

THE RESOURCES AGENCY OF CALIFORNIA  
DEPARTMENT OF FISH AND GAME

**STREAM SURVEY**

Date: August 11, 1977

NAME: Kidd Creek COUNTY: Sonoma

STREAM SECTION: entire FROM: Mouth TO: Headwaters LENGTH: 2.7 miles

TRIBUTARY TO: Austin Creek TWP: 8N R: 11W SEC: 34

OTHER NAMES: none known RIVER SYSTEM: Russian

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
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FISHES PRESENT AND SUCCESS
OTHER VERTEBRATES
FISHING INTENSITY
OTHER RECREATIONAL USE
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RECOMMENDED MANAGEMENT
SKETCH MAP
REFERENCES AND MAPS

**EXTENT OF OBSERVATION** - Kidd Creek and its two main tributaries were surveyed by foot from Kidd Creek's mouth to areas which were considered the upper anadromous fish limit. Distances walked were 1.5 miles on Kidd Creek, 0.1 mile on tributary N-1, and 0.8 miles on tributary S-1. The survey was conducted on August 11, 1977 by William Rowser and Dennis Fong.

**LOCATION** - Kidd Creek lies in western Sonoma County. Its headwaters originate on the east slope of Pole Mountain. It flows into Austin Creek approximately 3.1 miles upstream of Austin Creek's confluence with the Russian River.

**RELATION TO OTHER WATERS** - Kidd Creek supplies flow to Austin Creek throughout most of the year. In an average rainfall year, flow at the mouth of the creek usually ceases in either late August or September. The main tributaries and main body of Kidd Creek usually contain water throughout the year. Spawning and nursery habitat for silver salmon and steelhead trout are provided by Kidd Creek and its southern tributary.

**GENERAL DESCRIPTION** - Kidd Creek flows for 2.7 miles in a canyon which varies from being steep V-shaped at its mid and upper sections to a broad open basin in the downstream areas. The creek and its 4.2 miles of main tributaries drain approximately 3.1 square miles of watershed. In the northern areas of the watershed are areas which form plateaus of annual grasses. Other areas are densely populated by trees such as California laurel, Christmas berry, toyon, red alder, and redwoods. Approximately 10 homes and two resorts are located along the downstream 1.1 mile of creek.

**Altitude** - Mouth: 25' MSL; Mouth of tributary S-1: 100' MSL; mouth of tributary N-1: 300' MSL; Headwaters: 1500' MSL.

**Gradient** - Gradient of the downstream 1.1 mile was slight, rising less than 75'/mile (1.5'/100') Gradient of the middle section was moderate to slight averaging 7 ft/100 ft.

In the upper portions of the surveyed sections gradient was very steep averaging 20 ft/100 ft. Gradient on tributary S-1 was moderate throughout averaging 10 ft/100 ft.

**Width** - Average riffle width in the downstream mile averaged about 10 ft., ranging from 1 inch to 30 ft. Upstream riffle width averaged about 5 ft., ranging from 1 inch to 20 feet. Pool width averaged approximately 5 ft. Maximum width was about 40 ft. in the downstream mile and about 20 ft. in the upstream areas.

**Depth** - Riffle depth in the downstream mile averaged approximately 3 inches, ranging from 1 inch to 1 ft. In the upstream areas riffle depth averaged 2 inches, ranging from less than an inch to 6 inches. Pool depth averaged 2 ft. Maximum depth was approximately 6 ft.

**Flow** - Flows were visually estimated. Kidd Creek was dry from its mouth to 0.2 miles upstream. Flow was intermittent for 0.2 miles further upstream becoming continuous for the next half mile up to a point 200 yards downstream from the Cazonoma Lodge (shown as Sarlandt Resort on U.S.G.S. map). Flow upstream of Cazonoma Lodge was intermittent on both tributary S-1 and Kidd Creek. Flow at the fork of tributaries to S-1 were 0.01 cfs; for tributary E-1 and 0.1 for tributary W-1. Flow above the diversion on tributary S-1 was approximately 0.3 cfs. Tributary N-1 was flowing at 0.1 cfs.

**Velocity** - Velocity was slow to moderate throughout most of the creek. Areas where flows were moderately fast were above the diversion on tributary S-1 and in Kidd Creek downstream of tributary N-1.

**Bottom** - The downstream mile of Kidd Creek consisted of 50% rubble, 30% gravel, 15% sand, and 5% organic debris. For one-half mile upstream of Cazanoma Resort, bottom consisted of 5% bedrock, 20% boulders, 40% rubble, 25% gravel, 5% sand, and 5% organic debris. Bottom substrate for the upper sections of Kidd Creek and tributary N-1 were predominately bedrock and boulders. Tributary S-1 was almost entirely small rubble and gravel with small amounts of sand.

**Spawning Areas** - Frequency and quality of spawning habitat appeared good in both the middle part of tributary S-1 and the lower mile of Kidd Creek. Elsewhere spawning habitat appeared to be of poor quality due mainly to the size of bottom substrate.

