

CALIFORNIA DEPARTMENT OF FISH AND GAME

STREAM SURVEY

FILE FORM No. _____

NAME.....SMITH CREEK.....**COUNTY**.....Mendocino.....

STREAM SECTION....**FROM**....Headwater.....**TO** Junction w/ SF Ten Mile Creek.....**LENGTH**....5 Mi.....

TRIBUTARY TO....South Fork of Ten Mile Creek.....**TWP**...19N... **R**...17W...**SEC**.....11.....

OTHER NAMES....None known.....**RIVER SYSTEM**.....Ten Mile River.....

SOURCES OF DATA...Personal Observation and local residents.....

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 - This stream was checked on foot from the headwater, approximately 5 miles, to the junction of South Fork of Ten Mile Creek. Three-fourths mile of the North Fork was also checked at this time. This survey was made on September 5 and 6, 1961, by Herbert Adams and Weldon Jones.

LOCATION - Smith Creek heads in the mountainous terrain to the north of Dutchman Flat and runs in a westerly direction approximately six miles to enter the South Fork of Ten Mile approximately 1½ mi. above its confluence with the main Ten Mile River. It is approximately 6 airline mi. northeast of the town of Fort Bragg.

RELATION TO OTHER WATERS - Smith Creek contributes flow, as well as a good spawning and nursery area, to the South Fork of the Ten Mile River. Smith Creek is similar to another tributary, Campbell Creek, located just south or over the next ridge to the south, from Smith Creek. These two creek are of approximately the same length and size. Both have steelhead and/or rainbow trout, as well as silver salmon runs, and are of comparable gradient. They both enter the South Fork of the Ten Mile River approximately one mile apart.

GENERAL DESCRIPTION - Watershed and Immediate Drainage Basin - Smith Creek head in the mountainous terrain located o the west side of the Mendocino Coastal Douglas Fir Redwood Transition Zone. The entire drainage was heavily logged in past years, although most of the terrain now has a fairly good cover of second growth (Redwood Douglas fir). The lower section lies in the more open

valley. Cattle grazing and grain crops are the predominant agriculture in this valley. Fair, stream-side cover persists through this section of stream.

Altitude -

Gradient - Very shallow throughout. The gradient is 1 t 2 ft. per 100 ft. of stream section throughout the entire area surveyed. The North Fork has a gradient of 2 to 5 ft. per 100 ft. of stream.

Width - Range (1 ft. to 20 ft.), an average of 5 ft.

Depth - Range (1 ft. to 4 ft.), an average of 3 in.

Flow - Measures at .5 c.f.s. just above the ford at the Gray ranch. Flow was measured at 20 gallons per minute, 5 mi. upstream. The North Fork had a flow of 40 gallons per minute at its confluence with Smith Creek.

Velocity - Rapid to sluggish in larger pools throughout.

Bottom - Predominantly gravel; small amounts of rubble and an iron-colored growth of precipitate along the upper headwater sections above the confluence with the North Fork.

Spawning Areas - 10 to 85% in the main stream, becoming progressively better in lower areas. The North Fork was estimated at from 10 to 40% throughout.

Pools - Good throughout; average 5 to 20 ft. wide, 5 to 50 ft. long, and from 7 in to 4 ft. deep There were approximately 1 to 1½ pools per 100 ft. of stream and a pool to riffle ratio of 75% pools to 25% riffles.

Shelter - Good, consisting of undercut banks, overhanging vegetation, and wood material.

Barriers - One barrier was observed on the main stream fan four on the North Fork. See barrier survey for location and description. A total of 18 jams was noted on the North Fork and 168 jams were noted on the main stream.

Diversions - Three diversions were noted; all were near the Gray ranch. These diversions consisted of aluminum irrigation pipe for irrigation purposes. The first diversion was a 6-inch pipe attached to a centrifugal pump operated by tractor supplying water for irrigation by way of Rainbird sprinklers. This was approximately 1/2 mile above the confluence with the Smith Fork of Ten Mile. The second diversion was just above the road leading into the ranch house owned by the Grays. It consist of a 4-inch aluminum irrigation pipeline. Both these previously mentioned diversions took water from earth filled dams. These earth-filled dams stopped all flow. The only water allowed downstream was seepage. The third diversion was located approximately 300 feet above the confluence with the South Fork of Ten Mile . It consists of aluminum irrigation pope which was 4 in. in diameter; no earth-filled dam was noted here.

