

Wadeable Stream Sampling

If the stream is wadeable, staff will wade to a spot within the main flow of the stream to collect samples and perform onsite analyses. Staff will enter the water just downstream of the sampling point and walk upstream to prevent collection of samples at a point where the sediment has been disturbed. Staff will face upstream while capturing the sample. Samples collected in bottles that do not contain preservative will be immersed approximately three to five inches below the surface before opening, filled, and capped before the bottle is brought to the surface. This method will also be used to collect a sample of sufficient volume to fill all bottles that do contain preservatives. The preservative containing bottles will be filled as sub samples from the larger sample at the vehicle to prevent loss of preservative by overfilling in the stream. All analyses to be performed on site using portable testing equipment will be done either in the stream or at the vehicle as applicable. Calibration records for the portable testing equipment will be maintained. The samples for laboratory analysis will be placed into properly labeled and preserved sample bottles, placed in individual zipper locking freezer bags to prevent cross contamination, and placed on ice within fifteen minutes of collection. Chain of Custody forms will be used to document sampling times, proper preservation, and custody from sampling until delivery to the laboratory.

Bacteriological samples collected in a wadeable stream will be collected in sterilized glass bottles or purchased sterile whirl pack bags. Staff will enter the water just downstream of the sampling point and walk upstream to prevent collection of samples at a point where the sediment has been disturbed. Staff will face upstream while capturing the sample. The sample container will remain closed until submerged to prevent contamination. The container will be opened underwater, filled, and closed while still submerged. Bacteriological samples will be placed on ice immediately after capture and delivered for analysis within two hours. Analysis of bacteriological samples will begin within six hours of capture. Chain of Custody forms will be used to document sampling times, proper preservation, and custody from sampling until delivery to the laboratory.

Non-Wadeable Stream Samples

If sampling cannot be done safely by wading, a sample will be taken from a bridge or road crossing using a bucket and rope. Before taking the sample, the bucket will be rinsed out three (3) times with sample water. From the bridge or road crossing, the bucket and rope will be lowered midstream into the fast-flowing section of the water. Once the bucket has been filled, it will then be pulled up for sampling. This method will also be used to collect samples of sufficient volume to fill all bottles. All analyses to be performed onsite using portable testing equipment will be done either from the bridge or road crossing, or from samples collected with the bucket and rope as applicable.

If sampling cannot be done safely by wading, bacteriological samples will also be collected using a bucket and rope. Before taking the sample, the bucket will be rinsed out three (3) times with sample water. From the bridge or road crossing, the bucket and rope will be lowered midstream into the fast-flowing section of the water. Once the bucket has been filled, it will then be pulled up for sampling. A properly labeled sterile bottle or whirl pack bag will be placed underwater in the sample, opened, and allowed to fill. The sample container will be closed while still underwater and then removed from the bucket. Bacteriological samples will be placed on ice immediately after capture and delivered for analysis within two hours. Analysis of bacteriological samples will begin within six hours of capture. Chain of custody forms will be used to document sampling times, proper preservation, and custody from sampling until delivery to the laboratory. Calibration records for the portable testing equipment will be maintained. The samples for laboratory analysis will be placed into properly labeled and preserved sample bottles, placed in individual zipper locking freezer bags to prevent cross contamination, and placed on ice within fifteen minutes of collection.