## CALIFORNIA DEPARTMENT OF FISH AND GAME

## STREAM SURVEY

FILE FORM

No.....

NAME South Fork of Ten Mile River	county Mendocino
STREAM SECTIONFROM Extreme Headwaters	To the confluence LENGTH 21 mi.
TRIBUTARY TO. Ten Mile River	
Unknown OTHER NAMES	
SOURCES OF DATA Personal Survey	220124

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)
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Bottom
Spawning Areas
Pools
Shelter
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Temperatures
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PAST STOCKING
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SKETCH MAP
REFERENCES AND MAPS

EXTENT OF OBSERVATION - The entire portion of the South Fork was walked out on September 16, 18, 19 and 20, 1961, from the extreme headwaters to the confluence of Ten Mile River, a total distance of approximately 21 miles of stream, by S. N. Nye, W. Jones, J. Crowdus, H. Adams, and J. Santos.

LOCATION - The South Fork of Ten Mile River rises sharply west of Sherwood Peak off of the Sherwood Road, flowing west by south, and then west, then northerly, then westerly, then northwesterly into the main Ten Mile River.

RELATION TO OTHER WATERS - The South Fork of Ten Mile River is an important tributary to the Ten Mile River, supplying both a great deal of water, as well as snawning and nursery area for anadromous fishes.

GENERAL DESCRIPTION - Watershed - The South Fork of Ten Mile River is a typical north coastal, mountainous, heavily forested, second growth transition zone, having been heavily logged over and fired in the past.

Immediate Drainage Basin - The basin is primarily a very steep V-shaped canyon in the extreme headwaters, widening into a mid zone area to form a small valley. The stream narrows down into another steep V-shaped canyon, just above and near the confluence of Redwood Creek, opening up into another valley below Redwood

Creek, narrowing down again above Churchman Creek to another U- to V-shaped canyon with steep sides, eventually widening out into an open valley near the lower end and continuing into a wider valley with the confluence of the Ten Mile River. There is considerable heavy downed and humus material along the slopes of the steep-sided canyons. The main cover consists of second cut Redwood and Douglas fir, with considerable alder and willow along the stream. Approximately the lower 1-1/2 mi. of stream comes out of the timbered area completely into grassy slopes.

Altitude - (Range) Altitude ranges from the extreme headwaters at 2500 ft. down to 2000 ft. with the useable fishery value at present, down to a range of 25 ft.(altitude) with the confluence of the main Ten Mile River. This information is gathered from the maps of the U. S. G. S. Topographic Quads.

Gradient - The gradient in the headwaters is fairly steep, rising from 5 to 10 ft. per 100 ft. at the upper end of the observed area. The middle and lower sections consist of very moderate gradient, ranging from 2 to 1 ft. per 100 ft. of stream, or approximately 1 to 2% grade.

Width - The width ranges from 2 to 70 ft. with an average of 5 ft. in the upper section, ranging to an average of 15 ft. in the middle section, to an average of 35 to 40 ft. in the lower section.

Depth - The denth ranges from 1 in. to 4 ft. with an average of 4 in. throughout the upper section, with an average of approximately 6 in. in the middle and lower sections.

Flow - Flow range from .3 c.f.s. to 3.5 c.f.s. The .3 c.f.s. was recorded in the extreme headwater section, with a recording of 1.2 c.f.s. just above the confluence of Redwood Creek. Recorded flow below Redwood Creek was 1.8 c.f.S. Recorded flow just above the confluence of Churchman Creek was 2.0 c.f.s. Recorded flow just above Little Valley intersection road was 2.5 c.f.s. Recorded flow 1/2 mi. upstream from confluence of Ten Mile River was 3.5 c.f.s. It should be noted that these flow readings were taken within three or four days after a 1/2 inch recorded rainfall at Fort Bragg. The true flow would be very hard to determine as the type of stream bed consisting of gravel and rubble probably realized a great deal of percolation. The only flow records we have necessarily would be surface flow.

Velocity - Velocity is considered rapid throughout the upper section, becoming rapid to sluggish In the middle section, and mostly slugish in the lower section due to the wide stream bed.

Bottom - The upper section consists predominantly of gravel with some boulders and rubble, becoming gravel predominant in the middle and lower sections with some rubble, some bedrock, with the lower 1/2 mi. consisting of sand, mud, and silt, becoming swamp-like with backed-up water.

Spawning Areas - Spawning areas are considered excellent throughout. Spawning areas consist of 5 to 80% in range throughout the stream, being poor in the extreme heaciwaters and becoming progressively better as one approaches the lower end. The over-all average would be probably around 50% or better. The lower 1/2 to 3/4 mi. of stream bed consists of no spawning gravels, being primarily mud, sand, and silt.

Pools - Pools would be considered abundant throughout. Size range of pools would be 5ft. by 10 ft. by 2 ft. to 40 ft. by 100 ft. by 12 ft., with an over-all average of 15 ft. by 25 ft. by 4 ft. Pools consist of undercut banks, fallen logs, some bedrock pools, log jam pools, and wide, long pools in gravel areas. Pools would average 1 to 2 per 100 ft. of stream bed.

