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THE RESOURCES AGENCY OF CALIFORNIA
Department of Fish and Game

STREAM SURVEY

FILE FORM No .....

Date October 24. 1966.

NAME.....Mark West Creek..... COUNTY: ..... Sonoma.....

STREAM SECTION.....Entire.....FROM.....Mouth.....TO.....Headwaters.....LENGTH: ...26 miles.....

TRIBUTARY TO.....Russian River.....TWP.....8N.....R.....10W.....SEC...31.....

OTHER NAMES.....None.....RIVER SYSTEM.....Russian River.....

SOURCES OF DATA.....Personal observation & local residents.....

EXTENT OF OBSERVATION
Include: Name of Surveyor, Dat
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

EXTENT OF OBSERVATION - On July 18,19,20,21, 1965, Chuck Culley surveyed Mark West Creek on foot and by car.

RELATION TO OTHER WATERS - This stream has a large drainage and is important as a spawning and nursery area for steelhead trout.

GENERAL DESCRIPTION:

Watershed & Immediate Drainage Basin - Vegetation near the mouth is typical Redwood Forest. Most of the stream in the mid-section is bordered by cultivated fields and housing developments. The upper section is well forested with pines.

With the exception of the upper section, which is rather steep, the stream has a moderate gradient.

Altitude - Mouth at 0.0 feet to 40.0 feet, headwaters at 1,600 feet.

Gradient - Moderate, succession of pools and riffles.

Width - Average 11.0 feet.

Depth - Average depth 1.1 feet.

Flow - No records of maximum winter flows. Present flow at 0.60 cfs.

Velocity - Rapid, more than ½ foot/second.

Bottom - Mud - 2%
Hardpan - 1%
Fine Gravel - 12%
Coarse Gravel - 20%
Fine Rubble - 40%
Coarse Rubble - 17%
Boulders - 8%

Spawning Areas - Good to excellant steelhead spawning areas. Approximately 3.2 miles of spawning grounds.

Pools – 1) Caused by: dugging action of current, undercut banks, and a few shallow rock jams.

2) Size: Average length 16.7 feet
Average width 7.1 feet
Average depth 1.6 feet

3) Frequency: Good. 50% pools/50% riffles

Shelter - Boulders, logs, undercut banks, aquatic plants, and overhaning terrestrial plants.

Barriers - 1) Large flashboard dam, 100 yards upstream from the Trenton-Healdsburg Road, 10-12 feet high and 20-25 feet wide. The water behind it contains a few catfish and many carp. Owner should be allowing more water to pass so that the portion of the stream just below the dam would have a greater flow, and thus reduce the marsh-like environment now present.

Diversions - 1) Pumping stations:

a) 1500 feet downstream from Laughlin Road Bridge. Five inch pipe is diverting water for irrigation.

b) 3000 feet below the same bridge a five inch pipe is diverting water for irrigation.

c) 1.10 mile downstream of same bridge an eight inch pipe diverting
water.

Temperatures - Air: 77°F
Water: 69°F at 1515 hours

Aquatic Plants - Mosses were common, on about ½ the rocks inspected.

Winter Conditions - High water scourings, etc., can not be used as indicators of the normal winter conditions due to past severe flooding in the area.

Pollution - Mark West Creek is severely polluted from the entrance of the Laguna de Santa Rosa on downstream to the mouth of Mark West Creek.

It seems quite evident to me, through personal observation, that the Sebastopol Sewage Farm is, at least in part, responsible for the pollution. Water samples could be tested to determine to what extent it is responsible.

The only other factor that I feel could be contributing to the present pollution problem is the use of the land directly adjacent to the Laguna de Santa Rosa. In the upper section, the banks are very marshy and cattle are allowed to stir up the muddy areas. In the lower section, the Laguna de Santa Rosa is nothing more than a deep ditch. This "ditch" contains a small farm pond just before entering Mark West Creek. This pond is stagnant and marshy and its banks are muddy due to cattle that are pastured directly adjacent to it. A dead cow was hung up on a fence stretching across Mark West Creek directly benearth the Trenton-Healdsburg Road bridge. (It is interesting to note that less than ½ mile downstream people were wading and bathing in this stream.)

The owner of the land immediately east of the Trenton-Healdsburg Road bridge complained very bitterly about the pollution problem. He stated that two years ago, his pond created by the large flashboard dam previously mentioned, yielded many steelhead trout, perch, and small mouth bass, but now only a few catfish and many large carp are caught.

Springs - None observed.

