THE RESOURCES AGENCY OF CALIFORNIA
Department of Fish and Game

STREAM SURVEY

FILE FORM NO_____.
Date_____

NAME……Mill Creek……..……COUNTY …Mendocino…….…..…
STREAM SECTION … FROM … Headwaters……TO ….. Confluence with Robinson Creek ….. LENGTH…3 mi…
TRIBUTARY TO ……Robinson Creek……..…… TWP..13N……R….14W……SEC..2……
OTHER NAMES……..Unknown……..RIVER SYSTEM ……Navarro……...……
SOURCES OF DATA…Personal observation and contacts with 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 Area
Pools
Shelter
Barrier
Diversions
Temperature
Food
Aquatic Plant
Winter Condition
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: Mill Creek was surveyed June 23, 1969. The entire survey was made on foot by Jim Michaels and Jim Thompson, and required about 6 hours.

LOCATION: The mouth of Mill Creek is located approx. ½ mile upstream from the confluence of Robinson Creek and Anderson Creek in the town of Boonville.

RELATION TO OTHER WATERS; Mi11 Creek provides an important summer flow to Robinson Creek. It also provides suitable spawning and nursery habitat for steelhead trout.

GENERAL DESCRIPTION:

Watershed: The headwaters of Mill Creek flow though a narrow U-shaped canyon opening out into Anderson Valley where the streambed becomes meandering in nature width 5 to 15 ft. incised banks. Vegetation included redwoods, alders, maples, oaks, bay, madrone, fir, horsetails, and algae.

Immediate Drainage Basin: Mill Creek and its tributaries drain approx. 2½ sq. miles of land. Stream flow is roughly south to north. Streamside vegetation is abundant and includes, primarily, maple, alder, bay, redwood, horsetail, and oak.

Altitude: At confluence with Robinson Creek, elevation is approx. 380 feet above sea level. Headwaters are approx. 800 ft. above sea level. .

Gradient: Overall 210 ft. per mile-sluggish.
Width: Range 0 to 8 ft. average 3 ft.
Pools: Range 2 to 8 ft. average 4½ ft.
Riffles: Range 0 to 3 ft. average 2½ ft.
Depth: 0 to 5 ft.
Pools: 6" to 5 ft. average 2 ft.
Riffles: 0 to 6" average 3 inches
Flow: Station 1 - on tributary approx.¼ mile upstream from confluence with Mill Creek: 0.079 C.F.S.
Station 2 - on Mill Creek downstream from tributary: 0.092 C.F.S.
Velocity: Sluggish.
Bottom: Silt - 10%, fine rubble - 50%, coarse rubble - 5%, fine gravel & sand - 10%, coarse gravel - 15%, mud - 10%.
Spawning Areas: Approx. 60% of stream could be used by spawning steelhead.
Pools: Downstream from confluence with main tributary: 60% pools, 40% riffles. Upstream from confluence of main tributary to impoundments - 40% pools, 60% riffles. Upstream from impoundments to headwaters - 30% pools, 70% riffles.
Tributary: 5% pools, 95% riffles. Size: 3-8 ft. wide, 6-15 ft. long, depth 1-5 ft. deep, ave. 2 ft. in depth.
Shelter: 90% covered, many cutbanks.
Barriers: Four artificial barriers were observed. Two permanent dams 30 ft. high and two temporary summer dams 3 and 4 ft. high. Two large log jam barriers were seen with several potential log jam barriers observed.
Diversions: Three diversions were observed. All were of the pumping station variety. Two were 3" diameter; one was 1" diameter.

Use: Irrigation.

Period of Use: Two appeared to be for summer use only (both 3" div). The 1" diversion may be used on an annual basis.

Temperatures: Station 1 - air: 75°; water: 62°; time: 1400.
Station 2 - air: 70°; water: 62°; time: 1700.

Food: Caddisfly larvae abundant on rocks; some mayfly and dragonfly nymphs and backswimmers.

Aquatic _Plants: Some areas with abundant filamentous algae growth were observed.

Pollution: Cattle access to the stream in several areas has caused heavy siltation in those areas. Pollution from cattle was evident.

Springs: None of significant size noted. Some seepage was observed at various points.