Shelter - Shelter is considered adequate throughout, consisting of undercut banks, log jams, fallen logs, overhanging vegetation, and heavy growth of trees. Shelter is quite common to abundant in the upper and middle sections, becoming scarce and more open in the lower areas. Some areas are intermittent with heavy growth, becoming open, and closing up again, and then becoming open to a steady open area in the lower end.

Barriers - There are 7 barriers listed, as well as included in 238 jams for the main South Pork of Ten Mile River. See barrier survey for description and location.

Diversions - Two diversions were observed in the lower section of stream:

No. 1 - A 30 H.P. electric pump with 4 in. suction, Ttith a 3 in. output, rated approximately 500 gal. per minute, located on the Glen Gray Ranch just approximately 30 yards above Smith Creek confluence with Ten Mile.

Diversions Cont'd

No. 2 - A 4-cyl. engine pump, with a 4" suction, rated approximately 500 gal. per minute, located near the lower Glen Gray Ranch, possibly on the upper Smith Ranch.

Exact location or ownership is unknown.

Temperatures - During the four days of survey air temperatures ranged from  $60^{\circ}$  to  $75^{\circ}$ . Water temperatures during this same 4-day period ranged from  $56^{\circ}$  in the extreme upper section of the South Fork Ten Mile to  $58^{\circ}$  near the confluence of Redwood Creek, to  $60^{\circ}$  near the confluence of Churchman Creek, to  $65^{\circ}$  near Little Valley Road intersection, to  $66^{\circ}$  located in the extreme lower end.

Food - Food is considered adequate throughout; primary source of supply would be caddis fly as the predominant food, with considerable Mayfly and stone fly larvae; other unidentified aquatic bugs, flies, and insects were present. Aquatic Plants - Very few aquatic plants existed in the upper section--primarily algae. Through the middle and lower sections, some tules, rush, horsetails, and some water grasses were observed but could be, and would be, considered rare throughout. Algae was very heavy in the middle and lower sections. Winter Conditions - Winter conditions are subject to high and heavy run-off of freshets. See station data for further indications. Winter water indications show up to 10 ft. or better in width in the extreme headwaters, with indications of 2 to 10 ft. in height. Middle and lower winter conditions indicate from 20 to 90 ft. in stream bed width, with an over-all average of 30 ft. for the middle and 70 ft. for the lower, ranging uo to 6 ft. in depth.

Pollution - No pollution was observed in the upper section. Middle and lower sections showed possible source from domestic area, with sheep and cattle refuse. Some algae and iron rust-colored material combined were observed in some sections. It should be noted that no flsh were observed in these areas where this algae and iron rust-colored material existed.

Springs - Springs are considered normal for this time of year, being fairly common throughout.

FISHES PRESENT AND SUCCESS - Fish ranged in the steelhead/rainbow trout class from 1 to 10 in., with an over-all 3 in. average. Silver saimon ranged from 1 in. to 4 in., with a 2 to 3 in. average. Steelhead/rainbow trout were considered abundant for the stream condition. Silver salmon were considered common under the same stream condition. The range of fish for the upper section of the South Fork of Ten Mile River consisted of 80% steelhead/rainbow trout and 20% silver salmon. Not as many fish were observed as expected in the upper section, believed due to large Barrier No. 148 located just above junction with Redwood Creek. No silver salmon were seen above No. 60 Barrier. Steelhead/rainbow trout were seen in decreasing numbers all the way up to No. 14 Jam. The largest concentration of fish was observed in the lower end above the dry, intermittent flow area, above Redwood Creek, consisting of 1 to 30 fish per pool. One fish per 3 pools was observed from Jam No. 40 through 14, in the upper area. The middle and lower are as showed many more fish than the upper area. The percentage observed in the middle and lower areas would be approximately 70% rainbow trout/steeihead to 30% silver salmon. Fish would number 50 to 60 per average size pool in the middle and lower sections. I'he success of fish in the

South Fork Ten Mile would be considered very good for the conditions present, consisting of low flows and a great many log jams and possible barriers. OTHER VERTEBRATES- The upper area consists primarily of deer and bear. The middle and lower areas consist primarily of sheep and cattle, deer, a few bear (signs), a few bobcat (signs), and in the stream itself, frogs and salamanders. FISHING INTENSITY - In the upper area fishing intensity is unknown. The middle and lower fishing intensity could probably be light but actually unknown. Talking with some local people indicates some fishing for adult run salmon and steelhead.

