

**CALIFORNIA DEPARTMENT OF FISH AND GAME
STREAM SURVEY**

FILE FORM No 1

NAME Big Salmon Creek COUNTY Mendocino
 STREAM SECTION Entire FROM _____ TO _____ LENGTH 6 mi. Approx.
 TRIBUTARY TO Pacific Ocean TWP 16N R 17W SEC 28
 OTHER NAMES Unknown. RIVER SYSTEM Self or Big Salmon

SOURCES OF DATA Personal survey on foot

- 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
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- Aquatic Plants
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- 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 creek and its tributaries were walked out by Fish and Game Assistant, James Crowdus, and Fish and Game Seasonal Aid, Jack Santos, a distance of a total 10 miles were surveyed on October 6, 1961.

LOCATION - Big Salmon Creek is located approximately 18 airline miles south of the town of Fort Bragg on the Mendocino County coast.

RELATION TO OTHER WATERS - A good steelhead and silver salmon spawning and nursery stream for the Mendocino coast. This is entirely a separate drainage flowing directly to the Pacific Ocean.

GENERAL DESCRIPTION - Watershed - Big Salmon drains approximately 15 square miles. The watershed is typically east to west in its flow, Immediate Drainage Basin - Big Salmon runs through a U-shaped canyon. of second growth conifer for a distance of 6 mi. It has tributaries of fishery value contributing another 4 mi, to the drainage. The basin has a gentle slope on each side of what is considered foothills. The creek runs through heavily timbered country made up primarily of redwood, large alders, fir and brush. The upper section consists of dense vegetation in the form of brush in and along the stream in rather meadowy (if one could call it) meadows. The mid section is parklike with redwood and alder and fir throughout-very clean. The lower section is again open pasture and relatively clear due to a large burn 60-70 years ago.

The immediate creek area contains a profuse growth of alder, brush and willow.

Altitude - Sea level

Gradient - The gradient is considered moderate to very slight, with an approximate average of 6 ft. per 100. The tributaries have a steeper gradient of approximately 15 ft, per 100 on an average.

Width - Range from 2 ft. to 40 ft; average 10 ft,

Depth - Range from dry at this date to 5 ft. deep; the average depth is 18 in,

Flow - Five gallons per minute to 7 c.f.s. in range; the average is 5 c.f.s. at this date,

Velocity - Velocity is sluggish in the headwaters to generally slow throughout, A very mild gradient is the cause for this effect,

Bottom - The bottom is primarily rubble and gravel, with scattered bedrock, silt and mud throughout. The mid section of the stream is notably rubble and gravel whereas the upper and lower sections contained more of the bedrock and silt; in the extreme lower section boulders and coarse rubble was observed.

Spawning Areas - Headwaters considered poor - spawning gravel amounting to only about 5%. Mid and lower sections were most favorable for spawning with 50 to 70% area suitable. Overall estimate is high; estimate 75% of this stream has gravel satisfactory for this function.

Pools - Pools are scattered in frequency. Total pools - estimate 1 to 2 per 150 ft, Their size is 10 ft. long, 3 ft. wide and 1 ft. deep.

Shelter - The upper section is heavily vegetated above Donley Gulch. The mid section is park-like and relatively free of vegetation. The extreme lower mile of Big Salmon has very dense vegetation in and along the creek; estimate the total shelter for this stream, 70%.

Barriers - One barrier observed consisting of a road crossing in the extreme upper section. Beyond that, no other barriers observed. Many log jams have potential of becoming barriers if left to allow accumulation of debris. Diversions - None noted.

Temperatures - The temperatures ranged from 54 ° to 55° F. The air temperature ranged from 60° to 70° F. The first temperature was a water temperature.

Food - Food is considered adequate (Mayfly and various insects), but light in comparison to other streams surveyed.

Aquatic Plants - None observed.

Winter Conditions - Winter conditions believed to be three times the present flow or better, which would be approximately 15 c.f.s. The extreme headwaters show rapid run-off, due to steep gulches and deeply eroded gullies. Estimate the stream depth an average of 2-1/2 to 3 ft., with a width of approximately 20 ft.

Pollution - None observed.

