Progress Report - October 29, 1987

- Trout plan lower 100 miles Deschutes River
  - Management plan adopted by the Commission 1978

  - Management objectives are being met except:
    3(a) The lower end of the range has dipped below 1500 trout per mile in the Nena Creek sample site. Fifty percent of the spring-sampled trout are not larger than 12 inches in length.
    (b) We have not sampled above and below the Warm Springs River for several years.

A TROUT MANAGEMENT PROGRAM FOR
THE MAIN STEM LOWER DESCHUTES RIVER
(RIVER MILE 0 TO 100)

INTRODUCTION

The Deschutes River is a north flowing tributary of the Columbia River in Central Oregon and is a designated scenic waterway (Figure 1). Summer run steelhead and resident trout are the most important species to the local recreational fishery, although significant numbers of spring, summer, and fall chinook are also taken from the river. The salmon contribute significantly to fisheries in the Pacific Ocean and Columbia River and steelhead enter fisheries in the Columbia. The Deschutes also supports a good population of whitefish, lesser numbers of other trout species, small runs of coho and sockeye salmon, and several species of nongame fish.

HABITAT

A wild trout population is a product of its environment, and chemical and physical parameters are important. Productivity, as measured by conductivity readings, is high in the Deschutes. Growth of fish subsequently is rapid. Stream gradient is relatively uniform and averages ~~ages~~ 13 feet of drop per mile. The average stream width is 225 feet. Water temperatures range from 35° to 68°F. Riparian vegetation varies from poor to good. Sherar Falls is the one major barrier and it is laddered. Spawning gravel is adequate, but the distribution (as evidenced by rainbow redd counts) is uneven. The Deschutes has historically been a stable stream. Minimum streamflows of 3,500 CFS (March-June) and 3,000 CFS (July-February) have been specified below Pelton Dam, completed in 1958. Water quality is good throughout the year.

The Deschutes is a large productive stream and its habitat is capable of producing an excellent trout population.

FISH POPULATIONS

Status

Rainbow trout are found throughout the entire 100 miles of the Deschutes River below Pelton Dam. Large numbers of other fish species are present, and to some degree compete with trout for living space, food, shelter, and spawning gravel. Population estimates of trout two years old and older range from 1,00 to 2,500 per mile. Statistically there has been little change in population estimates per sample site over the past several years.

Growth rates

Growth is good but slows as trout mature. Trout are recruited to the fishery (12 inch minimum) during their third year of life.

Size and age at maturity

Most trout spawn from mid-May to mid-June at three years of age and 12 inches in length, but immature fish are present in some numbers in the 3 and 4 year age classes.

FISHERY

Public access ranges from limited to good. Of the 200 lineal miles of frontage, the Bureau of Land Management controls 86 miles; Warm Springs Indians 34 miles; State 30 miles; and private ownership the remaining 50 miles. Primary vehicle access is from Macks Canyon (RM 24) to the Deschutes club gate (RM 59). Several vehicle point access sites are also available.

The trout season begins in late April and continues through October. Angler pressure is not heavy and most trout are released.

Angling is not permitted from a boat, and motor-propelled craft and are not permitted above RM 68. Since 1979 only artificial flies and lures have been allowed.

MANAGEMENT OBJECTIVES

The following management objectives are exclusive of those for steelhead and salmon:

1. Maintain and/or improve riparian habitat.

2. Encourage voluntary catch and release angling.

3. Produce more larger and older trout:

    A. Achieve a range of 1,500 to 2,500 trout per mile (2 years old and older) in the Nena Creek sample site. Increase to at least 50% the trout over 12 inches long caught in sampling at the Nena Creek site. Trout caught that are less than 10 inches in length will not be included in the percentage under 12 inches.

MANAGEMENT PROGRAM

The lower 100 miles of the Deschutes River will be managed for wild trout only.