OTHER RECREATIONAL USE - Fishing, hunting, camping, hiking and swimming would consist of the only other known recreational use for this area. This would depend primarily on permission of the many owners of the area for trespass. ACCESSIBILITY - The access for this area is fairly difficult and very detailed as to the many numbers of roads, intersections, logging trails, skid trails and logging roads which one could get completely turned around and confused on. If a trip is planned into any of the area it would be advisable to contact the writer for detailed instructions. It is possible for access from the bottom or lower Ten Mile South Fork through the Smith Ranch, also through the Glen Gray Ranch, Camp 1 Road, and through Hyman Ranch from Little Valley Road, and from Union Lumber Company roads through Pudding Creek over Ramsey Ridge, through Gate No. 22, and up over to the South Fork. This road also continues on up to Redwood Creek and then veers sharply up over Smith Ridge near Dutchman's Knoll. This is primarily 4-wheel drive access in the back areas. The headwaters is available by dropping off the ridge from Sherwood Road and continuing by foot. An old railroad bed follows the stream all the way up and to many tributaries. This railroad bed, however, is intermittent--having been slid in, caved off, overgrown, and many trestles almost destroyed. It is, therefore, very difficult waiking through most parts except where a few roads do parallel or hit the stream. There are many old logging roads, trails, and skid trails from logging operations which cover much of the area, but access into them is almost impossible except by foot and only if one knows where they are located. A few general instructions will follow. Mileages from South Lincoln Street and Oak Street in Fort Bragg near the Marine Resources office via Pudding Creek, Union Lumber Company road, via Ramsey Ridge road, to Sherwood Road is 12.45 miles. Mileages from intersection of Sherwood Road and Ramsey Ridge Road to the headwaters of the South Fork area of Ten Mile located near the old mill is 9.05 miles. Mileages from South Lincoln and Oak Street, Fort Bragg, via Union Lumber Company and Pudding Creek Road to Ramsey Ridge Road, to Churchman Creek headwaters road and Gate No. 22 is 15.5 miles. Mileages from Gate No. 22 to turn-around uphill and switchbacks via Redwood Creek North Fork turn-around is 4.4 miles. Mileages from the office road which is South Lincoln Street and Oak Street, Fort Bragg, via Pudding Creek-Union Lumber Company Road to Little Valley Road is 5.85 miles. Mileages were not checked but are readily available from Fort Bragg north on Highway 1 to Little Valley Road turn-off, past Hyman Ranch to South Fork of Ten Mile. Access also can be made to the lower section by going north from Fort Bragg on Highwa, y 1 to Glen Gray Ranch Road or Old Camp 1 Road to the South Fork, which ties in with the South Fork Road which also ties in with Little Valley Road. Further access can be made near the mouth via the Union Lumber Comrany Road which crosses the South Fork of Ten Mile, anproximately 100 yards above the confluence with the Ten Mile River. Access into this area can also be had by going down the Smith

Ranch Road from Highway 1 north of Fort Bragg, or just short of the Ten Mile Highway 1 bridge. It is suggested that people wishing access into the area for further check do not contact Union Lumber Company, or Division of Forestry, or some of the local wardens or other people, as research into this has shown us that they do not know the existing road conditions. It has taken many days of investigation by jeep and 4-wheel drive vehicles, as well as by foot, to find and locate all the roads that are shown on the accompanying drawn map. It is recommended that access to this area be followed from this map. OWNERSHIP - The known owners are listed here. Union Lumber Company, Mrs. Lute, Mr. Hyman, Mrs. Smith, Mr. Glen Gray, and some access covered by the South Fork Rod and Gun Club (whether this is ownership or just access rights is unknown), and any other owners are unknown at this time, if any. POSTED OR OPEN - The majority of this stream is posted, as well as locked. The lower section from Little Valley Road intersection on down via the South Fork Road has many gates but none are locked at this time. All gates from Little Valley Road intersection upstream the rest of the way are all locked. IMPROVEMENTS - None observed other than Mrs. Smith on the extreme lower section, who is now cleaning out and burning jams and wood material. PAST STOCKING - Past stocking is unknown.

GENERAL ESTIMATE - The upper section of the South Fork of Ten Mile River is a fair to good spawning and nursery area for silver salmon and steelhead/rainbow trout. The over-all stream section of the South Fork of Ten Mile River and drainage has received heavy damage in the past from logging and fire. Many of the jams are from old railroad trestles, pilings and bridges. Much of this stream must be reached by foot and the area is heavily overgrown in many areas. This stream has a very-good potential if it could be cleared and cleaned out. Under present conditions of log jams and low flows, it is considered The stream is putting out very well as far as spawning and nursery area for anadromous fish, in that there are many fish now present. It must be assumed, however, if cleaned and cleared out, the stream could double and possibly triple the population it now has.

RECOMMENDED MANAGEMENT - It is the recommendation of this writer that the jams and wood materials in and near this stream be cleaned out, along with all of the growing willows and alders in the actual stream bed area. It is also felt by this writer that the small tributaries and headwaters areas which are of no fisheries value, present or future, be cleaned out, so that wood material does not come down to fcrm possible barriers after the main stream and tributaries are cleaned out. Upon completion of this work, the South Fork of Ten Mile River could then be restocked in the upper sections and be managed as anadromous fish spawning and nursery area with the possibility of IZture fishing being permitted after the run is well established.

SKETCH MAPS, REFERENCES AND MAPS - See, attached sketch maps

- 1. Union Lumber Company, 1945, by Montgomery
- 2. U.S.G.S. 1951 15 Minute series Branscomb and Glenblair sections
- 3. California Division of Forestry, 1949, Mendocino County's North and South Half.

End of report. Submitted by S. N. Nye.