

THE RESOURCES AGENCY OF CALIFORNIA
 Department of Fish and Game

STREAM SURVEY

FILE FORM No. _____

Date March 18, 1982

NAME...Bear Valley Creek.....COUNTY.....Marin.....
 STREAM SECTION...Entire....FROM.headwaters.....TO.....mouth.....LENGTH....3.5 mi...
 TRIBUTARY TO....Lagunitas Creek thence Tomales Bay.....TWP.....R.....SEC.....
 OTHER NAMES.....RIVER SYSTEM.....Lagunitas Creek.....
 SOURCES OF DATA.....Personal observation.....

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

EXTENT OF OBSERVATION: Bear Valley Creek was surveyed by Joyce Ambrosius, Seasonal Aide, on March 18, 1982. The stream was surveyed on foot from the headwaters to the mouth. This survey was conducted after the storm of January, 1982, to assess the damage that resulted from the storm.

LOCATION: Bear Valley Creek flows from the Point Reyes National Seashore in a northeasterly direction. It then turns northwest and flows through the Park Headquarters, then through a flood plain to Lagunitas Creek.

RELATION TO OTHER WATERS: Bear Valley Creek flows parallel and to the west of Olema Creek in the lower reaches. On it's western side is Haggerty Gulch.

GENERAL DESCRIPTION

Watershed and Immediate Drainage Basin: Bear Valley Creek is a perennial stream fed by three main tributaries in deep canyons. The stream drains approximately 1.5 sq. mi. of dense bay and redwood woodlands. The main tributary, which follows Bear Valley Trail, is in a U-shaped canyon, while the other two tributaries are in steeper V-shaped canyons. The riparian vegetation is

dense consisting of California bay, redwood, Douglas fir, alder, ferns, blackberry, and huckleberry. The lower two miles of the creek flattens out and opens into a willow-cattail flood plain. The main channel turns into many smaller channels before joining together again at the confluence of Lagunitas Creek.

Altitude: The mouth and lower two miles of the stream is at sea level with the headwaters at approximately 300 ft. for the main tributary. The other two tributaries begin at 800 and 1000 ft. above sea level.

Gradient: Gradient of the main tributary is moderate (200 ft./mile), with the secondary tributaries' gradient being 533 ft. per mile.

Width: The width range is 2 to 19 ft. with an average of 4 ft.

Depth: Water depth ranged from 4 in. to 1.5 ft. in pools, with an average of 8 inches.

Flow: Flow was continuous throughout and was estimated to be about 0.75 c.f.s.

Velocity: Moderate throughout becoming more sluggish in the lower reaches.

Bottom: Bottom consisted of shale with 30% rubble and 70% sand and silt in the headwaters turning to 100% sand and silt in the flood plain. The middle section consisted of 40% rubble and 60% silt and sand. Most of this silt and sand is probably a result of the recent storm which caused many landslides into the creek.

Spawning Habitat: At this time, spawning potential for SH and SS is poor. Spawning gravel is not present with the tremendous amount of silt and sand. The mouth is also a problem for fish passage through the flood plain with no main channel.

Pools: Pool to riffle ratio was 20:80. At the present flow conditions, there were no large pool areas.

Shelter: Bear Valley Creek is sheltered with a canopy mainly of bay, alder, and redwood in the upper section. In the flood plain, the cover is willow. In the one-half mile section directly downstream of the National Park Headquarters, the stream flows through an open silt bar area where there is no cover at all. Bank shelter is minimal at this time from the scouring by the storm.

Barriers: In the lower two miles, there is only one small log jam upstream from Park Headquarters. There are 4 log jams upstream of this two-mile section to the first major tributary. The first tributary has a natural bedrock falls of approximately 5 ft. high, 1/8 mi. upstream, stopping all fish passage. A major landslide and log jam, approximately 15 ft. high x 20 ft. wide x 30 ft. long, blocks the entire stream between the first and second tributary (Pic. 18). Approximately 1/2 mile up the second tributary, two major landslides have occurred causing log jams, which totally block the stream, of about the same size as the first major jam. One-quarter mile upstream from the second tributary is a fourth major landslide and log jam causing a total barrier again (Pic. 19).

Diversions: none observed.

Aquatic Plants: Scarce throughout due to recent storm scouring.

Winter Conditions: This winter storm altered the streambed channel and also caused major damage to the stream. It is impossible to determine previous winter conditions.

Pollution: Quantities of iron are present in the water as indicated by orange-colored iron-fixing bacteria present.

Springs: No springs were located.

Fishes Present: None observed.

Other Animals: Evidence of deer, raccoon, and many bird species including hawk, vulture, and duck.

Fishing Intensity: No evidence of angling activity.

Other Recreational Use: Bear Valley Creek Trail follows Bear Valley Creek. It is a popular hiking and backpacking trail giving access to the ocean through Point Reyes National Seashore.

