

Ozarks Water Watch Monitoring

This collaborative effort will rely on volunteers to help collect data to answer the question: How is the water? We will use both water chemistry and invertebrate data collected following Missouri Stream Team protocols, supplemented with nutrient analyses conducted at the University of Missouri. Table 1 provides a calendar for when each of the water quality collections/measure should be completed.

Table 1. Monitoring schedule.

	April	May	June	July	Aug	Sept	Oct
Low Flow 60mL	Collect 1		Collect 1		Collect 1	Collect 1	
High Flow 60mL	Collect 1					Collect 1	
Strm Team Wtr Chem	Measure		Measure		Measure	Measure	
Strm Team Invert	Collect					Collect	

Because water quality can fluctuate over the course of the season, we ask you spread sample collections out so we can characterize water quality for the full period April-October. Also, because water quality changes dramatically during high flows, we are asking some volunteers to collect two high flow samples during the year. This will allow us to determine how dramatically water quality does change with increased flow. This data will also be forwarded to DNR and used in modeling the movement of nutrients through the watershed.

Collection of 60mL bottles

The water in the 60mL bottles will be analyzed for total phosphorus and total nitrogen. While sample collection will be fairly simple, care must be taken because we are measuring small amounts (as low as 5 parts per billion) of the nutrients and even a slight contamination can cause problems.

Each bottle is labeled with a site ID, a bottle number, spaces for you to record the date and time, and a place for you to note if the sample was collected during low or high flow. It is best to fill the information (date and flow condition) on the bottle in before sampling. The information on the bottle will need to be written down on the back of this sheet.

Low Flow: Sample should be collected in water that is deep enough to eliminate contamination from bottom sediment. Mid-stream, where the water is well mixed is the best place to collect the sample in smaller streams. In larger rivers where mid-stream is too deep to wade, you will want to collect the sample closer to shore. Enter the water slightly downstream from where you plan on collecting the sample. As you move upstream to the site of collection, rinse the bottle to prepare it for sample collection. Each rinse should involve filling the bottle a third to a half full with stream water, cap the bottle, and shake vigorously. Repeat twice more for a total of three rinses. Facing upstream, visually check to make sure the water you are going to fill the bottle with does not contain any sediment that

