

### **Sampling Schedule**

For trophic weighted residue (TWR), the 2018 Georgia Water Quality report prepared by Georgia EPD as an integrated document in the 305(b)/303(d) list, states “Mercury is a naturally occurring metal that cycles between the land, water, and the air. As mercury cycles through the environment, it is absorbed and ingested by plants and animals. It is not known where the mercury in Georgia’s fish originates. Mercury may be present due to mercury content in natural environments such as in South Georgia swamps, from municipal or industrial sources, or from fossil fuel uses. It has been shown that mercury contamination is related to global atmospheric transport. The EPA has evaluated the sources of mercury loading to several river basins in Georgia as part of TMDL development, and has determined that 99% or greater of the total mercury loading to these waters occurs via atmospheric deposition.”

The County does not have the resources to monitor TWR in fish tissue from the Alapaha River at this time. Therefore, quarterly sampling for low level mercury (LLM) in streams impaired with TWR will be contracted to a private environmental firm who will engage a certified laboratory for analytical services and reporting. Three (3) dry weather samples and one (1) wet weather sample will be collected in accordance with the GA EPD’s Watershed Assessment and Protection Plan Guidance: Watershed Protection Plans. See *Table 3: Sampling Schedule* for proposed sampling months.

**Table 3: Sampling Schedule**

<b>Sampling Station</b>	<b>Scheduled Sampling Months</b>
Station #1	March, June, September, December
Station #2	March, June, September, December

### **Dry Weather Sampling**

A dry weather sample will be defined as one captured at least 72 hours after the most recent rain event totaling 0.1 inch of rain or more. All dry weather samples will be grab samples. Bacteriological samples (if applicable) will be collected in a sterile container, separate from the other samples.

### **Wet Weather Sampling**

The suggested wet-weather criteria are at least 0.2 inches of rainfall and at least 72 hours since the last storm event. Bacteriological samples (if applicable) will be collected in a sterile container, separate from the other samples.

### **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.