lahontan cutthroat are native to the Alvord Basin--one is presumed extinct and the other is a stream form restricted to Willow and Whitehorse creeks. The 1957, 1958, and 1959 releases were Summit Lake, Nevada, lake-dwelling native Lahontans. Heenan Lake, California, cutthroat stock, originating from the Carson River but slightly hybridized with rainbows, was released in 1960, 1961, 1965, 1973, and 1974. Utah cutthroat were stocked in 1969. Dry water years in 1962-64, 1966-68, 1970, and 1971 allowed no stocking. Rainbow trout were stocked in 1965, 1972, and 1975 because cutthroat were not available. Since 1976, annual releases of cutthroat, from a stock developed at Mann Lake, have been made and at present the trout population is almost entirely cutthroat.

Annual egg-takes since 1975 have ranged from 199,000 to 1,000,000. The low egg-take was in 1977 and reflected the lack of 3-year-old fish (no cutthroat stocked in 1975). The problem was further compounded when only 8,500 were available for stocking in 1978. Numbers and size distribution noted during the 1980 spring egg-take, however, appear favorable primarily as a result of nonconsumptive cutthroat fishing regulations imposed in 1979 and 1980.

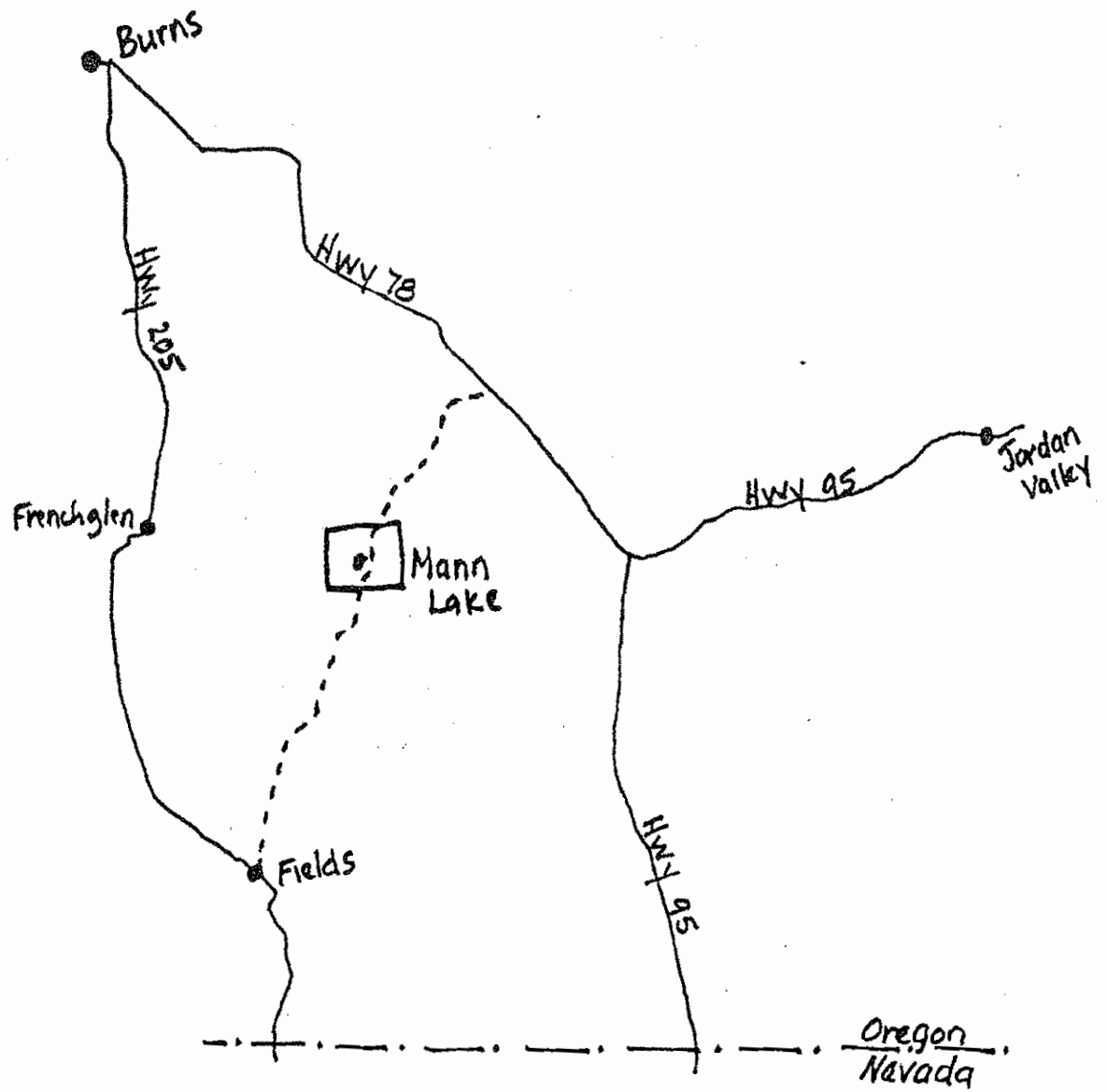


Fig. 1. Area Map

scale 1" = 2.1 miles

Several small maturing cutthroat were seen in the spring of 1980, cutthroat apparently that have moved downstream from Mann Creek. We are concerned about these small sized sexually maturing fish, since most trout in Mann Lake mature when they exceed 14 inches long.

FISHERY

Mann Lake has been open to year-round angling since 1963. A good fishery has existed with about 0.6 trout/h landed since the early 1970's and most trout have been in excess of 12 inches. In 1979 and 1980, fishing was restricted to "catch and release" because of shortages in particular age groups and their impact on the annual egg-take.

Angling pressure, as tallied by a BLM car counter, reached a high of 3,350 cars in 1978. It dropped to 714 cars in 1979 (79% reduction) because of the restrictive regulation and will probably continue at that level through 1980.

DISCUSSION

We have been managing Mann Lake with cutthroat trout, several releases of which were Lahontan stock--the largest and most highly predacious trout native to Western North America. Cutthroat are native to the Basin and we have demonstrated that a good trout fishery can be provided.

Since 1975, we have been taking cutthroat eggs at Mann Lake primarily to restock that lake but also to provide stock for other eastern Oregon waters. There has been little public concern sounded toward the annual egg-take, but a number of anglers have expressed dissatisfaction with the restrictive fishery in 1979 and further restrictions in 1980. We share their concern and anticipate allowing a consumptive fishery when populations appear adequate. We are also considering an alternate source for eggs which will reduce or eliminate the need for brood stock from Mann Lake.

OBJECTIVES

1. Provide a brood stock for an annual egg-take until another brood stock has been developed.
2. Provide a landing rate of 0.5 trout/h with most trout in excess of 12 inches long.