

The California Streamside Biosurvey

HABITAT FEATURES CHECKLIST

(make copies of this blank data sheet for each study site)

Date:	Stream Name:	Location:
Observers:	Group Name:	County:
		Supervisor:

Survey 100 meters of stream. Measure the length in meters (use a tape measure) of each habitat type present:

Riffles/Rapids	Pools	Runs/Glides
----------------	-------	-------------

1. Particle sizes on stream bottom: estimate percent area for each						4. Stream size: in cm			
Percent:	Fines <0.25 mm	Sand 0.25-2 mm	Gravel 2-65 mm	Cobble 65-250 mm	Boulder >250 mm	Order: (use map)			
<5%						Width of water:			
5-25%						min	max		
25-50%						Width of channel:			
>50%						min	max		
2. Bottom cover on stream: estimate percent area for each						Mid-stream depth range:			
Percent:	Algae (slick film or strands)	Twigs and leaf debris (<10 cm)	Woody debris (>10 cm)	Aquatic plants (rooted)	Other:	5. Embeddedness %: burial of gravel and cobble by fine and sand sediment			
<5%						<5%			
5-25%						5-25%			
25-50%						25-50%			
>50%						>50%			
3. Streambank cover, slopes and erosion: estimate percent area on both banks for each									
Percent:	Grasses	Brush	Trees	Rocks	Soil	undercut	steep	shallow	Eroding
<5%									
5-25%									
25-50%									
>50%									

Note: undercut slope angle = <90° to water; steep slope = >90°-150°; shallow or gentle slope = 150°-180° flat to water

Flow Conditions: slow/smooth moderate/rippling rapid/turbulent

or Current velocity estimate (using meter or timed float): **Average cm / second:** _____

Discharge estimate: _____ [avg. velocity (cm/sec) X cross-section area (avg. depth x width, cm²)]

Measures of water quality (if test kits available):

Temperature	Dissolved Oxygen	Alkalinity	Turbidity	Other?

Appearance of water: clear turbid foam oils greenish

Description of other surrounding environmental features such as landscape and land:

CALIFORNIA STREAMSIDE BIOSURVEY DATA WORKSHEET

(make multiple copies of this blank data sheet, one for each sample)

Date	Stream	Location	Sample No.
------	--------	----------	------------

Stream Type Sampled:

- Rock-bottom Riffle
- Mud-bottom Channel (circle substrates sampled: wood / bank / plants / bottom sediment)

INVERTEBRATE INDICATOR GROUP COUNTS:

= Counts (actual number counted in each group, out of a minimum 100 total)

A = Abundance category (R = rare <5%; C = common 5-25%; D = dominant >25%)

S = Index Score (from Table of Index Scores)

#	% A	S	Sensitive Category I
	—		Mayflies
	—		Stoneflies
	—		Caddisflies (w/o net-spinners)
	—		Hellgrammites (Dobson - Fishflies)

Sum
Score _____

#	% A	S	Intermediate Category II
	—		Riffle Beetles
	—		Net-spinning Caddisflies
	—		Alderflies
	—		Crane Flies & Other Diptera
	—		Other Water Beetles
	—		Flatworms
	—		Other/Unknown Invertebrates

Sum
Score _____

#	% A	S	Tolerant Category III
	—		Midges
	—		Black Flies
	—		Dragon- or damselflies
	—		Leeches
	—		Snails
	—		Clams
	—		Scuds
	—		Segmented Worms

Sum
Score _____

Biological Index of Water Quality = _____ [Sum Scores of categories I + II + III]

Water Quality Rating [_____] (see Rating Table) Comparison to Reference Biol. Index [_____]

Total Number # Groups Counted (all categories) = _____

SCI (sequential comparison index for n=50) = _____