

PROGRESS REPORT - November 1987

Fish Management Plan - Metolius River

- Management plan adopted by the Commission 1981

- Objectives are being met. In addition, angling regulations require unmarked trout to be released, a 10 year habitat improvement program is underway, hatchery trout have been deleted from the area above Camp Sherman bridge, bull trout populations are being improved, and an information report is due in the near future.

L2-20/j

adopted 1981

FISH MANAGEMENT PLAN

METOLIUS RIVER

Oregon Department of Fish and Wildlife

Fish Division

November 1981

FISH MANAGEMENT PLAN

METOLIUS RIVER

INTRODUCTION

The Metolius River (Fig. 1) is a major tributary to the Deschutes River and courses through an extremely popular recreation area. It is roaded almost its entire length, and is located a short drive off U.S. Highway 26. The stream is a favorite of many trout anglers.

The Oregon Department of Fish and Wildlife (Department) is currently managing the Metolius River from Lake Creek to Candle Creek (11 miles) with annual releases of hatchery yearling rainbow trout. In July 1981, the Oregon Fish and Wildlife Commission accepted the Department's recommendation to continue to manage the Metolius River for wild and hatchery trout.

HABITAT

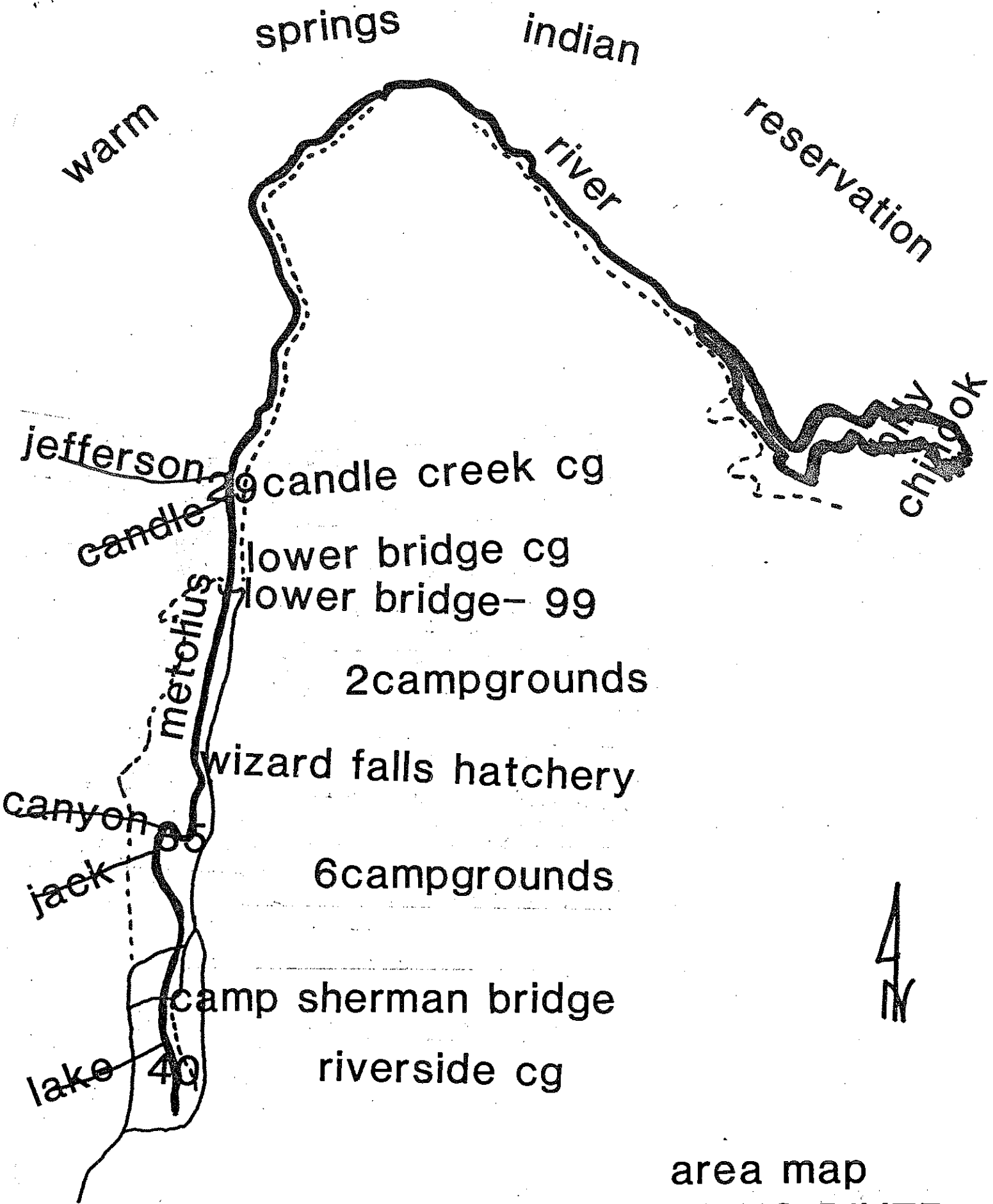
The Metolius River from its source to the head of Round Butte Reservoir is 28 mi long and averages 50 ft wide. Prior to reservoir formation, the river was 41 mi long. It is stable with an average flow of 1,500 cfs (measured near RM 12). The river drops at an average gradient of 35 ft/mi.

