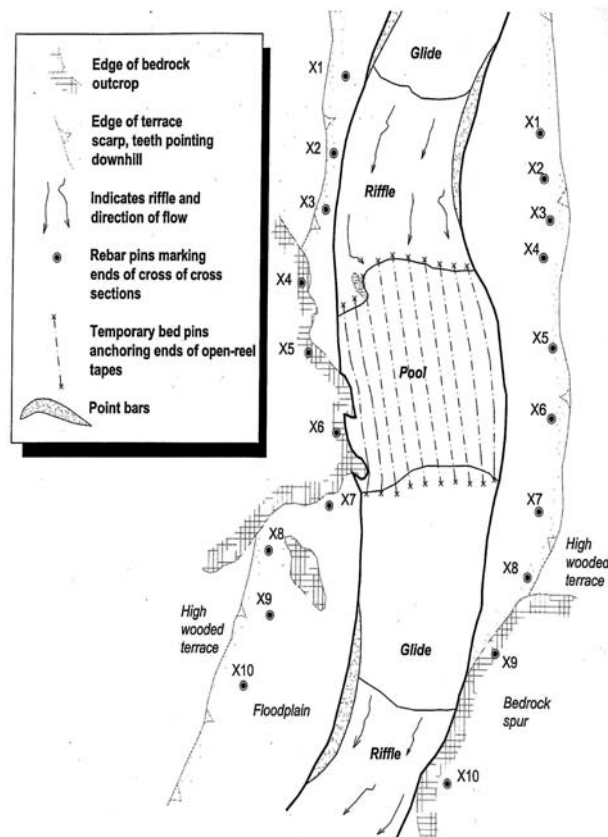


Habitat Geomorphology

Since 1979, Balance staff have been monitoring streamflow, sediment transport, and bed sedimentation in San Geronimo and Lagunitas Creeks on behalf of the Marin Municipal Water District (MMWD) and the Marin County Resources Conservation District. Elements of these programs have varied over the past 20 years, but commonly include:

- Operating standard stream gaging stations on San Geronimo Creek and other tributaries
- Measuring suspended and bedload sediment transport in tributaries and/or in the mainstem during major spills from Kent Lake
- Monitoring changes in embeddedness of cobbles in reaches supporting salmon and steelhead
- Measuring changes in the size composition of bed material in riffles and pools
- Establishing the depth of scour at standard locations during major storms using scour chains
- Quantifying changes in the sources of gravels on the bed, based on characteristic rock type suites which originate in different portions of this watershed.



Sampling sketch showing locations of longitudinal passes and cross sections relative to segments (pools, glides and riffles) in Lagunitas Creek.

Results have been applied to water-resources management, stream restoration and post-restoration monitoring, identifying erosion control needs, and general watershed-management purposes. Staffs of the state and national parks within these watersheds and community groups also participate in these investigations.