THE RESOURCES AGENCY OF CALIFORNIA DEPARTMENT OF FISH AND GAME

STREAM SURVEY

	Date: September 1 and 6, 1977
NAME: CROCKER CREEK	COUNTY: Sonoma
STREAM SECTION: Entire FROM: mouth To:	headwaters LENGTH: 3 miles
TRIBUTARY TO: Russian River	TWP: 11 N R: 10 W SEC: 28
OTHER NAMES: none known	RIVER SYSTEM: Russian River
SOURCES OF DATA: personal observations	

EXTENT OF OBSERVATION	
Include: Name of Surveyor, Date, Etc.	
LOCATION	
RELATION TO OTHER WATERS	
GENERAL DESCRIPTION	
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Immediate Drainage Basin	
Altitude (Range)	
Gradient	
Width	
Depth	
Flow (Range)	
Velocity	
Bottom	
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Pools	
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Diversions	
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EXTENT OF OBSERVATION - Crocker Creek and its tributaries were surveyed by foot by Bill Rowser and Dennis Fong, Seasonal Aids, on September 1 and 6, 1977. LOCATION - This stream lies in northern Sonoma County near the town of Asti. **RELATION TO OTHER WATERS** - Crocker Creek is a minor tributary to the Russian River. It provides winter flow to the river and small amounts of steelhead spawning and nursery habitat. **GENERAL DESCRIPTION -**Watershed - Immediate Drainage Basin - The creek and its 3 miles of main tributaries drain approximately 3.2 square miles. Most of the land surrounding the upper areas of the creek is managed as open grassland for livestock. Recreational use (a KOA campground) has been developed 1/2 mile upstream from the Russian River. Near the campground the stream was bordered with vegetation such as dogwood, buckeye, willows, live oak, and California laurels. Most of the creekbed was overgrown with annual grasses, coyote bush, anise and grapes. Vegetation became more sparse in the upstream areas. Pacific madrone and firs are the major tree species in the Crocker Creek drainage. The stream channel ranges from steep V-shaped at the headwaters to open lens shaped at the mouth. Altitude - Mouth 260' M.S.L. Tributary N-1 640' M.S.L. Headwaters 1280' M.S.L. Headwaters of tributary N-1 1520' M.S.L. Gradient - Gradient was slight in the lower half mile, averaging

4'/100'. Two areas had steep gradients, one near a dam 0.6 mile upstream, and at a boulder roughs area 0.8 mile upstream. Both of these created barriers to fish movement. Gradient of tributary N-1 (see attached sketch map) and that of the southeastward section of Crocker Creek were slight. The gradient of tributary N-2 was steep averaging 20'/100'.

 \underline{Width} -Width of riffle areas ranged from less than 1" to approximately 3', averaging 10". Maximum pool width was 10', averaging 2'.

Depth - Maximum depth of riffle areas was 2". Maximum pool depth was 3', averaging 6". **Flow** - Flow: Flows were intermittent on Crocker Creek and tributary N-1. Tributary N-2 and Crocker Creek upstream of tributary N-1 were dry. The creek was dry at the mouth to 0.3 mile upstream. No tributary had a surface flow at its mouth. No flows exceeded .05 cfs.

<u>Velocity</u>-Velocity was sluggish throughout except where steep gradients occurred. <u>Bottom</u>-Bottom substrate varied throughout the creek, averaging 5% bedrock, 10% boulders, 30% rubble, 40% gravel, 15% sand and mud. Portions of the creek had short stretches of predominately boulders, bedrock, or fine sand.

<u>Spawning Areas</u> - Areas: Spawning habitat was generally poor. Much of the streambed had gravel which was overlain with sand and fine gravel.

<u>Pools</u>-All pools, except for the lake formed behind the dam, were in depressions in the streambed and areas under falls. Pool development in the lower mile was good. Few pools were observed elsewhere.

<u>Shelter</u> - Boulders provided much of the shelter.

Barriers - Barriers to fish movement included a 50' high dam 0.6 mile upstream and a boulder roughs area 0.8 mile upstream. Numerous small log jams (listed on the sketch map) were observed on tributary N-1 and Crocker Creek upstream from N-1. None created falls greater than 6'. Tributary N-2 had 2 boulder falls within 0.1 mile of its mouth.

<u>Diversions</u> - None observed.

<u>**Temperatures**</u> - (Location, air and water temperature and time): 0.3 mile upstream from mouth, 78° and 61°F at 1140 hours; 0.6 mile upstream from mouth (lake), 81° and 76° F at 1230 hours; 0.8 mile upstream from mouth, 81° and 64°F at 1315 hours; near tributary N-l, 85° and 65°F at 1100 hours; headwaters of N-l, 92° and 68°F at 1400 hours.

Food - Caddis fly larvae, whorligig beetles, and water striders were observed.

<u>Aquatic Plants</u> – Epilobium, watercress, duckweed, cattails, and green algae were observed. <u>Winter Conditions</u> – Water levels appear to rise approximately 3' in most areas near the mouth. Near the headwaters water level appeared to rise about 1'.

<u>**Pollution**</u> - Pollution consisted of horse waste material and domestic garbage such as cans and paper products.

 $\underline{Springs}$ - Springs were observed at the headwaters of tributary N-2. Spring development appears to be poor elsewhere.

FISHES PRESENT AND SUCCESS - Suckers 3" to 5" and roach 1" to 3" were observed in some of the pools below the dam. A bluegill was also seen downstream of the dam. The lake formed by the dam contains bluegill. No fish was observed upstream of the dam. OTHER VERTEBRATES - Newts, rattlesnakes, deer, frogs, goats, horses, cattle.

FISHING INTENSITY - Moderate fishing intensity occurs at the lake. Apparently no fishing occurs elsewhere on this creek.

OTHER RECREATIONAL USE - Horseback riding and hiking.

ACCESSIBILITY - The mouth of the creek was accessible off of the Nelson property on River Road. A road marked by a "Cazadero Inn" and "KOA Campground" sign parallels the north side of the creek for 0,7 miles. This road leads to another road which ends up at the instream reservoir. A private road marked by a sign with Highland Camp Ranch, Pietro Crespi, can be used to reach the headwaters.

OWNERSHIP - The creek flows through private land.

POSTED OR OPEN - The creek is posted.

IMPROVEMENTS – The spillway at the dam should be repaired to prevent continued erosion of the banks of the stream where water is released.

PAST STOCKING-None recorded by the Department of Fish and Game.

GENERAL ESTIMATE - The creek appears to be in good condition. The lack of rainfall over the last two years has probably led to the growth of vegetation and the quantity of sand and debris in the streambed.

RECOMMENDED MANAGEMENT - The creek should be managed as steelhead spawning and nursery habitat.

SKETCH MAP - Attached.

MAPS-U.S.G.S, Asti, Calif. 1959. 7.5 minute.

Weldon E. Jones Assistant Fishery Biologist Region 3

CROCKER CREEK + IIN RIOW Sec 28

