STREAM INVENTORY REPORT

Big Gulch

INTRODUCTION

A stream inventory was conducted during the summer of 1994 on Big Gulch to assess habitat conditions for anadromous salmonids. The objective of the habitat inventory was to document the habitat available to anadromous salmonids. After analysis of the information and data gathered, stream restoration and enhancement recommendations are presented.

WATERSHED OVERVIEW

Big Gulch is a tributary to the Little North Fork Navarro River, a tributary to the North Branch North Fork Navarro River, a tributary to the North Fork Navarro River, tributary to the Navarro River, located in Mendocino County, California (Figure 1). Big Gulch's legal description at the confluence with the Little North Fork Navarro River is T16N R15W S35. Its location is 39°12'16" North latitude and 123°30'16" West longitude. Big Gulch is a first order stream with approximately 1.2 miles of blue line stream according to the USGS Navarro and Bailey Ridge 7.5 minute quadrangles. Big Gulch drains a basin of approximately 0.6 square miles. Elevations range from about 390 feet at the mouth of the creek to 1200 feet in the headwater areas. Redwood and Douglas fir forest dominates the watershed. The watershed is privately owned and is managed for timber production. Year round vehicle access exists via Masonite Road.

METHODS

See the Little North Fork Navarro River Stream Inventory Report.

HABITAT INVENTORY RESULTS

The habitat inventory of June 23, 1994 was conducted by Chris Bysshe and Jeff Strayer (CCC). The survey began at the confluence of Big Gulch with the Little North Fork Navarro River. The total length of the stream surveyed was 221 feet. The survey was ended due to a boulder cascade that is a suspected barrier to anadromous fish.

Big Gulch is a G4 channel type for the 221 feet surveyed. G4 channels are entrenched "gully" step-pool streams, with low width/depth ratios on a moderate gradient.

The water temperature on the survey day was 55 degrees Fahrenheit. The air temperature was 63 degrees Fahrenheit.

In the 221 feet surveyed, four habitat units were identified; two riffles, a mid-channel pool and a step run. The pool had a maximum depth of 1.6 feet.

Big Gulch

The total canopy was 99 percent. Seventeen percent was composed of deciduous trees, and 83% was composed of coniferous trees.

DISCUSSION

Big Gulch is a G4 channel type for the 221 feet surveyed. G4 channel types are generally not suitable for fish habitat improvement structures.

The water temperature on the survey day, 55° Fahrenheit is good for fish. To make any further conclusions, temperatures need to be monitored for a longer period of time through the critical summer months, and more extensive biological sampling needs to be conducted.

The mean percent canopy for the survey reach was 99%. This is a high percentage of canopy, since 80 percent is generally considered desirable.

RECOMMENDATIONS

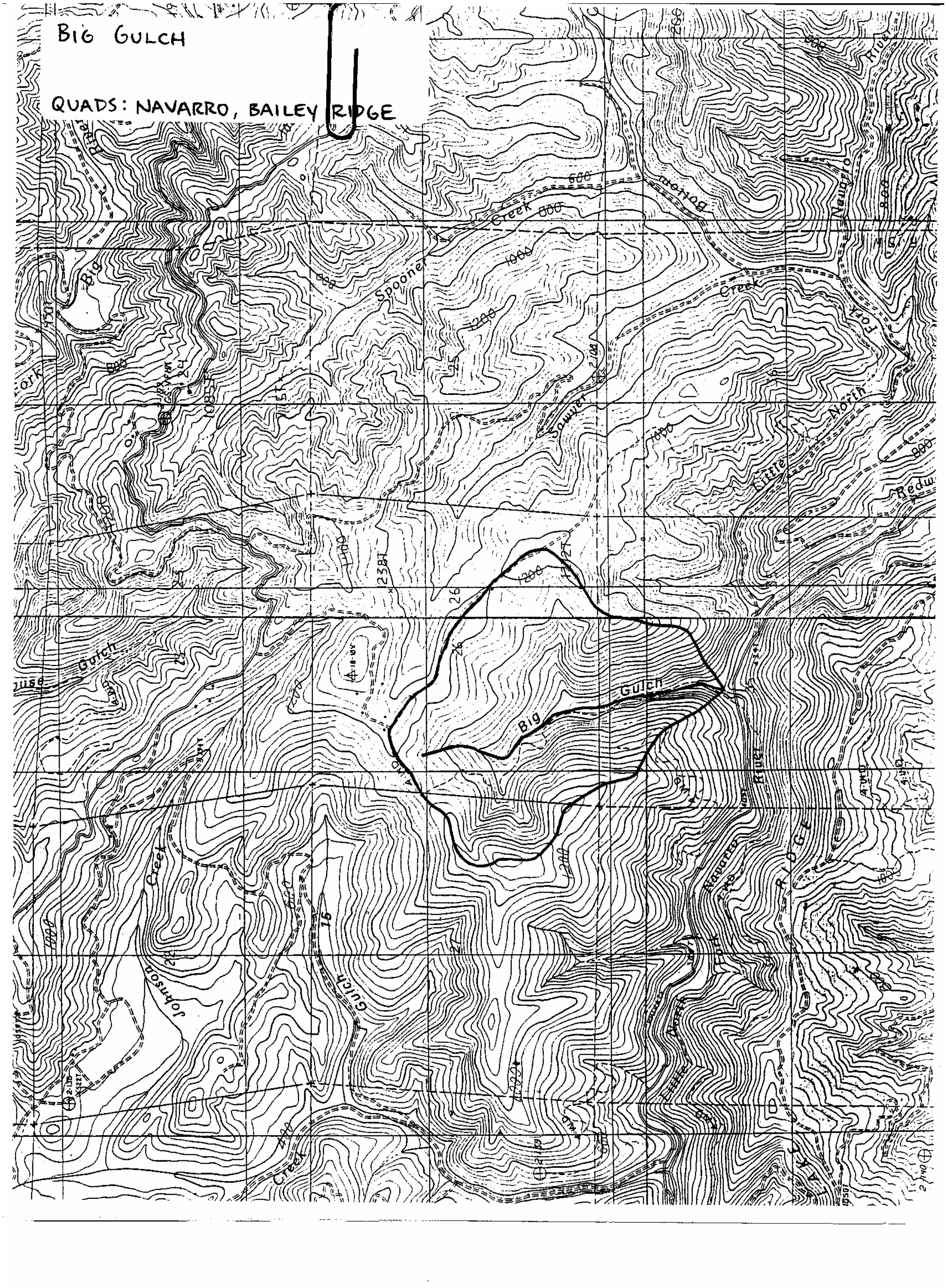
1) Big Gulch should be managed as an anadromous, natural production stream. Although only 221 feet of the stream is accessible to anadromous salmonids, the water provided to the Little North Fork Navarro River can supply a cool water refuge to steelhead and coho salmon in the warm summer months.

PROBLEM SITES AND LANDMARKS

The following landmarks and possible problem sites were noted. All the distances are approximate and taken from the beginning of the survey reach.

Position (ft):	Comments:
0'	Begin survey at the confluence with the Little North Fork Navarro River. Channel type is G4.
220'	Boulder cascade. End of the anadromous reach.

Big Gulch


BIG GULCH
QUADS: NAVARRO, BAILEY RIDGE
Big Gulch
Spooner
Creek
Sawyer
Bottom
Little
North
Fork
Navarro
Johnson
Creek
Gulch
RIDGE