Shasta-Trinity National Forest Big Bar Ranger District Canyon Creek August 2, 4, 10 and 11 1993 Surveyors: Ken Bryne, Lindy McCaslin, Ken Meyer, Becky Rogers, Ron Smith, Vic Sundberg, and Polly Taylor.

Adult Summer Steelhead and Spring Chinook Salmon Survey

Canyon Creek is a tributary of the upper Trinity River and runs in a southernly direction through steep mountainous terrain. Three crews surveyed approximately 15 miles of Canyon Creek by direct observation snorkeling in August of 1993. The survey began at the Lower Canyon Creek Falls and proceeded in a downstream fashion to the confluence with the mainstem Trinity River.

Due to time constraints, and various other catastrophes, an off district crew from Weaverville F&W and PSW graciously consented to complete one day of the survey.

Areas where fish were observed in 1993 are located on the accompanying map. The reach labels were designated in 1990. Most of these correspond to actual daily swimming reaches.

Observations

Section A

No adult salmon or steelhead were observed. The high water velocity and resulting bubble curtain made it difficult to see. This section of the creek is characterized by having unusually large, round boulders in the channel, along with a section having subsurface flow (the Sinks). During the 1993 survey, there was significant stream flow through the Sinks area. Juvenile rainbow trout and steelhead were commonly observed from 0+ to 2+. At 1445, August 2, the air and water temperatures were 98°F and 57.5°F respectively.

Section B

The first fish observed were located below Ripstein Gulch. A total of two adult summer steelhead were observed in this section. All adults were observed in pools. This stream section is also characterized by large boulders somewhat smaller than the previous Section A. On August 4, the flows were still a bit high with bubble curtains covering most of many pool areas. At 1325, the air and water temperatures were 80° F and 61° F. Juvenile rainbow and steelhead were commonly observed.

Section C

Five adult steelhead were observed in this section. One was seen in a run while the others were observed in main channel and lateral scour pools. Juvenile trout populations were abundant (0+ - 2+) while 0+ chinook salmon were commonly seen.

Section D

A total of five adult summer steelhead were observed. All of these fish were located in pools. The water temperature ranged from $54^{\circ}F$ to 62° on August 4 at 1000 and 1800 respectively.

Section E

A total of one jack chinook and six summer steelhead were observed. All of "these fish were located in pools. Juvenile chinook and steelhead trout were commonly observed while juvenile coho salmon were occasionally seen.

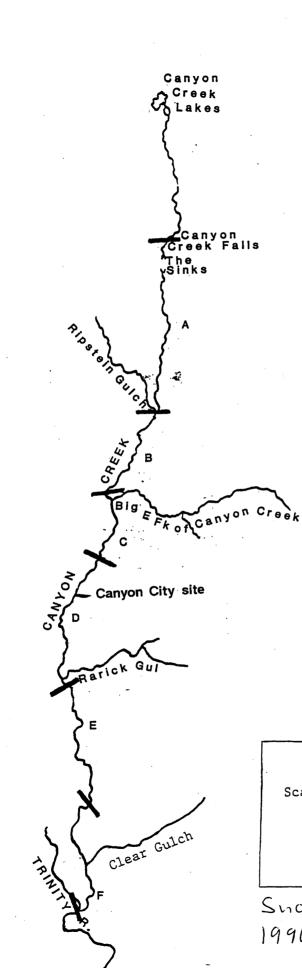
Section F

Six adult steelhead and one jack chinook were seen in this reach. The air and water temperatures were 73° and 62° respectively at 1145 on August 11. Juvenile fish were uncommon in this reach.

Summary

A total of 24 adult steelhead and 2 jack salmon were observed in the entire Canyon Creek drainage. All fish were observed below Ripstein Gulch and above Clear Gulch. The habitat above Ripstein appeared to contain enough cover in the form of boulders, but lacked deep pools and overhanging vegetation as well as spawning gravels. This area tends to have more white water any time but was also snorkeled before water levels had dropped to summer low flows. Few if any adults have been observed above Ripstein Gulch in the past. The water levels dropped significantly before the reaches downstream of Ripstein Gulch were snorkeled. Water temperature ranged from 54 to 62°F during the entire survey. If snow packs are heavy over the winter it is recommended that this survey takes place no earlier than the second week in August (best time!!).

Suggestions for next year include planning well in advance of projected surveys. The survey should be planned for late July to late August with a backup date also scheduled. If winter flows are high, mid to late August are the best dates. These Canyon creek dates need to be coordinated with the North Fork survey as well. If possible, they should not run consecutively as there is prep work involved for the North Fork packing. Crews should remember to use eardrops as ear aches are very common during Canyon Creek surveys.



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LEGEND Scale 1/2" = 1 mile Survey Termination Points A-F: Section Break Points Klamath Smallscale Suckers Dace Brown Trout

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Snorkel Survey Reaches 1990 to 1995 and 1998. L'Éverest 2/16/99