Overview

Distribution and habitat use snorkel surveys are conducted each year between January and September at 20 sampling sites along the Feather River (12 in the Low Flow Channel and 8 in the High Flow Channel). Three to six divers are distributed along three transects (left side of river, right side of river, center of river). The center transect is typically done in the downstream direction because currents are too strong to swim upstream whereas the other transects along river banks are done in the upstream direction. Divers use plastic slates to mark observations of fish. Effort at each site recorded in terms of time sampled, area covered, number of divers.

Attributes collected include: species, number of fish of a given size - groups of similar sized fish that were observed in a 1 square meter or less are treated as a single observation, substrate type - presence of every type of substrate is recorded, cover - presence of every type of cover is recorded, habitat type, approximate fork length in mm - fish identification and size estimation are calibrated by training divers with tethered fishing lures in a controlled setting. The accuracy of size estimates is enhanced by comparing observed fish to nearby objects whose dimensions are measured using the scales mounted on plastic writing slates. At each site, snorkeling units were identified by aerial maps and transects were assigned to each snorkeler.