**Pools** - Pool development was good throughout the creek. Pools were formed by natural depressions in the streambed, underfalls, and behind two dams.

**Shelter** - Shelter was provided mainly by boulders in pools. Heavy amounts of algae also supplied cover for escape.

**Barriers** - Partial log jam barriers were observed on tributary S-1 and Kidd Creek upstream from Cazanoma Lodge. All consisted of loose logs; locations are shown on the sketch map. Complete barriers to anadromous fish were steep gradients over boulders and vertical rock falls. At the mouth of tributary N-1 is a steep climb of 40° for approximately 30 yards. The upper fish limit on Kidd Creek appeared to be a 10 ft rock fans followed by a five foot falls below tributary S-2. This was also proceeded by a steep boulder gradient. Gradient became excessive on tributary S-1 at the forks.

**Diversions** - One diversion on Kidd Creek was an unscreened 4" plastic pipe at the base of a dam at Cazanoma Lodge. Water was not being diverted at the time of the survey. On tributary S-1 water was diverted for operating a water wheel at the Cazanoma Lodge. The diversion, a 6" screened metal pipe, was located a quarter mile upstream from the Lodge.

#### **Temperatures -**

<u>Location</u>	<u>Time</u>	<u>Air Temp.</u>	<u>Water Temp.</u>
0.8 miles above mouth	1700	66°F.	63°F.
0.5 miles above mouth	1715	66	60
50 ft above Cazanoma Lodge	1130	66	56
Below Cazanoma Lodge	1215	78	59
In trib. N-1 near mouth	1320	74	61
Kidd Creek below trib. N-1	1330	74	61
Kidd Creek at upper fish limit	1400	73	58
In trib. S-1 near mouth	1530	70	58
In trib. S-1 at diversion	1600	70	58
In trib. S-1 at forks	1620	69	61
In trib. E-1 near mouth	1630	69	59
In trib. W-1 near mouth	1645	69	61

**Food** - Gnats and water striders were abundant throughout the creek. Back swimmers and whirllygig beetles were also observed.

**Aquatic Plants** - Heavy amounts of green algae were present in the lower section of tributary S-1 and from the Cazanoma Lodge downstream. Aquatic grasses and horsetails were also present.

**Winter Conditions** - This creek receives heavy amounts of runoff from its watershed. High water level appeared to average 4 to 6 ft above the streambed in the lower mile.

**Pollution** - None observed, however, the heavy amounts of algae in the lower mile seem to indicate some sort of pollution, possibly septic tank seepage, is getting into the creek.

**Springs** - Spring development in the area surveyed appeared to be fair.

**FISHES PRESENT AND SUCCESS** - Juvenile steelhead trout were observed from 50 yards downstream of tributary N-1 to the pools in the lower sections of Kidd Creek.

Steelhead were also observed in tributary S-1 and in both forks for a distance of ¼ mile above the confluence.

Trout in the lower mile were observed in quantities of 20/100'. All fish observed were between 2 and 3 inches in length. Larger fish were probably present although not observed. Upstream of Cazanoma Lodge trout appeared at a rate of 5/100 ft., most were 1.5 to 3 inches long. Approximately 10 fish observed were 4 to 5 inches and two fish observed were 8 to 10" in length. All fish appeared to be in good condition. No other species of fish were observed. No silver salmon were observed on this survey. The owners of the Cazanoma Lodge reported that they had noticed no adult silver salmon in the creek this year. Lack of silver salmon and the low numbers of steelhead in the creek is probably due to the abnormally low rainfall in this and the previous year.

**OTHER VERTEBRATES** - Deer, goats, crayfish, salamanders, frogs, banana slugs, and western skinks were observed.

**FISHING INTENSITY** - Fishing occurs mainly near the Cazanoma Lodge by vacationers. Elsewhere along the creek fishing is very light.

**OTHER RECREATIONAL USE** - Hunting, camping, hiking.

**ACCESSIBILITY** - Kidd Creek is accessible by "Kidd Creek Road" which meets Cazadero Highway 3.0 miles north of Highway 116. The road is not posted with a sign. This road travels along the creek for 1.5 miles. A hiking trail along tributary S-1 can be reached by walking past the Cazanoma Lodge on its west side. This trail ends at the fork of tributary S-1. Another trail, approximately 20' above the first trail can be walked for 0.4 miles along tributary W-1.

**OWNERSHIP / POSTED OR OPEN** - The entire creek is posted and in private ownership.

**PAST STOCKING** - None recorded by Calif. Dept. of Fish and Game. The creek near Cazanoma Lodge has been stocked by Mt. St. Helena Hatchery in the past with catchable trout.

**IMPROVEMENTS** - None required at this time. The log barriers do not appear to severely inhibit fish movement.

**GENERAL ESTIMATE** - Despite low water levels, Kidd Creek appears to be in good condition. Sufficient volumes of water are present in the creek to supply habitat for fish life. No major obstructions or pollution were restricting fish from utilizing most of the creek up to the upper fish limits.

