

**NEW NONPUMPING, UNATTENDED SAMPLER HAS BEEN DEVELOPED, TESTED,
AND IS READY FOR SUSPENDED-SEDIMENT SAMPLE COLLECTION**

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Abstract The US U-9 is a nonpumping, unattended, isokinetic point sampler developed to collect water samples from streams for suspended sediment. The sampler is an inexpensive alternative to a pumping sampler, allowing the user to sample all stream conditions without being present. Unlike the unattended US U-59 sampler, which collects water once stage reaches the intake, the US U-9 is only open during user-specified conditions. The sampler is triggered by a data collection platform (DCP) or some other programmable device that supplies 12 volt power to open the sampler for filling (approximately 40 seconds per liter). The DCP can be programmed to trigger the sampler based on predetermined thresholds of any measureable parameter (streamflow, precipitation, turbidity, etc) or remotely using cellular and other wireless devices. The sampler can be equipped with either a 1/4- or 3/16-inch nozzle, and designed for use with a wide mouth, 1-liter bottle. The sampler is easily mounted to any site configuration. Multiple US U-9's can be installed at a site to sample specific stream stages, portions of the hydrograph (rising- or falling-limb), or turbidity-related conditions (sensor saturation). The US U-9 offers hydrographers an inexpensive method to collect previously unattainable isokinetic suspended-sediment samples.