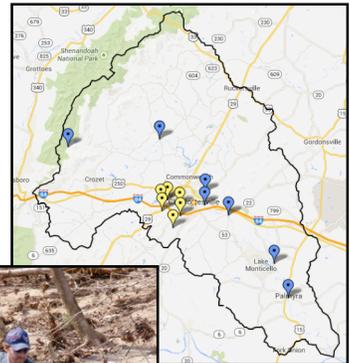


StreamWatch launched a bacteria monitoring program in July 2012. Staff and volunteers monitor 13 sites once per month using Coliscan© Easygel. Bacteria levels are used to determine if water is safe for swimming or other recreation. We monitor fecal bacteria levels, specifically *Escherichia coli* (*E. coli*), which are bacteria found in the intestines and fecal matter of mammals.

StreamWatch uses protocols and standards that are set by the Virginia Department of Environmental Quality. High counts of *E. coli* in a stream indicate that there is an elevated risk of illness from pathogenic organisms.

Bacteria scores are posted each month at <http://streamwatch.org/stream-conditions/bacteria-monitoring>.



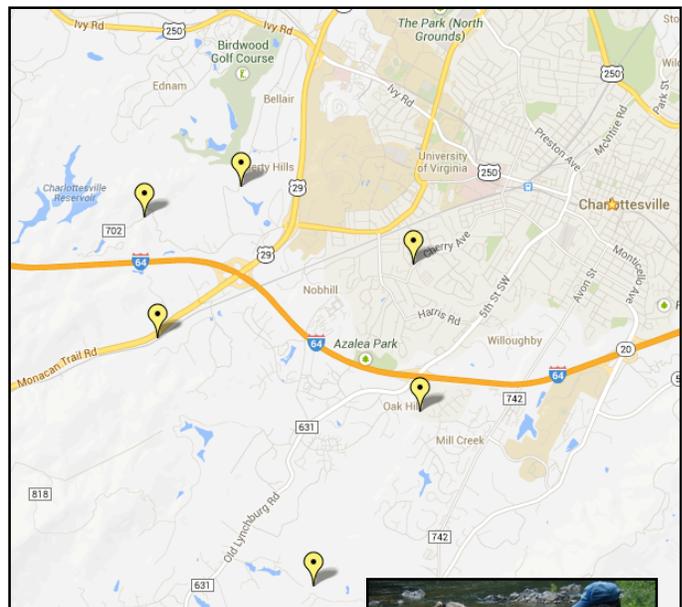
Moores Creek Tributaries

Six of our bacteria monitoring sites (yellow markers on the maps) are located in the Moores Creek Watershed, which is located in and around the City of Charlottesville.

These sites are part of a local collaborative project, the Moores Creek TMDL (Total Maximum Daily Load). This is a “pollution diet” designed to address the bacterial contamination of Moores Creek. StreamWatch is conducting bacteria monitoring, while other partners are educating and assisting property owners to lower the bacteria levels in the watershed.

