

SUPPLEMENTARY SURVEY

HAZEL GULCH CREEKMendocino CountyJuly 19, 1966

Stream Identification; Mouth: T16N, R16, Sec 32; Hazel Gulch Creek flows into Big Salmon Creek at the mouth of Donnelly Gulch Creek, which is located 1 mile on Hazel Gulch Creek below the southern Hardell ranchhouse and 1 1/4 miles

on the new Hardell ranch road from the Albion Ridge Road. An old logging bridge of soil and logs marks this site. Hazel Gulch Creek was referred to in the original report as Unnamed Tributary #5.

Extent of Survey - Entire drainage by foot with only cursory attention to area of current logging. Period of survey July 18, 1966.

Environmental Conditions

1. Stream Flow: At mouth: 0.09 cfs.
2. Temperatures: At mouth: 1730: air 74°, water 57°, weather fair, wind 5 mph.
3. Spawning Gravels
 - (A) On east branch of East-West Fork at Hardell ranchhouses:
 - (1) Evaluation: excellent
 - (2) Description: average 4' wide, coarse-fine gravels, 1' - 2' winter water coverage; gradient slight; stable.
 - (B) On west branch of East-West Fork at Hardell ranchhouses:
 - (1) Evaluation: poor
 - (2) Description: primarily mud bottom; poor fish access (18' , 45° slope, bedrock drop at mouth); little gravel near northern Hardell ranchhouse.
 - (C) Below East-West Fork:
 - (1) Evaluation: fair
 - (2) Description: deep summer and winter pools; considerable silt and mud bottoms; flow broken by roots and dense thickets.
4. Aquatic Insects
 - (A) Type: caddis fly larvae, and may fly and stone fly nymphs.
 - (B) Abundance: caddis fly larvae plentiful, others not abundant.
5. Diversions - 2 inch pipe and pump at Hardell's northern ranchhouse.
6. Current Logging - One mile on stream on east branch of East-West Fork, commencing about a mile above the Hardell ranchhouses. This logging is occurring in area of excellent spawning but only poor to fair nursery potential. H. J. Gray Company is logging; property owned by Hardell's. At time of survey debris is still in stream from logging and road building operations.
7. Barriers
 - (A) 18 small log jams on east branch of east-west fork and below east-west fork.
 - (B) 6-foot soil sink in grass pasture just above 30' high old bridge near Hardell's ranchhouses.
 - (C) 6' high log and boulder falls just above 30' high old bridge formerly used for passage to Hardell's southern ranchhouse.

Fish Population

1. Silver salmon and steelhead - The steelhead parr population on the east branch of the east-west fork was composed of last year's kutch

(4" - 5") as well as this year's (1 1/2" - 2"), which suggests considerable stream blockage, interfering with parr migration. Moreover, while the east branch is primarily a spawning area, the nursery water is currently underused. Only 5 parr were noted in the west branch, which has little nursery as well as negligible spawning value.

Access - By new Hardell ranch road, which joins the Albion Ridge Road (county road) 6 1/4 miles east of the post office of the village of Albion. A small house just north of this entrance marks this site. The old Hardell ranch road, about a mile north of the new road, is currently impassable, because of a washout. A mile from the entrance on the new road, an old logging road joins the Hardell ranch road, which logging road leads to the mouth of Hazel Creek. The new Hardell ranch road itself follows Hazel Gulch Creek to the Hardell ranch and thence follows the east branch of the east-west fork to the current logging operations in the headwater area. The old Hardell ranch road follows the west fork to the headwater area.

Comments - The primary value of Hazel Gulch Creek is to be found on the east branch of the East-West fork of the stream at the Hardell ranchhouses. Here spawning grounds are located, excellent in quality, but burdened by recent logging operations on the stream. Few old logging barriers exist. However, those that do exist cannot be removed by floating, since Hazel Gulch Creek below the fork is a continuous area of dense thickets, branches, and roots and would certainly jam any moving debris.

The west branch is of little or no value: Little spawning gravel exists, and the summer flow is negligible. Moreover, an 18', 45° slopes, bedrock drops at mouth, while not a complete barrier to fish, because of 3' - 4' steps, certainly handicaps movement of both parr and adults.

Recommendations

1. Clearance of 18 small old log jams on east branch of east-west fork and below east-west fork.
2. Removal of 6' soil sink in grass pasture above 30' high bridge at Hardell's.
3. Removal of 6' log-boulder falls above 30' high bridge at Hardell's.
4. Inspection of H. J. Gray's current logging operations to determine whether clearance of debris has been made.
5. No clearance of west branch of east-west fork.

Sources of Information

1. Personal observation.
2. Mr. Hardell of Hardell's General Store, Fort Bragg.
3. Unidentified loggers.

/s/ Edward R. J. Primbs