FISHES PRESENT AND SUCCESS:

	Lower Section of Stream		Middle Section of stream		Upper Section of Stream	
	Roach	S. H. Trout	Roach	S. H. Trout	Roach	S. H. Trout
Average #/100 ft	250	190	100	160		
Minimum Size	---	---	Adults	1.60"	Not continuous water flow.	
Maximum Size	Adults	Fingerlings	"	5.50"		
Average Size	"	"	"	2.26"		

	Stickleback	Sculpin	Stickleback	Sculpin	Stickleback	Sculpin
Average #/100 ft	225	8	0	2	---	---
Minimum Size	---	-				
Maximum Size	Adults	Adults				
Average Size						

Average #/100 feet for entire live stream: Trout 175/100 feet
Roach 237/100 feet
Sticklebacks 100/100 feet

Total number of steelhead trout inhabiting live portions of the stream: 1,421,000.

Figures on numbers derived from Braille seinings, and cresol samplings. Natural propagation success is considered good.

OTHER VERTEBRATES - Frogs and cattle were abundant in the lower l/8th portion of the stream.

FISHING INTENSITY - Medium to light, mostly light because of private property.

OTHER RECREATIONAL USES - None.

ACCESSIBILITY - Refer to attached map.

OWNERSHIP - Mostly private.

POSTED OR OPEN - Mostly posted.

IMPROVEMENTS - The pollution problem arising from the Laguna de Santa Rosa should be investigated and resolved.

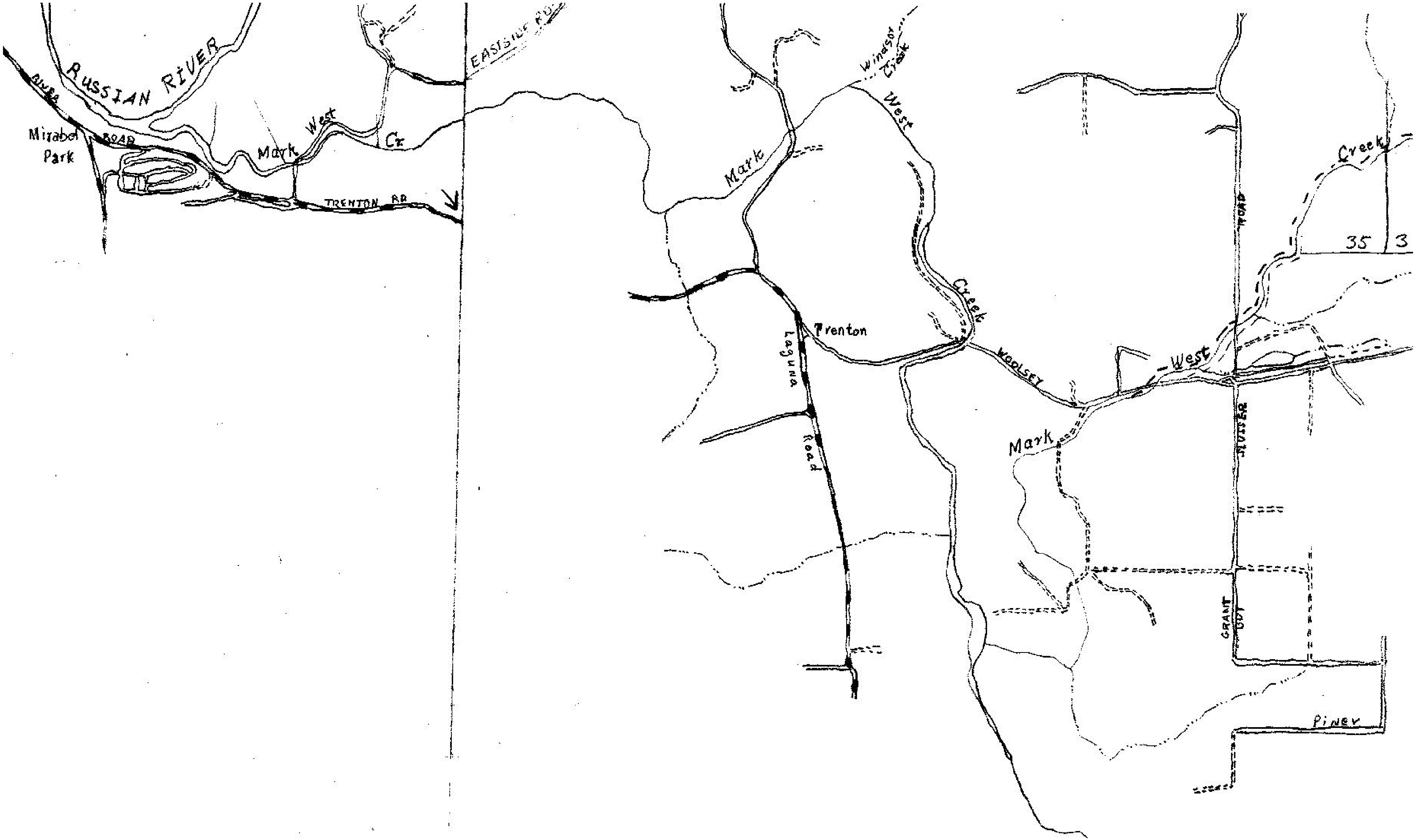
PAST STOCKING - Unknown.

