## Using citizen science to monitor quality of local rivers and streams in the Clinton River Watershed!

In a natural system, stormwater (rain, snow melt, etc.) is able to soak into the ground, be taken up by vegetation, or go to wetlands before reaching our streams. These natural processes help to cleanse and filter this stormwater. However, as one of the most populated watersheds in the state of Michigan, much of this stormwater now falls on the many driveways, rooftops, roads, and parking lots, and into stormdrains connected directly to our local rivers and streams. Substances we leave behind such as salts, motor oil, fertilizer and pesticides pollute this stormwater and when it flows into our local rivers and streams, it degrades the water quality in the Clinton River and Lake St. Clair. This decline in water quality not only affects the quality of life for residents of the watershed like you, but also negatively affects the plants and animals that call these waterways home.

A lot can be learned about water quality by observing the populations of animals that are living in a river system, specifically the Benthic Macroinvertebrates (river bugs) that live in our local rivers and streams. This is because each species of river bug differs in its tolerance to pollution. The winter stonefly nymphs are one of the most sensitive of all aquatic macro invertebrates that live in our rivers and streams. The presence of stonefly larvae in a stream indicates good water quality. These insects are most active and easily found in the month of January when the water temperature is very cold and there is still plenty of leafy debris in the river bottom for them to eat. CRWC and volunteers have been monitoring stonefly nymph populations in our local rivers and streams for years at *CRWC's Annual Winter Stonefly Search* event in January – this year's search is scheduled for **Saturday**, **January 20, 2018** and CRWC is looking for volunteers like you to get involved!

Volunteers will meet at the CRWC office at 9:30am on January 20th and from there will split into teams and travel to various sampling locations to search for the winter stonefly. Volunteers will then meet back at the office for lunch and hot beverages. Your participation in this annual search helps to add to CRWC's Adopt-A- Stream Data and will provide a chance to learn about the ecology and conditions of our local streams. Volunteers can bring their own waders. CRWC will have extra pairs on hand for those who choose to get in the water. We meet regardless of the weather so dress warmly and come help us search for these river critters!

## Registration is required. To register, contact the CRWC office (248-601-0606 or email registration@crwc.org).

The Clinton River watershed covers over 760 square miles in Southeast Michigan through four counties (Macomb, Oakland, Lapeer, and St. Clair). From its headwaters in Springfield Township, the Clinton River travels 81.5 miles and eventually empties into Lake St. Clair in Harrison Township. The Clinton River Watershed Council is a nonprofit environmental organization that protects, enhances, and celebrates the Clinton River, its watershed, and Lake St. Clair.