**RECOMMENDED MANAGEMENT** - Kidd Creek should be managed as a steelhead and silver salmon nursery and spawning area. It contributes valuable habitat for these fish year round.

**SKETCH MAP** - attached.

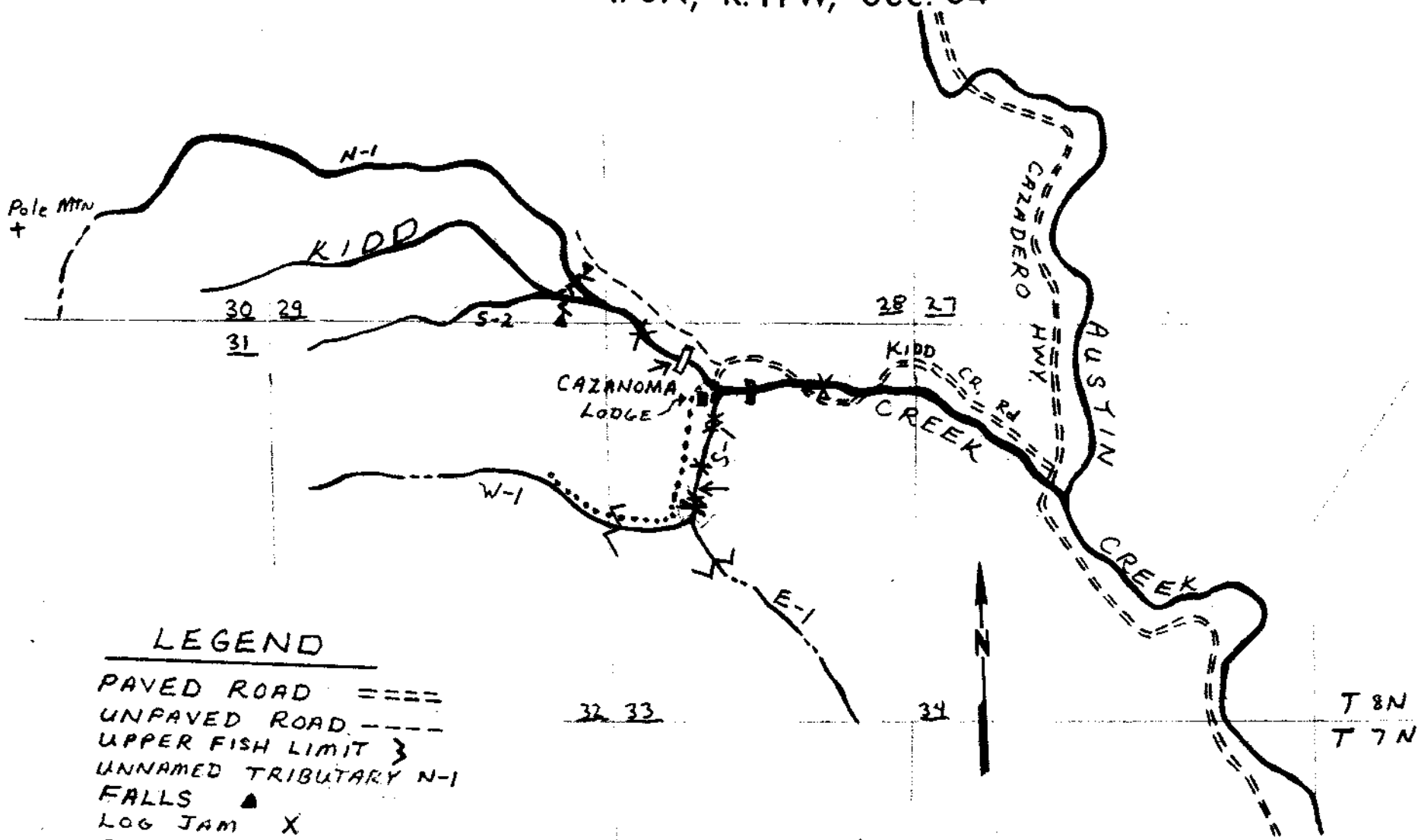
**REFERENCES AND MAPS** - U.S.G.S. Cazadero, Calif. 1943 and Duncan Mills, Calif. 1943. 7.5 minute series.

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Region 3

AWB/kl

# KIDD CREEK

T. 8N, R. 11W, Sec. 34



## LEGEND

- PAVED ROAD =====
- UNPAVED ROAD -----
- UPPER FISH LIMIT } (bracketed)
- UNNAMED TRIBUTARY N-1 (dashed line)
- FALLS ▲
- LOG JAM X
- BUILDING ■
- LOCKED GATE ●
- DIVERSION →
- SECTION NUMBER 4 (underlined)
- DAM ▭
- HIKING TRAIL .....