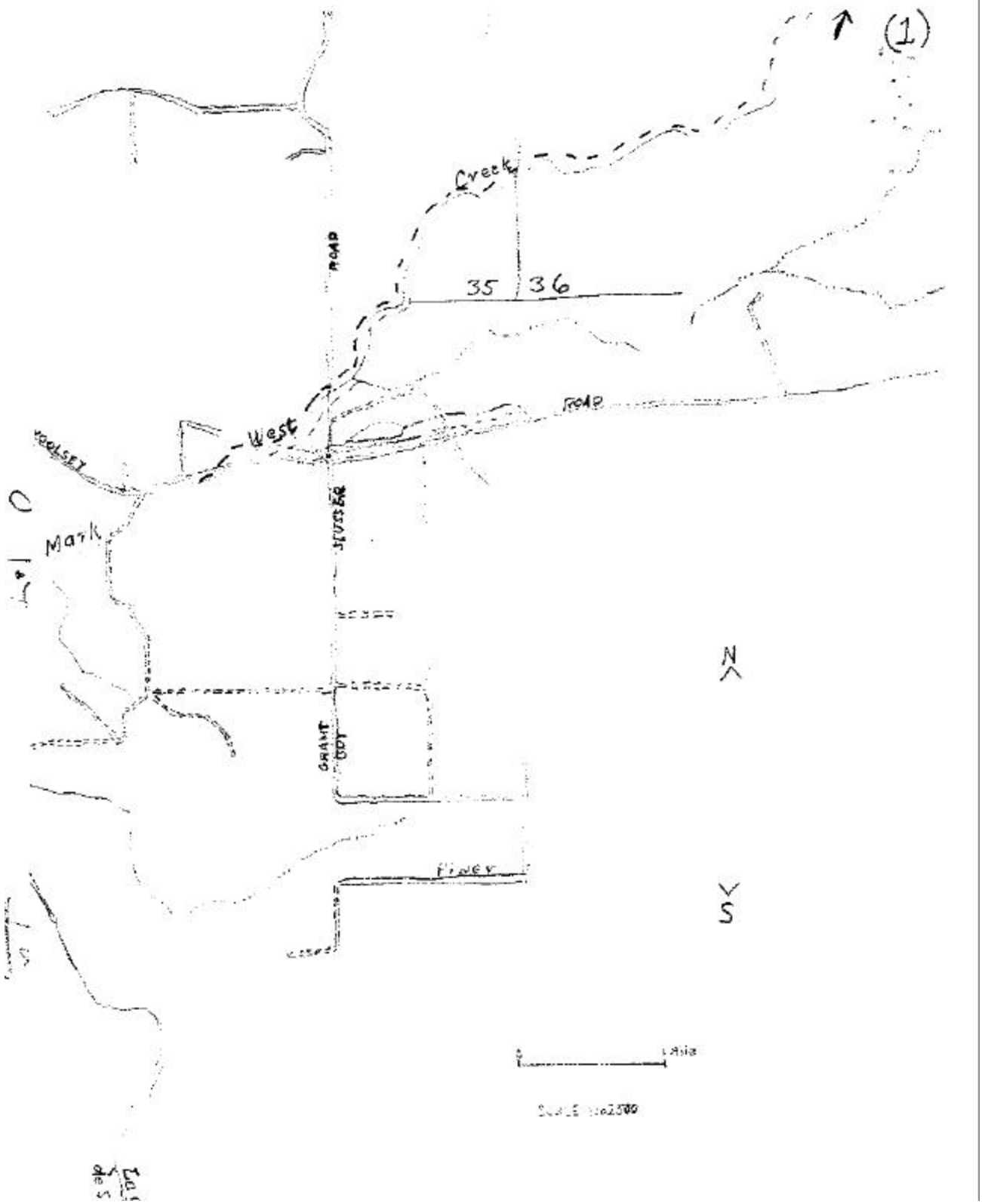
GENERAL ESTIMATE - In the lower 2/3rds of the length of the stream are found; spawning beds for steelhead, important nursery grounds for the same trout. The upper 1/3 of the stream is, for all practicable purposes, dry.