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adopted 1978

A TROUT MANAGEMENT PROGRAM FOR THE MAIN STEM LOWER DESCHUTES RIVER (RIVER MILE 0 TO 100)

INTRODUCTION

The Deschutes River is a north flowing tributary of the Columbia River in Central Oregon (Figure 1). Summer run steelhead and resident trout are the most important species to the local recreational fishery, although significant numbers of spring, summer, and fall chinook are also taken from the river. The salmon contribute significantly to fisheries in the Pacific Ocean and Columbia River and steelhead enter fisheries in the Columbia. The Deschutes also supports a good population of whitefish, lesser numbers of other trout species, small runs of coho and sockeye salmon, and several species of nongame fish.

HABITAT

A wild trout population is a product of its environment, and chemical and physical parameters are important. Productivity, as measured by conductivity readings, is high in the Deschutes. Growth of fish subsequently is rapid. Stream gradient is relatively uniform and averages 13 feet of drop per mile. The average stream width is 225 feet. Water temperatures range from 35° to 68°F. Riparian vegetation varies from poor to good. Sherar Falls is the one major barrier and it is laddered. Spawning gravel is adequate but the distribution (as evidenced by rainbow redd counts) is uneven. The Deschutes has historically been a stable stream. Minimum streamflows of 3,500 CFS (March-June) and 3,000 CFS (July-February) have been specified below Pelton Dam, completed in 1958. Water quality is good throughout the year.

The Deschutes is a large productive stream and its habitat is capable of producing an excellent trout population.

FISH POPULATIONS

Status

Rainbow trout are found throughout the entire 100 miles of the Deschutes River below Pelton Dam. Large numbers of other fish species are present, and to some degree, compete with trout for living space, food, shelter, and spawning gravel. Population estimates of trout 2 years old and older range from 1,200 to 2,500 per mile. Statistically there has been no change in population estimates per sample site over the past several years.

Growth rates

Growth is good but slows as trout mature. Trout are recruited to the fishery (12 inch minimum) during their third year of life.

Size and age at maturity

Most trout spawn from mid-May to mid-June at three years of age and 12 inches in length, but immature fish are present in large numbers in the 3 and 4 year age classes.

FISHERY

Public access ranges from limited to good. Of the 200 lineal miles of frontage the Bureau of Land Management controls 86 miles; Warm Springs Indians, 29 miles; and private ownership the remaining 85 miles. Primary vehicle access is from Macks Canyon (RM 24) to the Deschutes club gate (RM 59). Several vehicle point access sites are also available.

Approximately 20,000 yearling hatchery rainbow have been stocked in a 2-mile section above Warm Springs Bridge, and 41,000 into a 7-mile section near Maupin through 1978.

The trout fishery begins in April. Pressure has varied by area, apparently a result of access and various angling regulations. The two areas stocked with hatchery trout have shown returns of 1,500 to 4,900 hatchery trout per mile coupled with use estimates of 3,900 to 13,000 angler trips per mile. A non-stocked area, South Junction, showed 1,270 wild rainbow landed (kept or released) per mile and 325 angler trips per mile from statistical sampling in 1978. Use was down during 1978 since the summer steelhead season was closed.

Angling is not permitted from a boat, and motor-propelled craft are not permitted above RM 68.

MANAGEMENT OBJECTIVES

The following management objectives are exclusive of those for steelhead and salmon:

1. Maintain and/or improve riparian habitat by working closely with land management agencies.

2. Encourage voluntary catch and release angling.

3. Produce more larger and older trout:

    a. Achieve a range of 1,500 to 2,500 trout per mile (2 years old and older) in the Nena Creek sample site. Increase to at least 50% the trout over 12 inches long caught in sampling at the Nena Creek Site. Trout caught that are less than 10 inches in length will not be included in the percentage under 12 inches.

    b. Maintain existing trout numbers per mile at the sample sites above and below the Warm Springs River.

MANAGEMENT PROGRAM

The lower 100 miles of the Deschutes River will be managed for wild trout only. Angling regulations for 1979 are: two fish daily over 12 inches in length; artificial flies and lures only, except for the section between the mouth of Buckhollow Creek and Sherar Falls where bait will be allowed.

