

THE RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF FISH AND GAME

**STREAM SURVEY**

Date: April 8, 1983

NAME: Duncan Creek COUNTY: Mendocino

STREAM SECTION: Entire FROM: Mouth TO: Headwaters LENGTH: 3.5 miles

TRIBUTARY TO: Feliz Creek TWP: 12N R: 11W SEC: 23, SE $\frac{1}{4}$ , NE $\frac{1}{4}$

OTHER NAMES: Unknown RIVER SYSTEM: Russian River

SOURCES OF DATA: Personal observation and interview of 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** - Foot survey of entire creek from mouth to a point approximately 3.5 miles upstream on October 27, 1982 by M. Lorenz and D. Redwing.

**LOCATION** - Duncan Creek enters Feliz Creek from the west approximately 1 mile east of Hopland, CA, along Feliz Creek Road.

**RELATION TO OTHER WATERS** - Small stream providing fair spawning and poor rearing habitat for steelhead trout.

**GENERAL DESCRIPTION -**

**Watershed** - Lower 3/4 mile is contained in a flat bottomed valley averaging 1/8 mile in width. Gently sloping hills with oak woodland and chaparral type vegetation surround the valley floor. Riparian was low density willows (20% canopy). For the next 1/2 mile, the stream channel was incised into the valley floor which becomes narrower with steeper walls. Primary vegetation was oak-madrone with a few pines. Riparian was primarily moderate density willow (70% canopy). Above this point, the stream enters a narrow bedrock canyon area and consists primarily of a series of small falls and pools. Vegetation was confined outside of the inner gorge area (except for riparian) and consists of oak-madrone with interspersed douglas fir. Riparian was moderate density willow and alder (70% canopy).

**Altitude** - 520 ft. at mouth; 2,400 ft. at headwaters.

**Gradient** - 250 ft./mile.

**Width** - Lower 3/4 mile - Avg. 10 ft. Range 4 to 30 ft.  
Middle 1/2 mile - Avg. 4 ft. Range 3 to 15 ft.  
Upper 2 1/4 miles - Avg. 3 ft. Range 2 to 10 ft.

**Depth** - Lower 3/4 mile - Avg. 6 in. Range 0 to 5 ft.  
Middle 1/2 mile - Avg. 4 in. Range 0 to 3 ft.  
Upper 2 1/4 mile - Avg. 10 in. Range 0 to 4 ft.

**Flow** - Flow was measured at three locations (Pygmy flowmeter) and estimated at another (float method).

Lower 3/4 mile - .28 cfs above Johnson Creek  
~.75 cfs at the mouth (float method)  
Middle 1/2 mile - .25 cfs near 1st upstream diversion  
Upper 2 1/4 miles - .20 cfs approximately 1 3/4 miles above mouth

**Velocity** - Slow to moderately rapid in lower and middle sections. Moderately to very rapid in upper section.

**Bottom**-Riffles in lower 3/4 mile consisted of 70-80%. six-to-twelve inch cobbles, 10-20%. two-to-four inch gravel, and 0-10%. fines. Pool bottoms were primarily clays and silts with 0-10% bedrock.

**Spawning Areas**- Lower section - 20%. of winter bed  
Middle section - 5%. of winter bed  
Upper section - negligible

**Pools**- Lower section - Avg. 15 ft. x 50 ft. x 2.5 ft; R/P\* 6:1  
Middle section - Avg. 10 ft. x 30 ft. x 1.5 ft; R/P 4:1  
Upper section - Avg. 6 ft. x 12 ft. x 1.5 ft; R/P 2:1

\*Riffle/pool ratio

**Shelter**- Lower section - Fair. Several pools with overhanging vegetation.  
Middle section - Poor. Only a few boulders offer cover.  
Upper section - Good. Many small pools with boulders and ledges.

**Barriers**-A series of cascading falls over boulder piles begins approximately 1 3/4 miles above the mouth in the upper survey section.

**Diversions**-Flashboard irrigation dam is located approximately 5/8 mile above the mouth. Dimensions 4 ft. x 25 ft. A three-inch perforated pipe attached to an offstream pump is being used for domestic use approximately 7/8 mile above the mouth.

**Temperatures**-Water temperatures taken in all three survey sections were 51°F. with air temperatures ranging from 50°F. at 10:00 a.m. to 69°F. at 3:00 p.m.

**Food**-Very little food was available. Most aquatic invertebrates seen were above the barrier to migration.

**Aquatic Plants**-None observed.

**Winter Conditions**-Evidence of peak flows 4 to 5 feet above summer flow level.

**Pollution**-Lower section is used for horse, cattle, and sheep grazing. A gravel extraction operation is evident 1/8 mile above the mouth.

**Springs**-About 1 3/4 miles above the mouth, a small spring enters from the east.

**FISHES PRESENT AND SUCCESS -**

Lower Section - Roach (80/100 ft) suckers (10/100 ft).

Middle Section - Roach(50/100 ft), suckers (25/100 ft), steelhead parr (1/1,000 ft).

Upper Section - Roach (25/100 ft), suckers (10/100 ft), steelhead parr (1/100 ft).

**OTHER VERTEBRATES PRESENT**-Yellow legged frogs, raccoons, deer.

**FISHING INTENSITY**-Very light.

**OTHER RECREATIONAL USE**-Hiking trails.

**ACCESSIBILITY**-Surrounded by private land. Access by permission of landowners. First mile of Duncan Creek Road parallels creek closely.

**OWNERSHIP**-Private.

**POSTED OR OPEN**-Lower two sections posted. Upper section not posted.

**PAST STOCKING**-Unknown.

**IMPROVEMENTS**-The construction of a multi-purpose dam in the headwaters would extend summer flows and increase rearing habitat.

**GENERAL ESTIMATE** - Duncan Creek contains about 3/4 mile of fair salmonid spawning and poor rearing habitat in the lower survey section and 1/4 mile of marginal salmonid rearing habitat in the upper survey section.

**RECOMMENDED MANAGEMENT** - Duncan Creek should be managed for steelhead spawning and rearing.

**REFERENCES AND MAPS** - USGS (Hopland 1960) 15 minute series.

Mitch Lorenz  
Seasonal Aid