Springs - Springs and tributaries were numerous. None of the springs had fishery survey value. Several of the tributaries did have and are recorded under a separate survey and barrier report,

FISHES PRESENT AND SUCCESS - Steelhead and/or rainbow trout averaging 2" in size with an abundance of from 10 to 50 per 200 ft. in the mid and lower sections were observed. These fish were in good condition; success was good; propagation - natural. Silver salmon were observed in very light quantities in the mid and lower sections (very difficult to identify and locate) - estimate 1 to 2 per 100 ft. Good success; good condition; natural propagation good. The extreme upper area is considered to have very poor fish population due to dense in-stream vegetation of grasses and small stream area.

OTHER VERTEBRATES - Deer, raccoon, domestic sheep and cattle were observed.

FISHING INTENSITY - None observed.

OTHER RECREATIONAL USE - Recommend hunting, fishing (unless the stream is closed for nursery and spawning area), hiking and camping. No recreational uses observed at this date other than occasional camping debris.

ACCESSIBILITY - Immediate access to this stream is considered good; 75% of the stream is accessible by foot. Access in extreme upper and lower sections difficult due to considerable in-stream vegetation. Occasional old logging roads from the north side of the stream and along the stream provide excellent foot access, but only for very short distances can a vehicle travel these roads. The best general access is considered 6 mi. up from Route 1 on the Albion Ridge road, then down 1-1/4 mi. of dirt road; take the first fork to the right, thence about 3 blocks and you will come to a flat. At this flat is the junction of Donley and Big Salmon Creek.

OWNERSHIP - Ownership believed to be private in most cases. The lower section is under the control of various logging companies and gypo logging operations are in progress in a small area.

POSTED OR OPEN - No posting signs were observed except for several "no trespass" signs in the extreme lower section near Route 1.

IMPROVEMENTS - None noted.

PAST STOCKING - None known; none noted.

GENERAL ESTIMATE - The general estimate of Big Salmon Creek is that it is an excellent spawning and nursery area for steelhead and/or rainbow trout and silver salmon. At present there is less than 1/4 mi. that is of fishery value from the Pacific Ocean. An extension of approximately 10 mi. after log jam and barrier removal project is completed, is possible. Overall, this stream has about 60 to 70% of its area in park-like condition in a wide

U-shaped valley with large redwoods in open, easy access area. An old skid road and/or a logging railroad, in various stages of condition, parallels 90% of this stream, access on foot. The tributaries to this stream also contribute to the fishery value; they contribute approximately 4 mi. of the 10 mi. listed previously. The extreme headwaters of this creek are in a marshy area composed of many alders with occasional fir and redwood. Coming on down, there is considerable in-stream vegetation to the point of the junction with Donley Gulch. From here the stream obtains its park-like condition which progresses to a point approximately a mile or two from the Pacific Ocean. This mile or two area is composed of dense in-stream vegetation and pasture-like area. Approximately 60 to 100 years ago, a forest fire cleared this area. There are many burnt stumps around the surrounding terrain and much of the debris has been pushed into the stream, causing numerous log jams. The stream averages 10 ft. wide with a depth of 18 in. at this date. The average flow is 5 c.f.s. Velocity is very sluggish due to its mild gradient of about 6 ft. per 100. The bottom is predominantly rubble and gravel with occasional silt and mud. Spawning area for the overall stream is estimated at about 75%. Pools are scattered in frequency; estimate 1 to 2 pools per 150 ft. Shelter is abundant in the form of vegetation; estimate 75 to 80% of this stream covered with vegetation. There was only one barrier observed in the extreme upper section, caused by a road crossing; no diversions observed. Food is considered adequate. Access is generally easy.

RECOMMENDED MANAGEMENT -

1. I recommend that the jams listed on the jam barrier survey be removed to facilitate access to migrating salmon.
2. I recommend a road or a clearance project of the old logging railroad and/or logging road be exercised to allow easy accessibility to the general public for camping, hunting and fishing.
3. If this stream is to be eventually used as an egg-taking station, I recommend that an egg-taking station be constructed at the extreme lower section of this stream;
4. That the stream be closed to fishing.
5. Build the access road for creamer chopping study and general access.
6. Build a fish collecting trap on the dam itself.

