## THE RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF FISH AND GAME

## STREAM SURVEY

		File form No	_ <b>Date:</b> March 23, 196	6د
NAME: Mariposa Creek .(Lane Creek)	COUNTY:	Mendocino		
STREAM SECTION: FROM:Mouth	To: Upstrea	m limits	LENGTH: 1½ mi.	
TRIBUTARY To: West Branch of Russian River	TWP: T17N	R: R12W	SEC: 18 [17]	
OTHER NAMES: Lane Creek	RIVER SYSTEM:	Russian		
SOURCES OF DATA: Personal survey and loca	al 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 VERTERRATES 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 - On March 23, 1966, Kevin Rockwood walked downstream from the headwaters of the creek to the mouth at the West Branch of the Russian River.

RELATION TO OTHER WATERS - This creek lacks significance as a spawning or nursery area due to a large earth filled dam approximately ¼ mile above mouth. The long spillway has insufficient flow for fish passage.

## **GENERAL DESCRIPTION -**

<u>Watershed and Immediate Drainage Basin</u> - The headwaters of Mariposa Creek are in a mountain forest of redwood trees. It has a V shaped drainage basin at the headwaters and gradually becomes U-shaped near the mouth. Vegetation is abundant and most of the upper regions of the creek are well shaded.

<u>Altitude</u> - Ranges from 860 feet at the mouth to 1800 feet at the headwaters.

 $\underline{\text{Gradient}}$  - Steep to the lake formed by the dam and moderate from there to the mouth.

<u>Width</u> - Above the dam the width averages three feet and ranges from two to four feet; below the dam the width averages eight feet and ranges from three to fifteen feet.

<u>Depth</u> - Above the dam - average 12 inches, range 6" to 3 ft. Below the dam - average 3 feet, range 8" to 8 feet. Flow - Unknown

**Velocity** – Rapid throughout.

**<u>Bottom</u>** - Rubble (20%), gravel (25%), boulders (25%), sand (15%), bedrock (10%), mud and silt (5%).

<u>Spawning Areas</u> - There are good areas above the dam with loose gravel from pea-size to two inches.

<u>Pools</u> - Below the dam there are four large pools covering 65% of the stream with 35% riffles. These are 10-15 feet wide, 3-8 feet deep, and 10-30 feet long. Below the dam the riffles are formed by boulders and digging action of the current. Above the dam the stream consists of 40%, pools, 60% riffles. These pools are formed by log jams, boulders, and digging action of the current.

<u>Shelter</u> - Above the dam there is overhanging brush, redwood trees and undercut banks. Below the dam the shelter consists of overhanging brush. Shelter is very abundant the entire length of this stream.

<u>Barriers</u> - The culvert, 200 yards above the mouth, under the road offers a partial barrier with falls of approximately 2½ feet and six inches of water.

A large earth filled dam ¼ mile above the mouth, with a 30' spillway and a 4' drop, offers a complete barrier to migrating fish. Although an occasional

steelhead or salmon has been observed to get over the falls, it would not be able to swim up the spillway due to the shallow, rapidly flowing water.

Approximately 1½ miles above the mouth, a series of cascading boulder falls makes the area above inaccessible to fish.

<u>Diversions</u> - Water is diverted from the lake above the dam during summer months, for irrigation.

Food - Insects were abundant and many larvae were observed on the rocks.

<u>Aquatic Plants</u> - Moss and algae were observed in the lower portions of the stream. Winter Conditions - Unknown.

Pollution - None seen.

<u>Springs</u> - Three to four springs were observed approximately 1 mile from the mouth. These springs were apparently rich in iron, an orange-red, flocculent precipitate was present.

FISHES PRESENT AND SUCCESS - One rainbow trout/steelhead, 7-8" was observed above the dam. Large steelhead or salmon were observed below the dam.

OTHER VERTEBRATES - Cattle, salamanders, frogs, and deer were observed.

FISHING INTENSITY - Light.

OTHER RECREATIONAL USES - Unknown

ACCESSIBILITY - Mariposa Creek is accessible by jeep trail to the upper limits of the existing fishery.

OWNERSHIP - Private.

POSTED OR OPEN - Posted.

IMPROVEMENTS - A fish ladder could be built to enable anadromous fishes to get above the dam.

PAST STOCKING - None known.

GENERAL ESTIMATE AND RECOMMENDED MANAGEMENT – The earth filled dam forms a barrier to anadromous fish, blocking off 1.25 miles of good spawning and nursery area. The owners of this dam should be required to build a fish ladder to allow for this upstream migration.

If the proposed dam on the West Branch of the Russian River is built, it will block all upstream migration to this part of the drainage, making a fish ladder unnecessary.