

CALIFORNIA DEPARTMENT OF FISH AND GAME

STREAM SURVEY

FILE FORM

No.....

NAME..... SOUTH FORK BIG RIVER.....COUNTY..... Mendocino.....
 STREAM SECTION.....FROM..... headwaters.....TO..... Hansen School.....LENGTH..... 7 mi.....
 TRIBUTARY TO..... Big River.....Twp..... 17N.....R..... 15W.....Sec..... 28.....
 OTHER NAMES..... none.....RIVER SYSTEM..... Big River.....
 SOURCES OF DATA..... Personal observations.....

- EXTENT OF OBSERVATION**
 Include Name of Surveyor, Date, Etc.
- LOCATION**
- RELATION TO OTHER WATERS**
- GENERAL DESCRIPTION**
 Watershed
 Immediate Drainage Basin
 Altitude (Range)
 Gradient
 Width
 Depth
 Flow (Range)
 Velocity
 Bottom
 Spawning Areas
 Pools
 Shelter
 Barriers
 Diversions
 Temperatures
 Food
 Aquatic Plants
 Winter Conditions
 Pollution
 Springs
- FISHES PRESENT AND SUCCESS**
- OTHER VERTEBRATES**
- FISHING INTENSITY**
- OTHER RECREATIONAL USE**
- ACCESSIBILITY**
- OWNERSHIP**
- POSTED OR OPEN**
- IMPROVEMENTS**
- PAST STOCKING**
- GENERAL ESTIMATE**
- RECOMMENDED MANAGEMENT**
- SKETCH MAP**
- REFERENCES AND MAPS**

EXTENT OF OBSERVATION- The entire South Fork drainage and tributaries were flown out on 10-16-58. The South Fork and a portion of the tributaries were surveyed on the ground on 8-8-57 and 11-8-58 by R.F. Elwell.

LOCATION- The stream heads in the mountainous area due east of Orr's Springs, flows eastward and northeast through rugged mountainous terrain and enters Big River in the center of the Big River drainage approximately 15 miles due east of Mendocino.

RELATION TO OTHER WATERS- This section of the Big River drainage, including its tributaries, serves as an important spawning and nursery grounds for anadromous fish.

GENERAL DESCRIPTION

Watershed and Immediate Drainage Basin- The upper section of the drainage lies in the fairly open, mountainous canyon in the oak-grass-land-conifer transition zone. Tan oak-conifer cover furnish good stream shade. The mid-section lies in a moderately open canyon which is fairly well-wooded and has good stream shade. This section is lightly populated and has one or two mills adjacent to the river. The lower section lies in an open canyon characterized by grass-conifer cover. Tan oak-conifer stream shade is good. This section of the drainage is fairly well populated and it was at one time a thriving

logging community.

Altitude-

Gradient - Fairly steep in the headwaters section and moderate throughout the remainder of the drainage.

Width- Average 6 ft. (3ft -15ft.).

Depth - Average 3in. (2in.-8in.).

Flow - ¼ c.f.s. to 2 c.f.s.

Velocity - Sluggish to rapid.

Bottom - Predominantly gravel, rubble, and with some bedrock.

Spawning Areas - Considered to be generally good to excellent throughout the entire section surveyed.

Pools - Pool development is excellent, being fairly large and frequent throughout the drainage.

Shelter - Very good. Comprised mainly of logs, brush, undercut banks.

Barriers - There were 7 log jams in this section of the drainage which constitute either complete or potential barriers to fish life.

Diversions - No diversions were observed during this survey, however, it is probable there are a number of small domestic and larger irrigation type diversions for small gardens.

Temperatures - Ranged below 70° F. in the well-shaded sections of the stream during the summer and fall months.

SOUTH FORK BIG RIVER
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Food - Native insects and larvae common throughout.

Aquatic Plants - None observed.

Winter Conditions - This section of the drainage is subject to heavy runoff during the winter period.

Pollution - A considerable amount of slush and silt was noted in the stream at several points. This is from recent logging operations.

Springs - Fairly good spring development throughout this section of the drainage.

FISHES PRESENT AND SUCCESS - RT/SH, SS averaging 3 inches were present throughout the drainage but not in any great numbers..

OTHER VERTEBRATES - Frogs and salamanders abundant throughout the drainage.

FISHING INTENSITY - None known.

Other Recreational Use - Unknown.

ACCESSIBILITY - The entire 7 miles of stream between Orr's Springs Resort and the \Hansen School is accessible via the Orr's Spring Road, which parallels this portion of the drainage. The remainder of the South Fork from Hansen Scholl downstream to Hell Gate Dam is accessible via the summer road and a four-wheel drive vehicle. Drainage below this point is also accessible only via raft or foot.

OWNERSHIP - Most of the drainage is privately owned. Major lumber companies also own portions of it.

POSTED OR OPEN - Approximately 50% of the drainage is posted or fenced against trespass.

IMPROVEMENTS - None needed other than barrier removal.

PAST STOCKING - The South Fork was stocked with 200,000 silver salmon eggs in January 1956.

GENERAL ESTIMATE - This section of the drainage appears to be an excellent SH-RT, SS spawning and nursery area. However, log jams, forming barriers, prevent full utilization of this drainage.