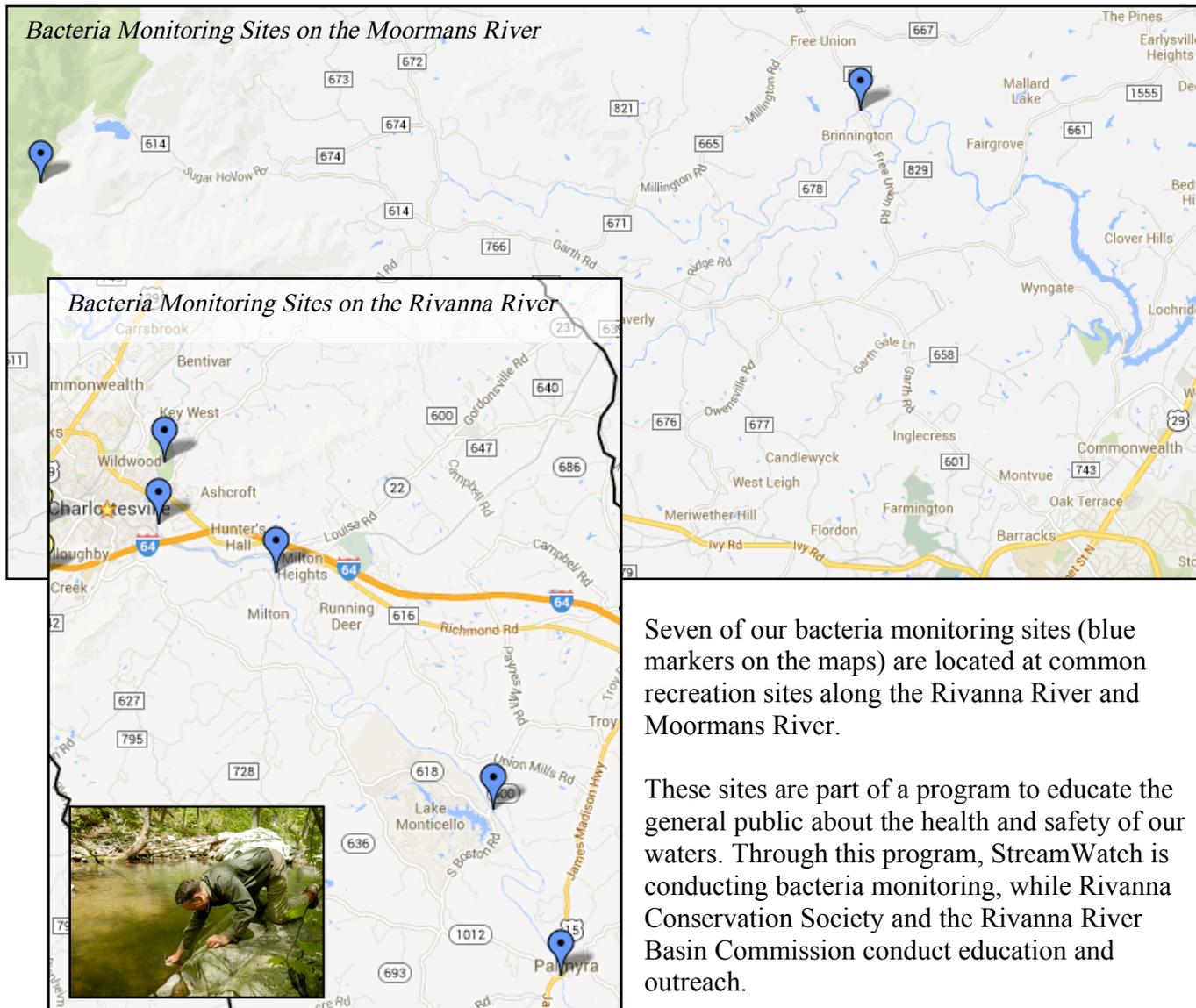
Bacteria in the Moores Creek Watershed

StreamWatch periodically found high levels of bacteria (in excess of state water quality standards) at one site on Lodge Creek and two sites on Biscuit Run. Sites that did not have high bacteria levels were on Unnamed Tributary, Moores Creek Upper, and Morey Creek. All of these streams are tributaries to Moores Creek.



In the coming year, StreamWatch will continue monitoring at the sites where high levels of bacteria were found. We will add additional upstream sites as needed, as we attempt to locate the sources of bacterial contamination. We will no longer monitor the three sites where low bacteria levels were found.

Rivanna River and Moormans River



Bacteria in the Rivanna River and Moormans River

The Virginia Department of Environmental Quality has found that certain portions of the Rivanna River fail the state and federal water quality standards for recreation due to high levels of bacteria. During our monitoring period, two samples (out of 70 total) produced failing scores: Rivanna @ Darden Towe and Rivanna @ Palmyra. These samples occurred during high flow in February 2013. Neither of StreamWatch's Moormans River sites on the Moormans River produced high bacteria scores.

It is common for bacteria levels to be elevated after a storm, as pollutants are washed from the landscape into streams. Because high bacteria scores tend to be correlated with high flow and temperature, it should be noted that more frequent monitoring or monitoring after storms could have resulted in more failing scores at our sites.

In the coming year, StreamWatch will continue to monitor these seven recreation sites. During our strategic planning in fall 2013, we will determine if additional sites should be added. We will continue to post sampling results on our website and inform the community of the safety of our waters.