FISHES PRESENT AND SUCCESS: Steelhead and/or rainbow trout, roaches, sticklebacks and one sucker (6") were observed. Steelhead - size l"-6", average 2". Density - 45/100 ft. of stream. Electroshocking a hundred foot section yielded 67 steelhead trout. Sticklebacks -size 3/4"-2", average 1". Density 10/100 ft. of stream. Roaches - size l”-3", average 2". Density - less than 5 per 100 ft. of stream.

OTHER VERTEBRATES: Frogs, newts, and water dogs were abundant. Quail, doves and deer also seen.

FISHING INTENSITY: Fishing appeared to be very light. One discarded hook package was found.

OTHER RECREATIONAL USE: None noted. Hunting in season probable as many quail, doves, and deer were spotted in the vicinity of the stream.

ACCESSIBILITY: Roads: two dirt roads provide access to Mill Creek. One crosses Mill Creek ½ mile upstream from its confluence with Robinson Creek and parallels Mill Creek upstream to the confluence of the main tributary. The second road approached Mill Creek approx. ½ mile upstream from the confluence of the main tributary and parallels the stream to the large impoundments ½ mile upstream.

OWNERSHIP: Entire streambed is within private property.

POSTED OR OPEN: Entire stream is on posted land.

IMPROVEMENTS: Log jams all along streambed need to be removed to allow easier access for upstream fish migration.

PAST STOCKING: Not known.

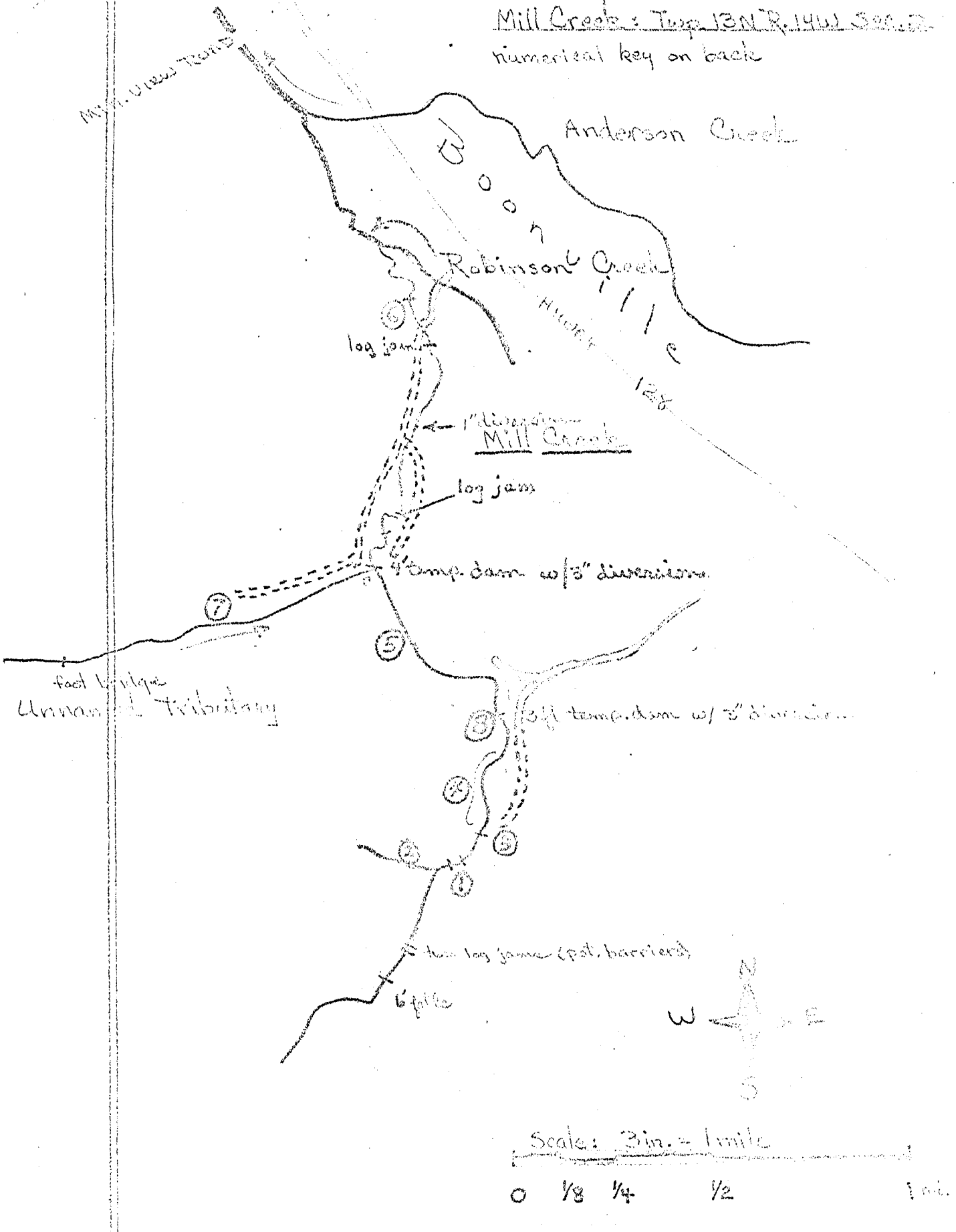
GENERAL ESTIMATE: Mill Creek is reported to be a major tributary to Robinson Creek, both in summer and in winter. It provides nursery and spawning habitat for steelhead trout and has good shelter along most of its length.