Temperatures - A water temperature of 57° F. and an air temperature of 74° F. were recorded at 12 o'clock on 9/5/61 just above the confluence with Smith Creek on the North Fork of Smith Creek. A water temperature of 57° F. and an air temperature of 76° F. was recorded at 1500 hours on 9/5/61 five miles up above the confluence with the South Fork of Ten Mile. A water temperature of 57° F. and an air temperature of 69° F. was recorded at 12:30 on 9/6/61 just above the road toward the Gray ranch.

Food - Considered abundant from the North Fork down. Food supply was adequate above this point in both the North Fork and the main tributary. Food was composed primarily of caddis fly larvae and small dipterous insects.

Aquatic Plants - Some algae and watercress observed in the lower ¼ mile of stream.

Winter Conditions - Main stream and tributaries are subject to moderately heavy run-off. The lower one mile of stream occupies approximately ½ of the available stream bed and shows signs of rising approximately 3 to 8 ft.

Pollution - None observed in this survey. Possible sources of pollution from domestic sources near the Gray ranch.

Springs - Spring development was considered good for this time of year.

FISHES PRESENT AND SUCCESS - Silver salmon and steelhead and/or rainbow trout, as well as sticklebacks, were observed in this stream. Sticklebacks were found in the lower area from the Gray ranch down. They ranged in size from ½ in. to 2 in. averaging ½ in. they made up approximately 10% of the population. The steelhead and/or rainbow trout ranged (¾ in. to 8 in.), an average of 2 in. They were considered abundant, making up approximately 60% of the total stream population. They ranged throughout the estimated five miles of main stream survey and ½ of the North Fork survey. The silver salmon observed were from 1-½ in to 4 in., with an average of 2 in. they made up approximately 30% of the total fish population of this stream. Success was considered good and condition was good. They were found throughout the main stream up to a point approximately 1 mile above the junction with the North Fork. Some, but very few silvers, were also observed in the North Fork, approximately ¼ mile. Some solver salmon fingerlings, as well as steelhead and/or rainbow trout, were observed stranded in small pools of the dry sections of stream.. There were from 50 to 130 salmonid fishes per average 100 ft. section of this stream.

OTHER VERTEBRATES - Cattle were observed grazing in the fenced off portion of the Fray Ranch. Deer appeared to be the dominant vertebrates above this area.

FISHING INTENSITY - Unknown.

OTHER RECREATIONAL USES - Possibly hunting.

ACCESSIBILITY - Lower 2 miles of stream is accessible by vehicle via an old logging road. This logging road is blocked by a slide approximately 100 yards above the confluence with Smith Creek. The upper portion of Smith Creek above the North Fork is accessible only by foot. A series of old logging railroad grades and bridges once provided access through this upper section. These are now in such poor condition that they give no help to hikers or other persons on foot.

POSTED OR OPEN - No posted signs were observed in this stream, although a gate controlled by Mr. Gray is locked in the lower ¼ mile of stream. This gate controls access along the entire stream.

IMPROVEMENTS - None observed.

PAST STOCKING - Not known.

GENERAL ESTIMATE - This stream appears to be an excellent spawning and nursery area throughout its length for silver salmon and steelhead, as well as steelhead and/or rainbow trout. Access for silver salmon and steelhead and/or rainbow trout is good; the gradient is very mild. Pool development and spawning area is excellent. Small sections of the mid area are dry at present. Access for any work to be done in the upper section above the North Fork would be difficult.

RECOMMENDED MANAGEMENT - This stream should be continued to be managed primarily as a silver salmon and steelhead and/or rainbow trout spawning and nursery stream. All jams and barriers shown on accompanying barrier survey should be removed from this creek. Some provision should be made to allow flow or partial flow of water around the agricultural diversions in the lower end.

SKETCH MAP - See attached.

REFERENCES AND MAPS - Union Lumber Company, Timberland Department, January 1, 1945.

This survey is submitted by Weldon E. Jones, Fish and Game Assistant, Region 3.

Weldon E. Jones/mh

(no map available for this KRIS version of this stream survey).