

1994 Canyon Creek  
Adult Summer Steelhead and Spring Chinook Salmon Survey

REF 90444

Shasta-Trinity National Forest  
Big Bar Ranger District  
Canyon Creek

August 17, 18, 19, 23, and 24, 1994

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Canyon Creek is a tributary of the upper Trinity River. The headwaters lie within the Trinity Alps Wilderness and it then flows in a generally southerly direction through steep mountainous terrain to the mainstem Trinity River at Junction City.

Two crews surveyed approximately 15 miles of Canyon Creek by direct observation, snorkeling in August of 1994 targeting adult summer-run steelhead (Oncorhynchus

mykiss) and spring-run chinook salmon (Oncorhynchus tshawytscha). We began the survey at the Sinks, located below Lower Canyon Creek Falls, and proceeded downstream to the confluence with the mainstem Trinity River. The Sinks is a barrier above which anadromous fish cannot go. ←

We searched all habitats thought to hold adult steelhead or salmon and recorded all adult fish seen along with the corresponding habitat types on topographic maps (attached). The reach labels (see attached maps) were designated in 1990 and most correspond to actual daily swimming reaches (i.e. the area surveyed by one crew in one day).

We did not take the time to get accurate counts of juvenile fish, but rather noted general numbers as well as general information on other fish and wildlife species seen.

### Observations

Table 1 presents the results of this survey broken out by reach and Table 2 presents the results broken out by habitat type. Descriptions of observations at each reach follow:

#### Reach A

We saw 6 adult steelhead and no adult salmon within this reach. All adult steelhead were in either main channel or step pools. This section of the creek is characterized by having unusually large, round boulders in the channel, along with a section, the Sinks, having subsurface flow. The water was especially low this year with little flow through the Sinks area. We saw modest numbers of juvenile rainbow trout and steelhead in the lower portion of the reach ranging in size from 0+ to 2+. At 1400, August 23, the air temperature was 84°F. The water temperature ranged from 55°F at 1000 to 64°F at 1400.

#### Reach B

We saw 8 adult steelhead and no adult salmon within this reach. All steelhead were in bedrock formed lateral scour pools or step pools. This stream section is also characterized by large boulders, though somewhat smaller than the previous Section A. We saw numerous juvenile rainbow trout and steelhead in size classes from 0+ to 2+. The air temperature at 1400, August 17, was 88°F. The water temperature ranged from 63°F at 1010 to 69°F at 1400.

#### Reach C

We saw 9 adult steelhead and no adult salmon within this reach. All steelhead were in either main channel or bedrock formed lateral scour pools. We saw numerous juvenile (0+ - 2+) steelhead and rainbow trout and a small number of juvenile (0+) coho and chinook salmon. This is the first section where we saw salmon. At 1250, August 18, the air temperature was 84°F. The water temperature ranged from 62°F at 0930 to 67°F at 1250.

#### Reach D

We saw 8 adult steelhead and 3 adult chinook salmon within this reach. All adults were in either bedrock formed lateral scour pools or back-channel pools. We saw numerous juvenile rainbow trout and steelhead and a small number of juvenile chinook and coho salmon. We gathered no temperature data this day (August 19).

#### Reach E

We saw 7 adult steelhead and 2 adult chinook salmon within this reach. All adults were in bedrock formed lateral scour pools. We saw numerous juvenile rainbow and steelhead, a small number of juvenile chinook salmon, and no coho. At 1300, August 24, the air temperature was 85°F. The water temperature ranged from 65°F at 1100 to 72°F at 1300.

#### Reach F

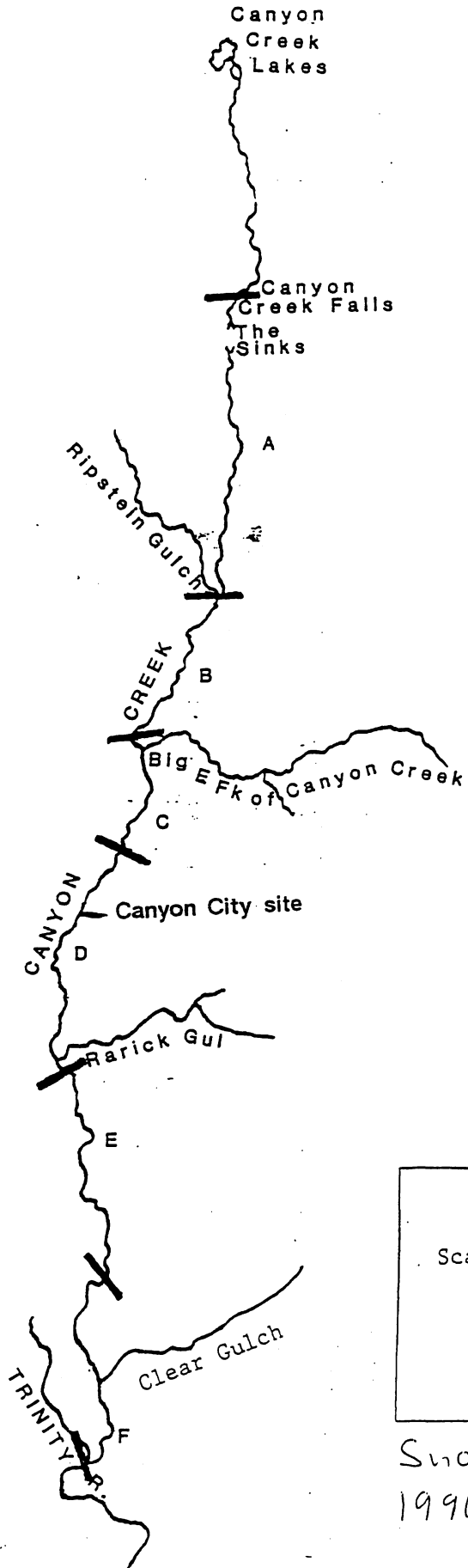
We saw 7 adult steelhead and no adult salmon within this reach. All adults were main channel or bedrock formed lateral scour pools. We saw numerous juvenile trout (0+ - 2+) along with a few 0+ chinook salmon in the upper section of this reach (though not nat as many as in the upper reaches) and very few in the lower section. At 1055, August 24, the air and water temperatures were 74.5°F and 66.3°F.

#### Summary

We saw 45 adult steelhead and 5 adult chinook salmon the entire Canyon Creek drainage. All fish were seen below the Sinks and above Clear Gulch. Most of the fish seemed to be trapped in the pools in which we found them due to low water levels.

Other species we saw include: Speckled dace (Rhinichthys osculus), Klamath smallscale sucker (Catostomomus rimiculus), Pacific giant salamander (Dicamptodon ensatus), rough skinned newt (Taricha granulosa), Foothill yellow-legged frog (Rana boylei), and Western aquatic garter snake (Thamnophis couchi).

NOTE: Snorkel surveys in Canyon would be more effective if conducted during periods of higher flows than during this year's survey. Late July or the first week of August would have been the best time to do the survey this year. Close attention, on a yearly basis, must be paid to winter flows in order to time the survey correctly.



LEGEND

Scale 1/2" = 1 mile

Survey Termination Points

A-F: Section Break Points

Klamath Smallscale Suckers

Dace

Brown Trout

Snorkel Survey Reaches  
1990 to 1995 and 1998.

L. Everest 2/16/99