THE RESOURCES AGENCY OF CALIFORNIA CALIFORNIA DEPARTMENT OF FISH AND GAME

STREAM SURVEY

					I	File form	No	Da	ate:	
Name:	Stinson Gulc	County: Marin								
				<u>——</u> а р	point	appro	ximate	ely 20	00 yards	
Stream Sectior	n: From:_	Mouth U <u>r</u>	pstream	To: ups	tream	from	the L	ength:	3/4 mi.	
					first tributary.					
Tributary To:	Bolinas_Lagoo	n	Twp:	1N	R:	7W	Sec:_	28 M.I	D.B.&	
Other Names:_			River s	ystem:	Sti	nson	Gulch	Cree	k	
Sources of Dat	a: Persor	nal Obser	vation a	and Inf	ormati	.on				
	Obtair	ned from	Local Re	esident	s					

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

GENERAL ESTIMATE
RECOMMENDED MANAGEMENT

SKETCH MAP

REFERENCES AND MAPS

EXTENT OF OBSERVATION - On October 6, 1960, Jack T. Allen spent approximately two hours walking this stream out on foot.

RELATION TO OTHER WATERS - This is a small relatively unimportant steelhead drainage located in southern Marin. County.

GENERAL DESCRIPTION:

<u>Watershed</u> - This stream is located in the steep, rugged coastal foothills of southern Marin County. It flows down a steep, V-sided canyon, heavily shaded with oak, madrone, bay, and some Redwoods. Ferns are found in abundance along this canyon. Soil in the general area is composed of loam, sandstone and shale. After the stream leaves the hills it flows across a narrow, approximately 1/4 mile wide coastal plain, to enter Bolinas Bay.

<u>Immediate Drainage Basin</u> - The stream flows through a steep and rather narrow boulder and rubble-lined channel. Streamside vegetation is relatively sparse along much of the stream, but the entire stream is heavily shaded by oaks, bay, etc., along the steep canyon sides.

Altitude - Zero to 1400 feet.

<u>Gradient</u> - 400 feet per mile in the lower half mile and 2,000 feet per mile in the remainder of the drainage.

<u>Width</u> - The stream channel varies up to 30 feet, in width but the average at the time of the inspection was 3 to 10 inches for the riffle area and about 2-1/2 feet for pool areas; average about 10 inches.

Depth - 1 inch to 18 inches; average of pools, 6 inches; riffle, 1 inch. Average, 2 inches

Flow - 50 to 100 gallons per minute. Stream was dry except for a few standing 'pools near mouth upstream for a distance of about 1/4 mile. Flowing water existed from 1/4 mile above the mouth upstream to the uppermost section checked.

Velocity - Slow in lower section; rapid to cascading in middle section.

Bottom - Large gravel to small rubble in the lower 1/4 mile section; large gravel to small and large rubble, with some boulders and a little sand, in the mid section extending upstream to the upper limits of the area checked.

Spawning Areas - Fair to good in the lower 1/4 mile--30 to 40% was of fair quality in this section; mid section, good quality but scarce—only about 10 to 15%.

Pools - Pools on the average were quite small, but ranged from $1-1/2 \times 2-1/2$ ft. $\times 6$ in. deep to $8 \times 15 \times 1-1/2$ feet deep. Average was about $1-1/2 \times 3$ feet $\times 6$ inches

Shelter - Good for juveniles in the form of rubble and boulders; poor for adults.

Barriers - A 6 to 7 foot high boulder and debris barrier existed approximately 50 feet downstream from the first tributary. Adults may be able to surmount this barrier during periods of extremely high flow. A 4 ft. high boulder barrier exists approximately 50 ft. upstream from the first tributary. This may also be passable during periods of high flow. A third barrier in the form of a series

of boulder cascades approximately 100 to 150 feet long existed approximately 100 yards upstream from the first tributary. This seems to be the upstream limit for anadromous fish, although 8 to 10 inch trout are reported to occur in the drainage above this barrier. These are believed to be a resident form.

<u>Diversions</u> - A 4-inch screened pipeline diverts water directly from the creek 250 yards downstream from the first tributary. This pipeline supplies water for domestic use to the ranch located near the highway.

Food - Aquatic forms, moderately plentiful; also, terrestrial insects are abundant.

<u>Aquatic Plants</u> - Water cress was abundant in pools and seeps near the mouth of the stream. Aquatic plants were scarce elsewhere in the drainage.

<u>Winter Conditions</u> - This stream is subject to rather severe fluctuation during winter storm periods. Pollution - None observed.

Springs - None observed.

observed.

FISHES PRESENT AND SUCCESS - Cottid sp., from I to 2-1/2 inches long observed in pools near the mouth. A total of about 15 were observed in four pools. Rainbow trout, 2 to 3 inches in length, were observed to be quite plentiful in the mid section of the stream. From 3 to 30 per pool were observed, with an average of about 35 to 50 per 100 ft. section of stream. They were noted to be progressively fewer as one approached upstream to the vicinity of the barriers. Condition of the fish was good. Adequate natural propagation occurs in this area.

Other remarks: What is believed to be a resident trout fishery is reported to occur above the barriers. Size of the reported fish is from 6 to 10 inch? s. No juvenile silver salmon were

OTHER VERTEBRATES - One water snake and numerous frogs observed.

FISHING INTENSITY - Light—restricted almost entirely to a few neighborhood children..

OTHER RECREATIONAL USES - None observed, but picnicking reported to occur in the lower half of the drainage.

ACCESSIBILITY - Accessible on foot from Highway 1

OWNERSHIP - Lower section under private ownership. Upper section, unknown.

IMPROVEMENTS - None observed.

PAST STOCKING - Unknown.

GENERAL ESTIMATE - Stinson Gulch Creek, a small approximately 2-mile long coastal stream, supports a relatively minor steelhead fishery in some years. A series of barriers, or partial barriers, located at about the midpoint of the stream, limits the use by anadromous species to the lower half of the drainage of which only about a quarter mile section contained live water at the time of the survey. It is doubtful that more than two or three dozen pair of adult steelhead utilize this stream even in good water years but, even so, steelhead production is limited by the lack of adequate nursery area. Only about one quarter of a mile is available for this purpose. What, in the writer's opinion, is believed to be a resident trout fishery, is reported to exist in a quarter to half-mile section upstream from the series of barriers at the mid point of the stream. Pools on the average are quite small at the low flows which existed at the time of the check. At higher flows these would furnish little protection or resting areas for the small steelhead. It is estimated that the progeny from two or three pair of adult steelhead would be more than sufficient to populate the section of the stream available to anadromous species.

RECOMMENDED MANAGEMENT -

- 1. This stream should be continued to be managed as a steelhead fishery.
- 2. The difficult access, in addition to the low flows, do not adapt this stream to a catchable trout program.
- 3. This stream which, at best, makes only a very minor contribution to the Bolinas Bay fishery, would not justify the cost of expensive protective devices which will be required when the new highway is constructed, but if culvert designs in the future are limited to the type that is presently in operation, no problem should occur.

SKETCH MAP - See attached map.

REFERENCES AND MAPS – U.S.G.S. Quadrangle Map, 7.5 Minute Series, Bolinas Quadrangle, Marin County, 1954.

Jack T. Allen/mh

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JTA:mh

cc - Jack T. Allen

Lagunias Creek ONE COUNTY GULCH, CREEK Andreckest Blvd MORSES GULCH CREEK. MC KINNAN GULH CREEK Bolmas Lagoon STIMSON GULCH Bolinas tinson Beach Pacific Ocean Miles