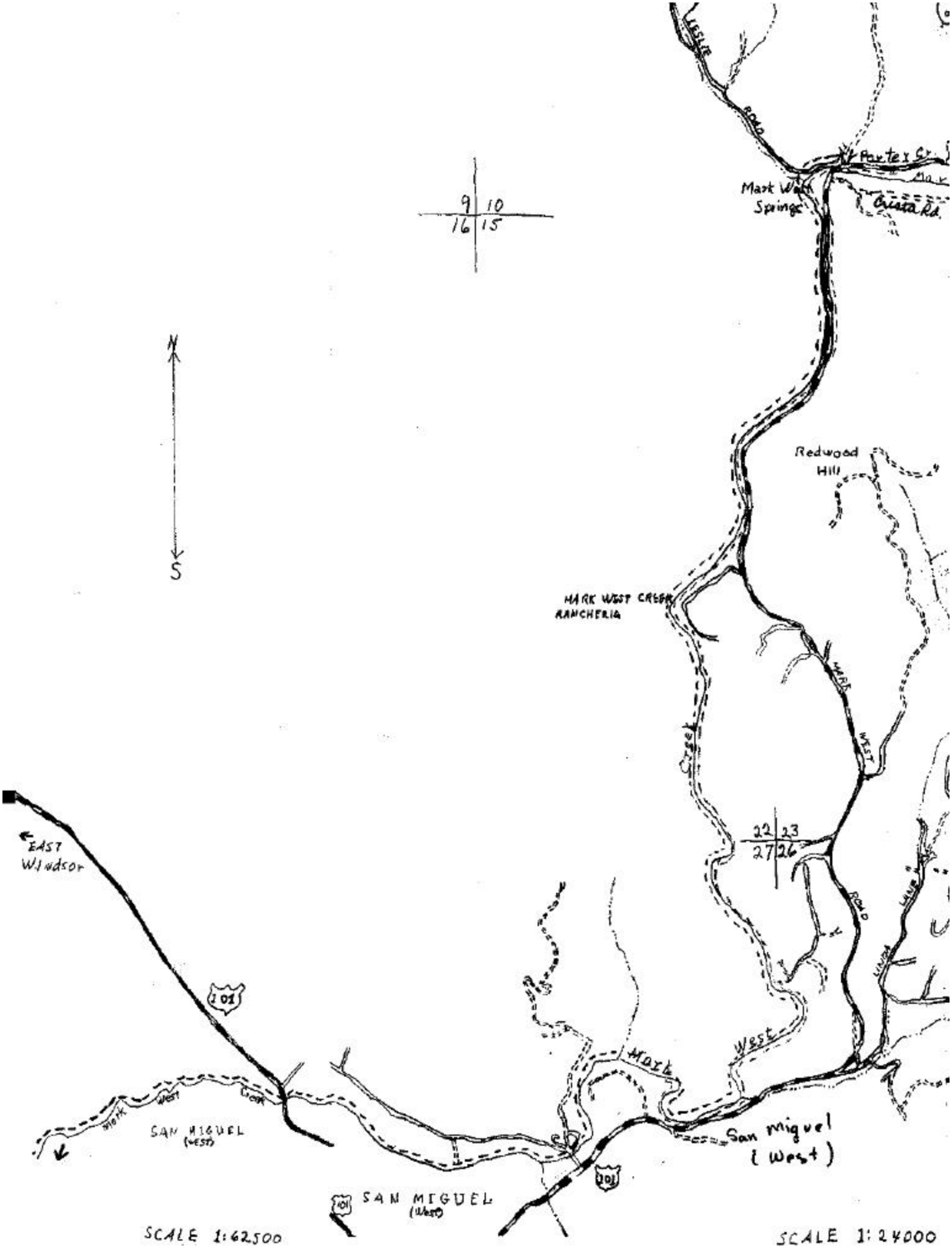
RECOMMENDED MANAGEMENT - This stream should be managed as a fairly important steelhead spawning stream, and as an important steelhead trout nursery area.