Fish Division
Oregon Dept. Fish & Wildlife
April 6, 1979

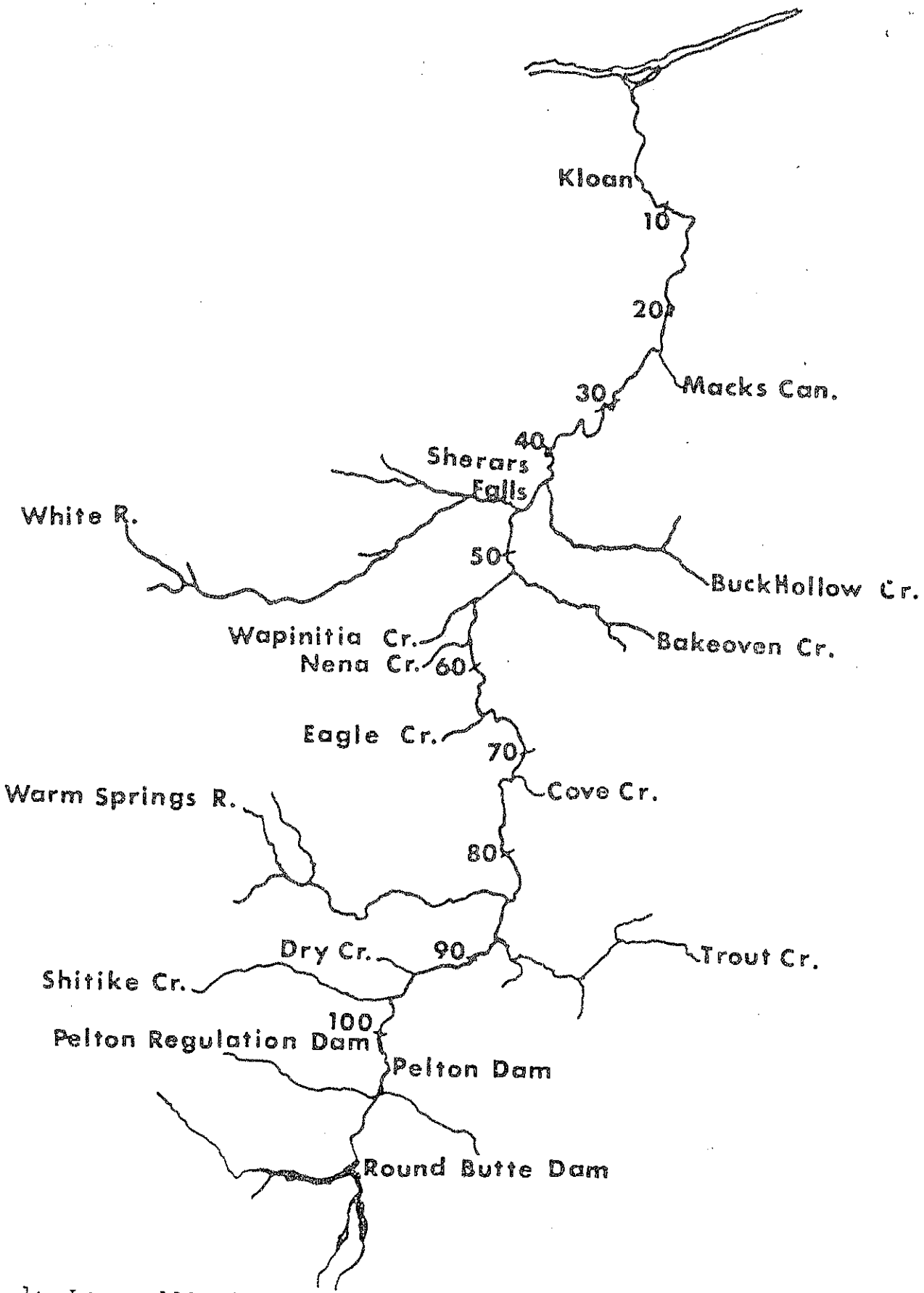

Fig. 1: Lower 100 miles of the Deschutes River.