Accessibility: Point Reyes National Seashore provides access to Bear Valley Creek along Bear Valley Road which parallels the lower section of the stream.

Ownership: Bear Valley Creek flows through National Park lands.

Posted or open: Open.

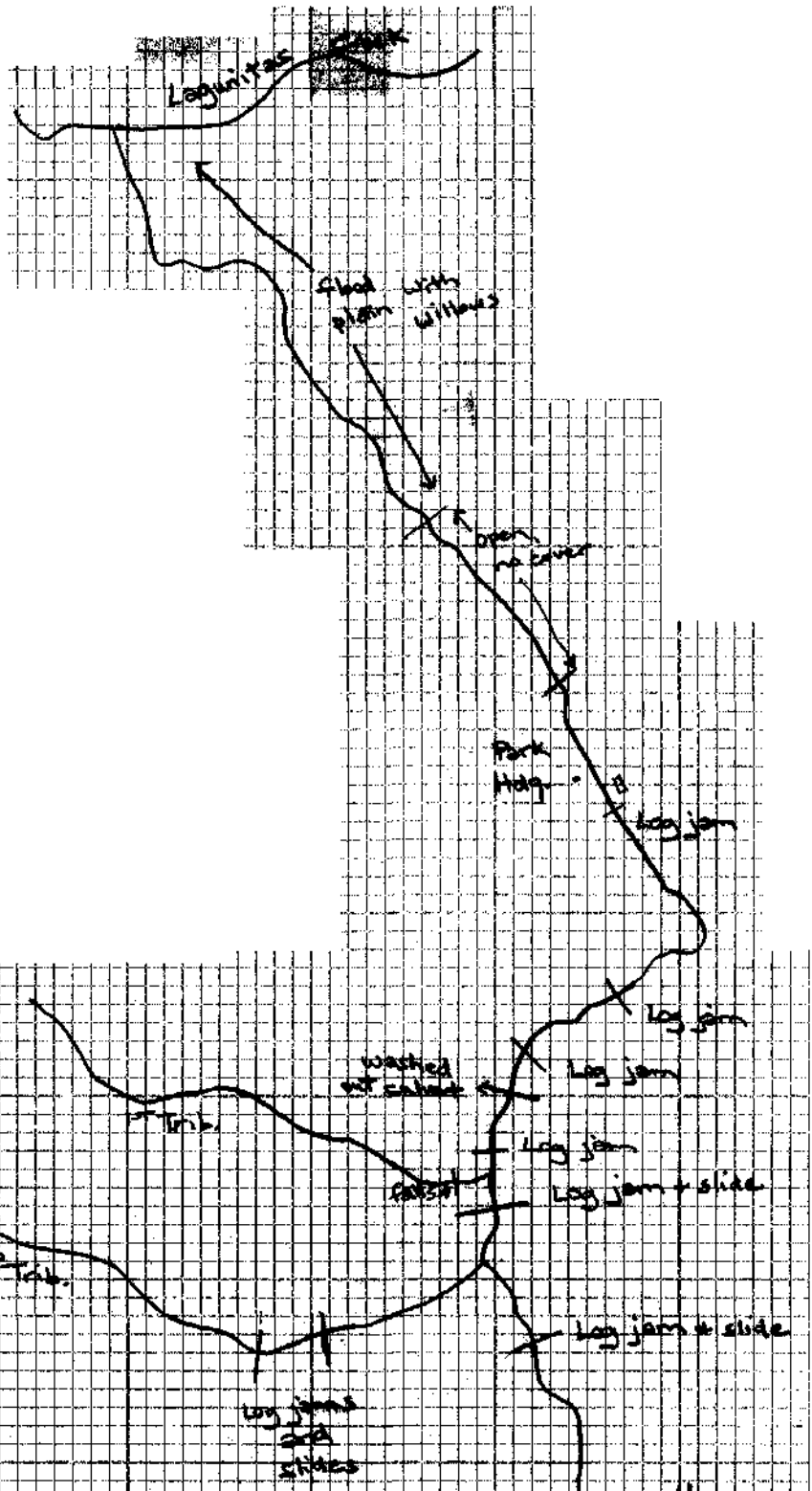
Improvements: None noted.

General Estimates: Bear Valley Creek has very low potential as a spawning and nursery habitat for SH and SS. The limiting factors are the flood plain at the mouth of the creek allowing no access to the upper reaches and also the bottom conditions consisting mainly of sand and silt with no gravel present. The creek has many log jams and landslides across the stream causing total barriers to fish passage.

Recommended management: This stream needs to be cleared of the log jams and slides and the lower section needs to be channelized and cleared of silt deposits which have caused a wide flood plain to develop. A follow-up survey should be made during summer months to determine flow and potential use.

Reference Maps: U.S.G.S. 7.5 min. Inverness Quad.

Joyce Ambrosius
Seasonal Aid
Region 3



Bear Valley Creek
 Marin County