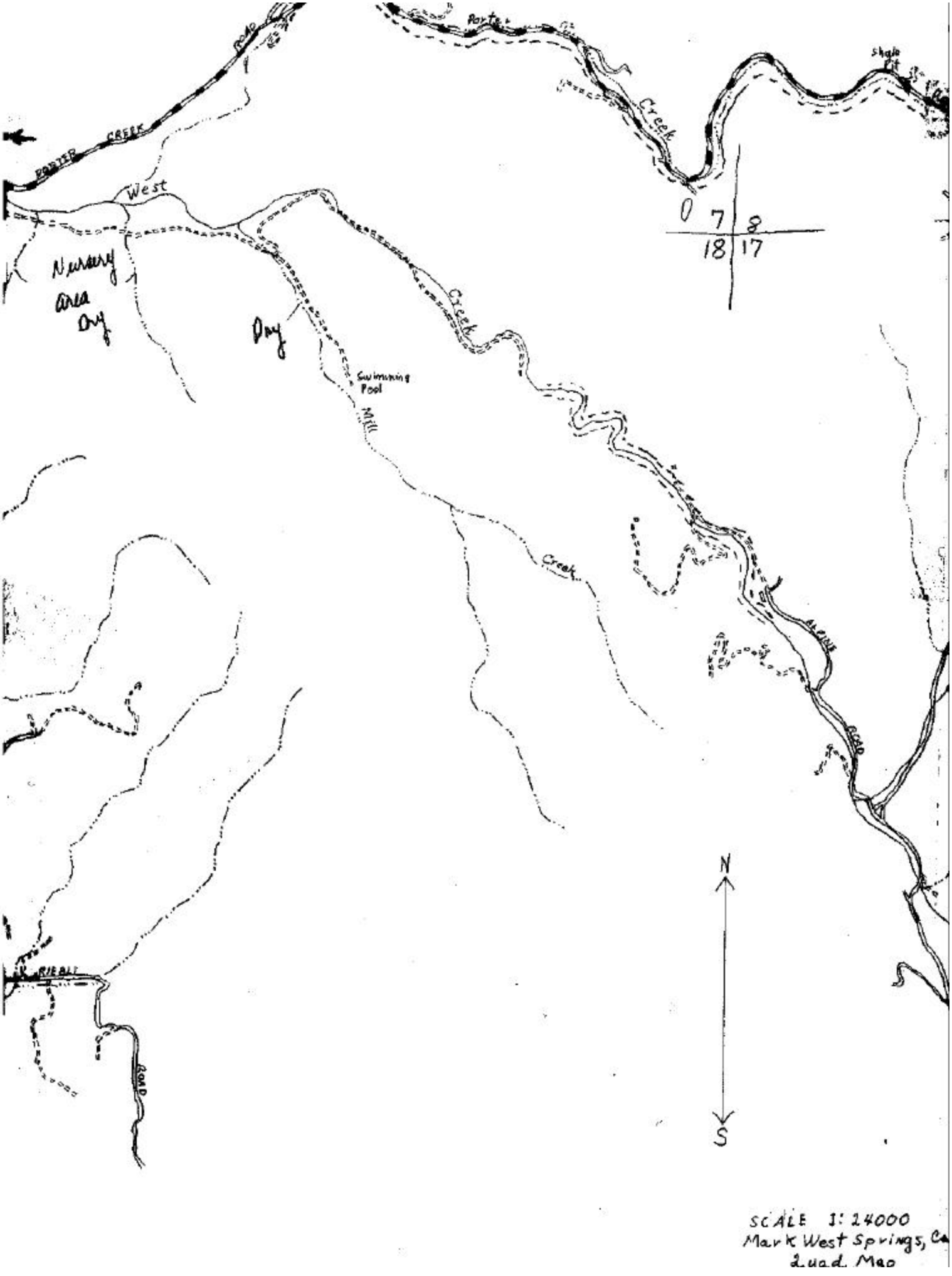
SKETCH MAP – Attached.

REFERENCES AND MAPS – U.S.G.S. QUADS, Camp Meeker, Sebastopol, Mark West Springs, and Calistoga. The Visitor's Map of Sonoma County, California.