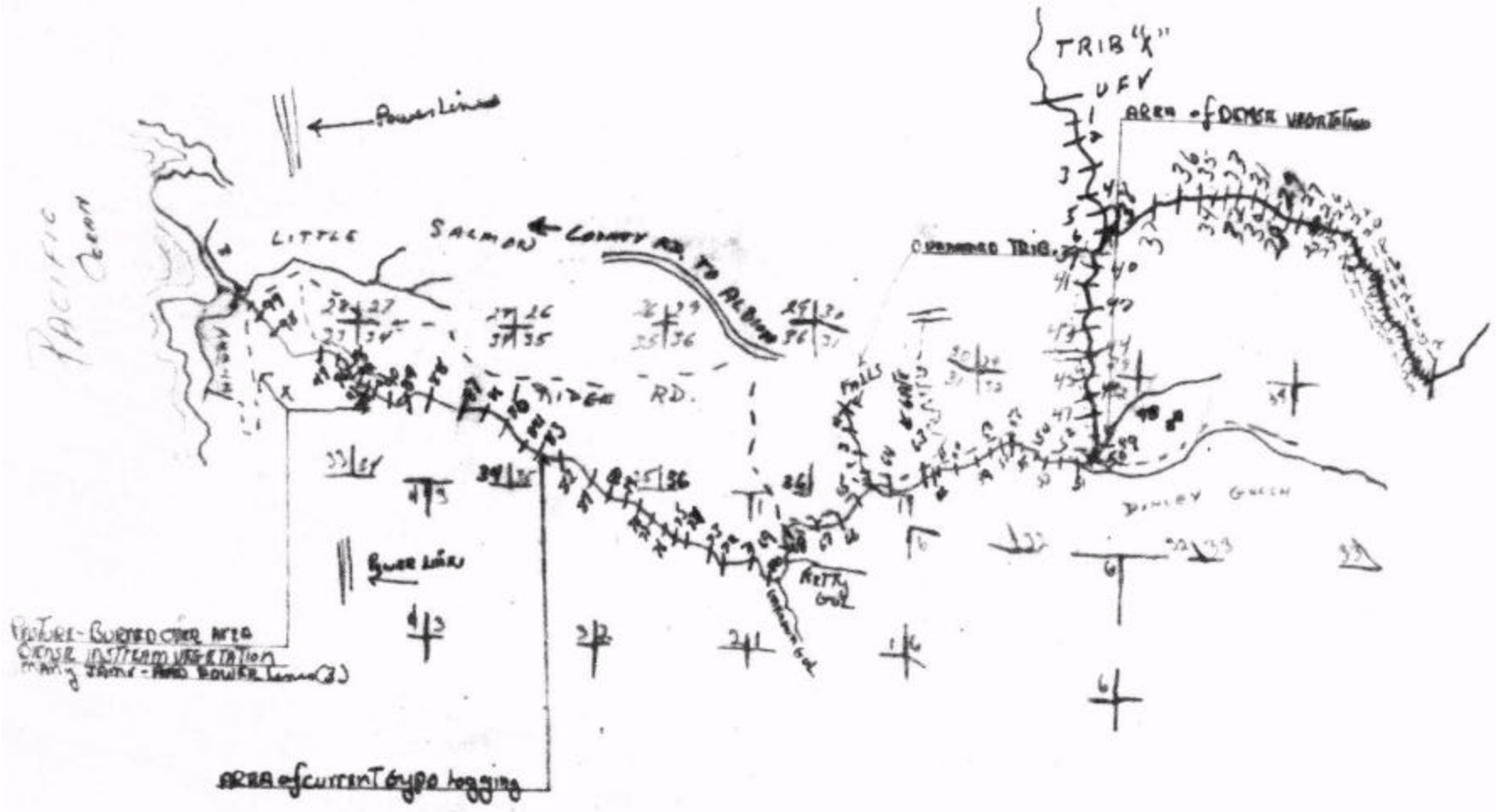
Local residents speak of many salmon migrating in this stream in the old days (50 or 60 years ago). Their estimates were in general, "You could walk across the stream on the backs of the salmon". From this information (general as it is) one can guess what fishery value this stream once had,

I further recommend that any roads crossing this stream to other tributaries, or to the extreme headwaters, be removed and elevated to a sufficient height to allow passage of driftwood and migrating fish.

This completes the stream survey for Big Salmon Creek by Fish and Game Assistant, James Crowdus, October 6, 1961.

James Crowdus/es

cc: James Crowdus



BIG SALMON CREEK T16N R17W S22

--- = logging roads (not all usable)

1" = 1 MILE