Springs at the head of the river are 48F, but tributaries contribute about 89% of the stream flow and several are 40F spring fed. Consequently, the stream cools to a 45F average opposite Wizard Falls Hatchery. The cold temperatures are not optimum for high productivity and rapid trout growth. Metolius River conductivities average about 80 micromhos as compared to 150 in the Lower Deschutes; optimum trout growth could be expected at about 150.

Most of the trout spawning gravel is located above Camp Sherman and it is limited in the tributaries. Much of the river is fast moving with few pools and shelter is lacking. Between 1963 and 1967, the US Forest Service fell 74 snags into the river below Bridge 99 to create additional pool area and cover.

FISH POPULATIONS

The Metolius River and tributaries were first stocked in 1938 with rainbow fingerlings after complaints of poor fishing; and yearling trout were first stocked in 1947, and we currently release approximately 40,000 yearlings annually, averaging about 3 fish/lb. Trout are released weekly (mid April through early September) from the mouth of Lake Creek (RM 40) downstream to Candle Creek (RM 29). One private resort also stocks about 1,600 legal trout per year at RM 36.



area map
METOLIUS RIVER

Wild rainbow trout presently constitute a small portion of the total fish population. Only 307 were noted in the estimated sport catch of 14,369 fish in 1976. Hatchery rainbow provided 96% of this catch. A snorkel survey from Camp Sherman to Allingham (1 mi) on April 18, 1981, counted 666 fish of which 41 (6%) were wild rainbow trout. On April 21, 1981, a snorkel survey of three miles from Wizard Falls to Bridge 99 counted 2,247 fish of which 6 (0.3%) were wild rainbow. Whitefish made up 79% of the population above Allingham and 95% from Wizard Falls to Bridge 99.

Dolly Varden are present but declining in abundance. Few have been caught with electrofishing sampling gear in the closed headwater area or in tributaries and few have been seen in scuba surveys above Bridge 99. Dolly Varden were trapped and removed from some tributaries in the late 1930's because of predation on salmon. Possibly part of their life history involved downstream migrations into the larger Deschutes River, which they are now denied because of Lake Billy Chinook. Brown trout are present, and their numbers appear to be increasing. Brook trout are only occasionally seen. Portions of the main stem and most tributaries are extensively used for spawning by several thousand kokanee which migrate upstream from Lake Billy Chinook or downstream from Suttle Lake. Suckers, which are numerous in Lake Billy Chinook, are found in the deeper pools in the Metolius River and are scattered throughout the system.

Steelhead never used the Metolius River, but spring chinook spawned there until they were cut off by Round Butte Dam on the Deschutes. Spawning ground counts were made through 1966.

FISHERY

The river can be waded in many areas and access is generally good, but boat angling is prohibited. There is some private property with restricted public access between the source of the river and Bridge 99.

The river above Bridge 99 is restricted to fly angling only and portions of it have had such a restriction since 1939. A catch and release regulation (barbless flies) was imposed in 1968 on a 1/2 mile section of the stream above Camp Sherman. The regulation reduced angling pressure, but it was not popular and was removed in 1969.

A statistical creel program was conducted by the Department from May 20 through September 9, 1976, (114 of the 190-day season) to assess the yearling trout stocking program and determine angler use. A 47% catch of stocked fish was realized by the 38,000 anglers who fished 50,000 h. About 96% (13,727) of the total catch was hatchery rainbow. The remaining 4% was noted as 307 wild rainbow, 72 Dolly Varden, 82 whitefish, and 181 brown trout. The hatchery fish showed little movement and 69% of those caught were taken within 5 days of release. Approximately 33% of the anglers fished in the bait area below Bridge 99.

DISCUSSION

The Metolius River was originally primarily a producer of spring chinook salmon. Beginning in 1938, hatchery trout were superimposed on the salmon population. The salmon were eliminated by the construction of Round Butte Dam on the Deschutes River. We do not know magnitude or composition of the trout population in the Metolius before 1938 (the beginning of trout stocking), but there were certainly fewer anglers. Complaints of poor fishing, Department studies verifying low trout populations, and local agitation resulted in construction of Wizard Falls Hatchery to produce trout specifically for the Metolius River, and other waters.

Thousands of people now use this recreation area. There are 12 campgrounds, 108 summer homes, and 6 resorts along the river. Aesthetics, modern campgrounds, pleasant weather, paved access, summer homes, viewing of the springs at the head of the river, the large rainbow trout at Camp Sherman Bridge, Wizard Falls Hatchery, and challenging trout angling combine to create a tremendous amount of use along the Metolius, especially the upper 10 mi. A US Forest Service estimate in 1980 showed 74,300 visitor days in the campgrounds alone.

The present trout program provides an opportunity for a large number of anglers to fish with a reasonable chance of success. However, a high percentage of the anglers do not catch trout in spite of the annual stocking of about 40,000 hatchery fish. Crystal clear water, fly angling only, high angler density, and rapid angler turnover contribute to the lack of success.

OBJECTIVES

1. Determine the feasibility of enhancing wild trout populations.
 - a. Protect wild trout by marking all hatchery trout and requiring the release of all unmarked trout.
 - b. Determine the value of discontinuing stocking in a study area near the head of the river.
 - c. Determine the feasibility of improving trout habitat in the study section.
2. Maintain a fishery which provides opportunity for anglers to catch and keep trout.
3. Encourage catch and utilization of whitefish.
4. Determine user preferences on the Metolius River.
5. Initiate a public information program regarding fish management in the Metolius River.
6. Coordinate our fish management plan for the Metolius River with the Warm Springs Indians and US Forest Service.
7. Conduct a study in the area above Camp Sherman.