

THE RESOURCES AGENCY OF CALIFORNIA  
Department of Fish and Game  
**STREAM SURVEY**

Date March 10, 1982

NAME.....Olema Creek.....COUNTY.....Main.....

STREAM SECTION.....Entire.....FROM.....Headwaters.....TO.....Mouth.....LENGTH....9 mi..

TRIBUTARY TO....Lagunitas Creek thence Tomales Bay..... Twp.....R.....Sec.....

OTHER NAMES .....NA.....RIVER SYSTEM...Lagunitas Creek.....

SOURCES OF DATA.....Personal Observation.....

Extent of Observation: Olema Creek was surveyed during February and March by Joyce Ambrosius, Seasonal Aide. The stream was surveyed in sections by foot from the mouth to the headquarters. Sections referred to in this survey report are:

Section A - 2 miles upstream from the mouth to Bear Valley Road and Hwy 1 intersection.

Section B - next 1.2 mi. u/s from Bear Valley Road.

Section C - next 2.2 mi. u/s to Five Brooks Trailhead and stables.

Section D - next 1 mi. u/s from Five Brooks.

Section E - last 2.5 mi. u/s to headwaters.

Location: Olema Creek runs parallel to Hwy. 1, flowing in a NW direction, draining into Lagunitas Creek.

Relation to Other Waters: Olema Creek is a tributary to Lagunitas Creek. Neighboring tributaries are Bear Valley Creek and Haggerty Gulch Creek.

GENERAL DESCRIPTION

Watershed and Immediate Drainage Basin: Olema Creek is fed from many small tributaries coming off of Bolinas Ridge. The stream flows in a northwesterly direction through a narrow valley of willow, alder, and blackberries. The majority of the stream flows through grazing pastures. A small section (Section D) flows through a steep and narrow V-shaped canyon which is heavily vegetated.

Altitude: The mouth of Olema Creek is at sea level with the headwaters at approximately 200 ft. above sea level.

Gradient: Very slight, 22 ft./mile (0.42%).K

Width: Width at the headwaters is approximately 2-4 ft. and widens at about the beginning of Section C to about 4-6 ft. Maximum width is 10 ft. with an average of 6 ft.

Depth: Depth ranged from 3 inches to 3 ft. with an average of 10 inches.

Flow: Flow was continuous throughout with a flow of about 3 c.f.s. at a time 2 to 3 weeks after the last rain.

Velocity: Moderate throughout except for two areas in Station A where velocity was sluggish due to marsh area.

Bottom: The bottom in Sections A, B, and C consisted of 40% rubble, 30% gravel, and 30% silt. Section D was 50% rubble, 20% gravel, and 30% silt. Section E was 70% rubble and 30% silt.

Spawning habitat: Because of the large amount of silt and mud deposited from the January 1982 storm, most spawning areas have disappeared. In the lower sections (A & B), gravel is abundant under a layer of mud and silt.

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 Area
Pool
Shelter
Barriers
Diversions
Temperature
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

Pools: Water flow is steady throughout with few pools. The headwater section (E) has a pool to riffle ratio of 40:60. The other sections have a ratio of 10:90.

Shelter: There is good riparian habitat along the entire length of the creek. Because of the scouring from the storm, there are very few undercut banks. There are many logs and roots in the creek, available for shelter. Section E had undercut banks and did not receive as much scouring since flows were less.

Barriers: Section A: Only 1 log jam was observed in this section. Section B: This is the worst section. Seven log jams were noted, each a few hundred feet from the next, within 1.2 miles. There is much bank erosion and many slides in this area which is mostly grazing land. Section C: Four log jams were noted in this section. The water was clearer and there was less bank erosion. Section D: This is another bad section of slide and bank erosion. Six log jams were sighted. Section E: No log jams were observed. In two areas, the gradient levels out and the creek spreads into a marsh area with no well defined creek channel.

Diversions: None observed.

Aquatic Plants: Bunch grasses were present in Section E. Plants were scarce in the rest of the creek due to the storm's scouring.

Winter Conditions: It is impossible to tell previous winter conditions due to the tremendous amount of water this winter.

Pollution: Pollution occurred in the grazing areas from horses and cattle which have direct access to the stream.

Springs: None observed.

Fishes Present: None observed.

Other Animals: Deer, great blue heron, and vultures were noted. Domestic animals included horses, cows and sheep all grazing on the banks of the stream.

Fishing Intensity: No evidence observed.

Other Recreational Uses: none observed.

Accessibility: Olema Creek runs parallel with Hwy. 1 and is accessible from the road at most points.

Ownership: Olema Creek runs through many private ranches. Some of the creek is also within the Pt. Reyes National Seashore.

Posted or Open: Not posted against trespassing.

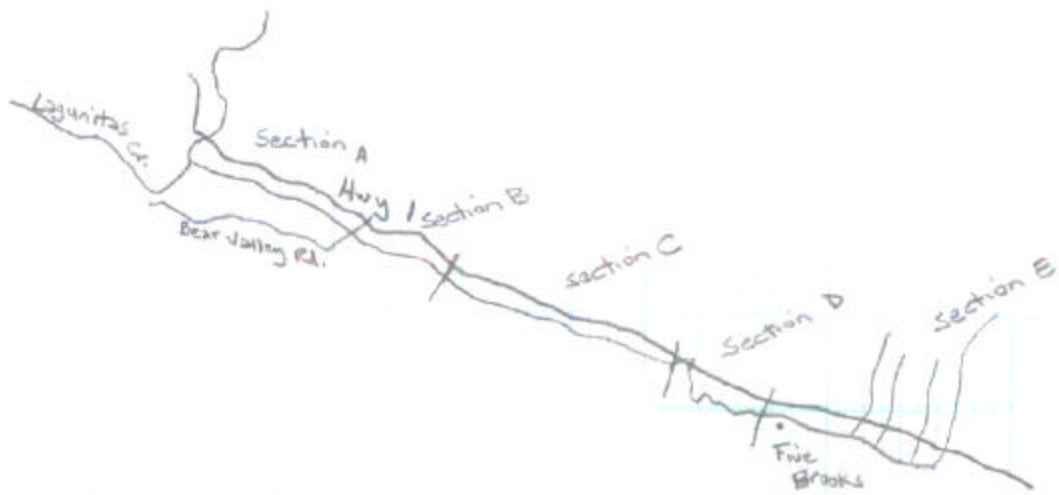
Improvements: none noted.

General Estimate: Olema Creek is a major tributary to Lagunitas Creek. It has potential for spawning and nursery habitats for SH and SS. The storm of January 1982 has caused severe erosion and many log jams the length of the creek, decreasing its availability to fish at this time. Riparian habitat is good along the entire length.

Recommended Management: Olema Creek should be cleared of all log jams and grazing should be kept away from stream banks to help stop erosion. The creek should be managed as a spawning and nursery habitat for SH and SS. The streambed should be checked periodically to monitor the scouring of silt and mud from the gravels caused from the storm.

Reference Map: U.S.G.S. 7.5 minute Bolinas and Inverness quads.

Joyce Ambrosius  
Seasonal Aid  
Region 3



Olema Creek  
Marin County