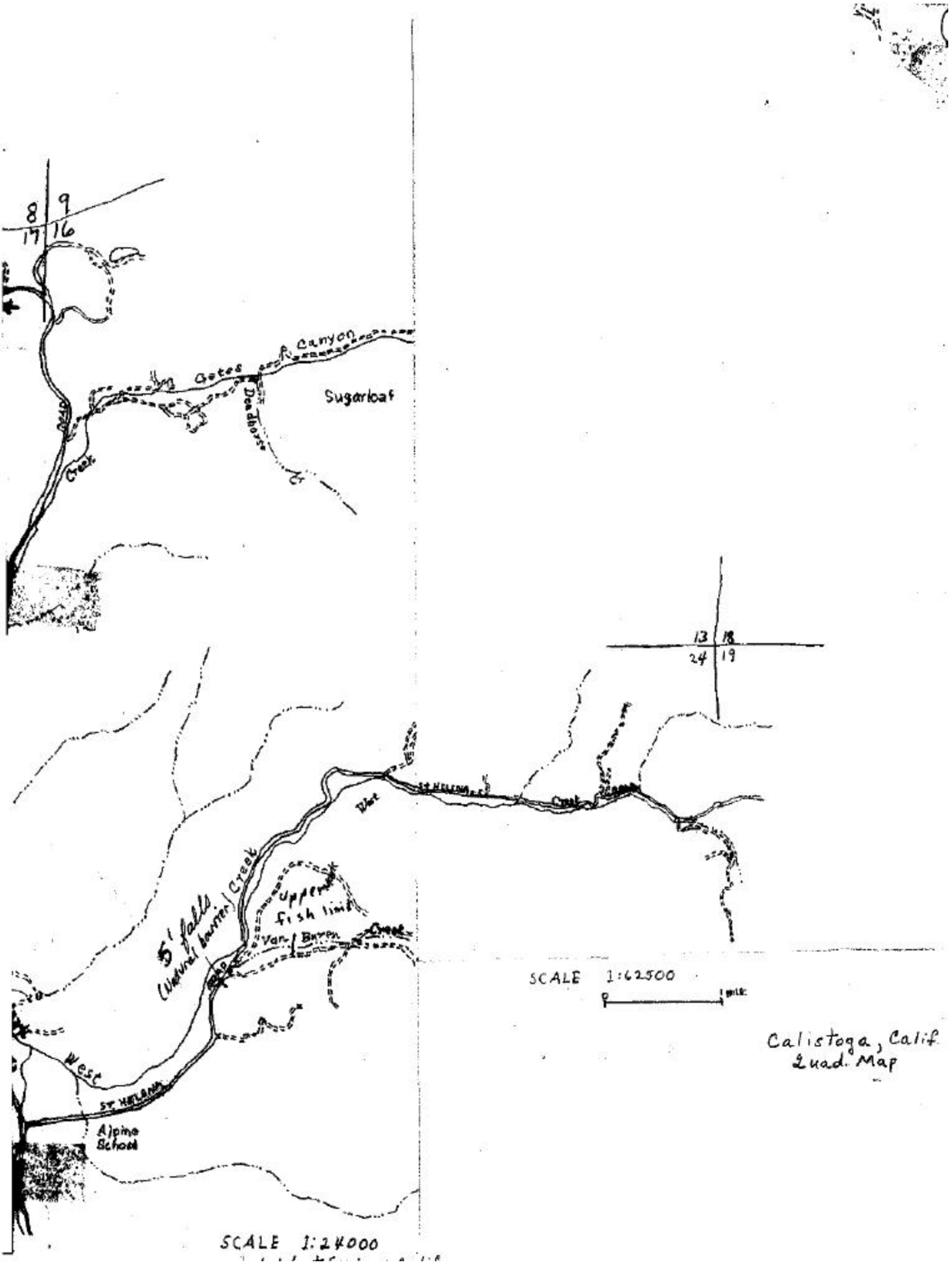

RUSSIAN RIVER
Mirabel Park
ROAD
Mark West Cr
TRENTON RD
EASTSIDE RD
Windsor Creek
Mark
West
Creek
Trenton
Laguna Road
WOOLSEY
West
Mark
Creek
35
3
ROAD
RIVER
Piner


(1)
Creek
ROAD
35
36
West
ROAD
Mark
GRANT
GUY
River
N
S


LESLIE ROAD
Porter Cr.
Mark West Springs
Crista Rd.
9 10
16 15
N
S
Redwood Hill
MARK WEST CREEK RANCHERIA
Mark West Creek
22 23
27 26
EAST Windsor
101
Mark West Creek
SAN MIGUEL (West)
Mark West
San miguel (West)
101
SAN MIGUEL (West)
SCALE 1:62500
SCALE 1:24000



SCALE 1:24000
Mark West Springs, Ca
Quad. Map



Calistoga, Calif.
Quad. Map