RECOMMMDED MANAGEMENT: Mill Creek should be managed as a steelhead spawning and nursery area.

SKETCH MAP: Attached.

REFERENCES: U.S.G.S. Maps - 15' series (Boonville-Ornbaum).

Author: Jesse Thompson


Mill Creek: Twp 13N R.14W Sec. 8
numerical key on back
Anderson Creek
Robinson Creek
log jam
Mill Creek
log jam
temp. dam w/3" diversion
unnamed tributary
temp. dam w/ 3" diversion
log jams (past barriers)
Scale: 3in. = 1 mile
0 1/8 1/4 1/2 1 mi.

① Two impoundments 75 yds. apart. Approximately 20 feet high. Located two miles upstream from confluence with Robinson Creek.

② Unnamed trib. entering Mill Creek at upstream impoundment (See no. 1 above). No apparent fish value.

③ Barrier 150 yds downstream from impoundments. Upper fish limit for Mill Creek. Flow between barrier and impoundments is intermittent.

④ Good nursery area. Possible spawning area for [illegible] and

⑤ 550 yd. open stretch immediately upstream from [illegible] of Unnamed trib. Water temp. at 1400 hrs. was 37°. Fish [illegible] growth were observed.

⑥ Downstream limit for steelhead spawning on Mill Creek. From this point upstream to confluence of main tributary good spawning areas are intermittent. Many pot. barriers in form of log jams observed in this section

⑦ Approximately ½ mile of stream upstream from confluence of Mill Creek is good to excellent spawning gravel. Little nursery value. Upstream from this area for about ¼ mile is fair nursery area.

⑧ Heavy siltation (Booyds) - cattle access.

California Department of Fish and Game - Region 3
Stream Flow Measurement

Gaging of Mill Creek - tribute to Robinson Cr. At, near Immediately d/s from Confluence w/ Unnamed Trib.
Date June 29 19 62 Time 1320 A.T. 70° W.T. 64° Meter No.
Measured by C. Whitaker Notes by Comp. by A. Thompson Checked by
Method .6, .2 and .8, other Gage Height Location

Dist fr init pt	Width Ft.	Depth in Ft. Total	Depth in Ft. of Obs	Revolutions	Time Sec.	Velocity Mean in Sec.	Area Sq. Ft.	Q.	Remarks
8-9' 8.5'	1	.18	.064	11	60	.18	.18	.0324	
9-10' 9.5'	1	.20	.080	18	5	.30	.20	.0624	
								.0948	
Unnamed trib.		Tribute to Mill Cr.		Immediate vicinity		from confluence			
just		Time 1330		T° 75°		AT 62°			
9-10' 9.5'	1	.20	.080	6	60	.10	.20	.020	
10-11.1, 10.5'	1.1	.24	.100	14	5	.23	.26	.059	
								.079	
Totals									

Sheet No.

FG3 9/65 300 IF 65