## CALIFORNIA DEPARTMENT OF FISH AND GAME

## STREAM SURVEY

FILE FORM

No.....

NAME RUSSIAN GULCH CREEK	
	.2 mile above
STREAM SECTION. Entire FROM. Mouth	To. 30 foot falls LENGTH 3.5 mi
TRIBUTARY TO Not a tributary: flows into Ocean	1
OTHER NAMES. Not Known	Russian Gulch Creel
SOURCES OF DATA Personal observation and pers	sonal interview 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 Areas
Pools

Shelter Barriers Diversions Temperatures Food Aquatic Plants Winter Conditions Pollution

POILUON
Springs
FISHIES 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 - Russian Gulch Creek surveyed on foot from mouth on shore of Pacific Ocean to a point .2 mile above 30 foot bedrock falls which is 2.7 miles upstream from mouth, and to a point .2 mile above west-northwest fork of unnamed northwest tributary to Russian Gulch, the fork of the tributary being .4 mile from mouth of unnamed tributary, the mouth of unnamed tributary being located at end of paved road on Russian Gulch Creek. The survey, accomplished on 31 August 1965 by E. R. J. Primbs, covered a total distance of 3.5 miles.

LOCATION - Russian Gulch Creek flows into the Pacific Ocean at the bridge crossing of Russian Gulch Creek by Highway #1, approximately 1.6 miles

crossing of Russian Gulch Creek by Highway #1, approximately 1.6 miles north of the town of Mendocino. The bridge is identified by the road sign "Russian Gulch Creek," as well as by the entrance on the west side of the highway to the Russian Gulch State Park.

RELATION TO OTHER WATERS - Provides 2.1 miles of spawning and nursery grounds for SH and SS immediately adjacent to ocean waters.

GENERAL DESCRIPTION -

Watershed and Immediate Drainage Basin - Size: 2.4 square miles; Russian Gulch Creek flows from the vicinity of the Woodlands Station of the California Division of Forestry approximately due west for 4.8 miles; no current logging; logged prior to 1934, mostly prior to 1930: area adjacent to stream has been a state park, Russian Gulch State Park,

since 1934; steep 50 degrees to 70 degrees canyon slopes; stream shade 70 per cent from trees: red alder and redberry-alelder dominant in lower areas, with redwood dominant in upper areas; surface cover given by bracken and sword fern, horsetail, blackberry, sedge, and other plants; some poison oak on slopes.

Altitude - At mouth sea level, at upper fish value 160 feet.

Gradient -76 feet per mile to upper fish value.

Width - Average 8 feet with range from 6 feet to 30 feet.

Depth -Average 5 inches with range from 2 inches to 6 feet.

Flow - 2.5 cfs. at mouth; 2.0 cfs. at end of paved road (upper fish value); 1 cfs. at 30 foot bedrock falls; .8 cfs. at west-northwest fork on unnamed northwest tributary. Velocity - Slow.

Bottom - Boulders 5 per cent; coarse rubble 15 per cent; fine rubble 30 per cent; coarse gravel 25 per cent; fine gravel 15 per cent; sand 10 per cent.

Spawning Areas - Twenty per cent of winter bed (12,480 square feet).

Pools - Eighty per cent of summer flow, caused by digging action and gravel deposits.

Shelter - Forty per cent of stream bank: roots, undercut banks, boulders.

Barriers - The State Park Division, employing the Chamberlain Conservation Camp crews, has been clearing the stream, primarily, according to Ranger Dick Powers, to avoid road wash-outs. Powers stated that the Park Service intends to remove all log jams eventually when the manpower is available. Currently, Russian Gulch Creek is free of all log jams for the first two miles upstream from mouth--that is, to the end of the paved road which parallels stream--and above the end of the paved road, there are: No. 1 total barriers (1) 30 foot share bedrock falls .6 mile from end of paved road on main stream. No. 2

partial barriers (1) five log jams and one four foot boulder falls on main stream between end of paved road and 30 foot falls (2). Eight log jams, one 18-foot high boulder and log jam, one four foot boulder falls, and .1 mile of continuous slash deposits between mouth at end of paved road and west-northwest fork of unnamed northwest tributary to Russian Gulch. Diversions - The water from a large spring is appropriated by the state park for domestic camp site use.