RECOMMENDED MANAGEMENT - 1. Continue to manage primarily as a spawning and nursery area for anadromous fish. 2. Remove all existing log jams beginning with Hell Gate Dam working upstream. Hell's Gate Dam cuts off approximately 28 miles of drainage which is badly needed by the fisheries resources in this drainage.

Sketch Map - See attached.

References and Maps - CDF Mendocino County south half 1948.

R.F. Elwell:cd

Field Note

From Orrs Springs downstream 1 mile:

The stream in this section courses through good conifer-tan oak cover furnishing good stream shade. Average width is 5ft (3-8ft), average 4 in. (3-6in). Pools are small and scattered. Bottom is composed mainly of bedrock with scattered gravel areas. Spawning areas are considered to be fair to poor. Steelhead-rainbows averaging 3 in. in length are present but not abundant in this section. Flow was estimated at 1 c.f.s.. Frogs and salamanders abundant.

1.0 Mile Downstream to B.E. Johnson Camp No. 1:

Stream courses through a moderately open valley in the section which has been logged off in the past rather extensively. Conifer-tan oak stream shade is fair. Average width 5ft, (2-6ft) average depth 3 in. (2-6in.). Bottom is predominately gravel, rubble and some sand. Spawning areas are considered to be very good in this section. Salmonids averaging 3 in. in length are present in this section but not abundant. Flow was a measured 1.0 c.f.s. at a point approximately $\frac{1}{4}$ mile above Johnson's Camp. The stream between Johnson's Camp and Leonard Ranch is much the same as noted above.

Leonard Ranch to Hansen School:

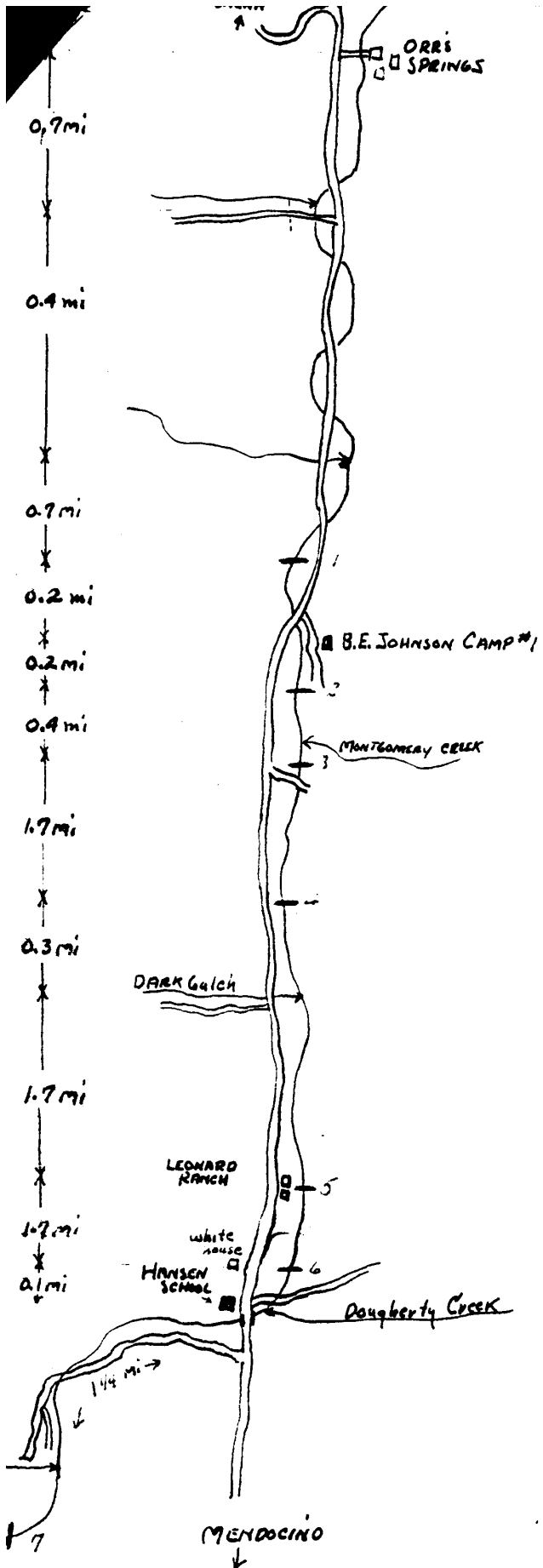
Stream in this section courses through a wide valley characterized by grass-conifer cover. Tan oak-conifer stream shade is good. Spawning gravels in this section are very good. Average stream width is 6ft (5-10ft.), average depth 5in. (3-6in.). Pool development is fair, scattered, fairly large but shallow. Flow at the Hansen School on this day was an estimated 2 c.f.s.

R.F.Elwell:cd

SOUTH FORK BIG RIVER

MENDOCINO CO.

8-8-57, 12-12-58 RFE



LOG JAMS -

- # 1 - Log debris 6' hi x 20' wide x 6' long
- # 2 - Log Jam 8' hi x 20' wide x 20' long
- # 3 - Log Jam 6' hi x 40' wide x 75' long
- # 4 - Log Jam 5' hi x 20' wide x 200' long, silted
- # 5 - Log Jam 6' hi x 8' wide x 20' long
- # 6 - Log Jam 12' hi x 15' wide x 20' long
- # 7 - Log Dam 8' hi x 20' wide x 50' long. HELLS GATE