## THE RESOURCES AGENCY OF CALIFORNIA Department Of Fish And Game

## STREAM SURVEY

	Date:
NAME: PIETA CREEK	COUNTY: Mendocino
STREAM SECTION: Entire FROM: Mouth TO:	Headwaters LENGTH: 10.7 miles
TRIBUTARY TO: Russian River	TWP: 12N R: 11W SEC: 2
OTHER NAMES: None known	RIVER SYSTEM: Russian River
<b>SOURCES OF DATA:</b> Personal observations	

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 -** Pieta Creek was surveyed on foot on September 12 and 13, 1974 by Seasonal Aids Jerry Bruns and Brad Jackson from the mouth to the headwaters.

**RELATION TO OTHER WATERS -** Pieta Creek is an important tributary to the Russian River contributing steelhead nursery area—some of the best in the drainage. Excellent spawning gravel was abundantly distributed throughout the creek.

## GENERAL DESCRIPTION -

**Watershed -** The Pieta Creek drainage is dominated by chaparral, oak, madrone, and annual grasses. Most of the creek runs through canyon areas.

**Altitude -** 2800 feet (M.S.L.) in headwaters to 480 feet (M.S.L.) at the mouth.

**Gradient -** 3.9 feet/100 feet of stream.

**Width -** Maximum width of stream 30 feet near the mouth and 1.5 feet in the headwaters. The average width was about 6 feet.

**Depth -** Numerous deep pools were present to a depth of about 10 feet. Pools averaged about 3 feet deep—with a minimum of 1 foot. Riffles averaged about 4 inches in depth.

**Flow** - Flows ranged from 3 cubic feet per second near the mouth to less than 1/4 cfs in the headwaters. Flows were less than 0.5 cfs upstream from the mouth of Tyler Creek. Approximately 1.3 miles of the upper section of Pieta Creek was dry although there was some flow in the extreme headwaters.

**Velocity -** Generally slow with some rapid flow over riffle areas. Numerous small rock falls were present throughout the stream.

**Bottom -** Above the mouth of Tyler Creek, the substrate of Pieta Creek was mainly gravel (50%), rubble (20%), and bedrock (10%) and boulders—rocks (20%). Pools consisted of gravel 35%, bedrock 25%, and rocks 15% with the remainder sand, silt and detritus. Below Tyler Creek the substrate was mainly bedrock (20%), boulders (25%), rubble (30%), gravel (20%), and some sand and detritus.

**Spawning Areas -** Spawning gravel in Pieta Creek was excellent above the mouth of Tyler Creek. Approximately 75% of the channel was potential spawning gravel. Downstream from the mouth of Tyler Creek, Pieta Creek runs mostly over bedrock. However, spawning gravel was present in areas where the canyon widens. Approximately 10% of this lower section was potentially spawning gravel.

**Pools** - Above the mouth of Tyler Creek approximately 30% of the stream was pool habitat. Pools ranged in depth from 1 foot to 5 feet, with an average of 2 feet. Riffles averaged 3 inches deep. Below the mouth of Tyler Creek, pools make up about 50% of the creek. Pools ranged in depth from 1 foot to 10 feet with an average of 4 feet. Riffles averaged 6 inches in depth.

**Shelter -** In the headwaters shelter was good with about 70% of the stream shaded. Downstream to the mouth of Tyler Creek, overstory was poor, shading only 10% of the creek. Instream cover was provided by large rocks and boulders. Below the mouth of Tyler Creek most of the cover was provided by large boulders and rocks.

Barriers - Numerous small rock falls were present, but none appeared impassable to salmonid

**Diversions -** Numerous hunting clubs divert water from the stream. Most of these are located upstream from the mouth of Tyler Creek.

**Temperatures** - Pieta Creek headwaters - water 58°F, air 70°F; above mouth of Tyler Creek - water 68°F, air 80°F; 1 mile below Tyler Creek - water 68°F, air 80°F; 2 miles above mouth of Pieta Creek - water 70°F and air 76°F.

**Food** - Aquatic insects were abundant. Mayfly, caddis, stonefly, diptera, dragonfly, damselfly and hemiptera larvae and nymphs were observed.

Aquatic Plants - Filamentous algae was present in open pool areas.

Winter Conditions - Flooding occurs in the valley above the mouth of Tyler Creek. The winter channel extends to a width of 100 feet in places indicating a large winter discharge.

Pollution - None observed.

Springs - Numerous springs are present (see map).[sic]

FISHES PRESENT AND SUCCESS - Fish were abundant in the lower section including juvenile steelhead, roach, suckers and squawfish. Roach and suckers were extremely abundant from the mouth of Pieta Creek upstream about 3.6 miles. Juvenile steelhead were present in this area in a density of about 35/100 feet. Juvenile steelhead were the only species present in the upper Pieta Creek. Juvenile steelhead extended upstream to the headwaters about 1/4 mile above the forks and ranged in size from 1-10 inches. The majority of the fish were less than 3 inches and were estimated at 150-200/100 feet of stream. Approximately 10.7 miles of stream was utilized as nursery habitat.

**FISHING INTENSITY -** Total use is unknown but local hunting club owner reports heavy use in the Tyler Creek area by members.

OTHER RECREATIONAL USES -

**ACCESSIBILITY of STREAM -** (See map.)[sic] At mouth access was from Highway 101. Access to central section was through Davis Ranch. Key to gate can be obtained at Van Bebber Ranch nearby. Access to upper area by Pieta Land Company road. Four-wheel drive vehicle can drive to creek. A jeep road runs parallel to Pieta Creek downstream to the mouth of Tyler Creek.

IMPROVEMENTS - None.

PAST STOCKING - Unknown.

**GENERAL ESTIMATE -** Pieta Creek is a valuable spawning and nursery stream for steelhead.

**RECOMMENDED MANAGEMENT -** Pieta Creek should continue to be managed as one of the most important spawning and nursery areas for steelhead within the Russian River drainage. Particular emphasis should be placed on protection and maintenance of the habitat.

**SKETCH MAP -** See attachment.[sic]

REFERENCES AND MAPS - U.S.G.S. map.