Temperatures - Maximum at end of paved road at 1500 on 31 August 1965: water 56 degrees Farenheit, air 65 degrees Farenheit, weather: light overcast, calm; altitude 160 feet. Food - In riffle area, caddisfly larvae: 10 per square foot, mayfly nymph: 5 per square foot, stonefly nymph: 2 per square foot.

Aquatic Plants - Moss and a spot or two of algae.

Winter Conditions - Four feet to five feet above summer level; tidal action also affects winter level for a considerable distance.

Pollution - None observed.

Springs - Continuous along north slope (approximately 5 per mile).

FISHES PRESENT AND SUCCESS - No. 1-SH size; 1-1/2 inches to 3 inches, average 2-1/4 inches; 50 per 100 feet. No. 2-SS size: 2-1/2 inches to 3-1/2 inches, average 3 inches; 30 per 100 feet. No. 3-Three-spined stickleback (Gasterosteus aculeatus) 2 caught near mouth. NOTE: Of 137 parr caught and identified, 84 were steelhead and 53 were silver salmon. The steelhead were abnormally small, perhaps because of the low water temperature and relatively scarce food.

OTHER VERTEBRATES - Red-legged frogs.

FISHING INTENSITY - A number of children were observed fishing for parr in the camp site area of park. Ranger Dick Powers stated that this fishing by children was sufficient in extent to have an undesirable affect on SS-SH propogation: the relatively few parr present in camp site area seems to support this observation.

OTHER RECREATIONAL USE - Camping, hiking.

ACCESSIBILITY - Accessible at mouth and for 2 miles upstream from mouth by Russian Gulch State Park Road, which is paved. Russian Gulch State Park Road joins Highway #1 on the west approximately 1.6 miles north of the town of Mendocino and is marked by road signs. Park trails follow the stream from the road end to a point above the 30 foot falls and also follow the unnamed northwest tributary to a point above the west-northwest fork, of the tributary.

OWNERSHIP - State of California.

POSTED OR OPEN - Closed to hunting.

IMPROVEMENTS - Removal of one log jam on main stream below 4 foot boulder falls, approximately .1 mile above end of paved road, and removal of 5 log jams below 18 foot boulder and log falls on northwest tributary, approximately .2 mile above end of paved road.

PAST STOCKING - Not known.

GENERAL ESTIMATE - Russian Gulch Creek has limited spawning gravels, which, however, is being successfully and almost fully utilized by silver salmon and steelhead. A disadvantage for nursery is the scarcity of food, which is offset by the very favorable water temperature, adequate shelter, absence of rough fish and other desirable factors. In the first two mile section of the stream, the section which comprises virtually all; the stream suitable for SH-SS nursery and spawning, there are no log jams; the only partial barrier being an easily-passible 4 foot boulder falls. There still is extensive

logging damage above this section, for this upper area is the typical trout waters. Few if any SH-SS are currently trafficking to these higher waters, although except for the 30 foot bedrock falls, there are no absolute barriers. Ranger Dick Powers is of the opinion that removal of the log jams in the upper area would release gravel deposits: I failed to find extensive gravel deposits entrapped by the debris. Moreover, removal of these log jams will increase the winter velocity which is already of considerable magnitude and perhaps wash some of the existing gravel deposits in the lower areas from their existing sites. However, removal of the log jams would not present any serious fishery problem; on the other hand, neither would removal afford any significant fishery benefits. There is some interference with propogation and traffic by the apparent current policy of permitting children to "fish" at the camp sites.

RECOMMENDED MANAGEMENT - Russian Gulch Creek should be managed for silver salmon and steelhead spawning and nursery. The 7 log jams delineated above under "improvements" should be removed primarily to enhance summer velocity, although a small quantity of spawning and nursery area will also be opened thereby. Prohibition of all fishing should be considered on grounds that public satisfaction of the park may be greater to be able to observe the stream inhabited by parr than to view a stream stripped of fishlife by wasteful extraction.

SKETCH MAP - See attached.

REFERENCES AND MAPS - U.S.G.S. (Mendocino) 7-1/2 minute series (1960). U.S.G.S. (Comptche) 15 minute series (1960). Division of Forestry map--Mendocino Ranger Unit (1950).

Edward R. J. Primbs/bg 1 September 1965

Typed Dec. 16, 1965

Russian Gylch Greek

