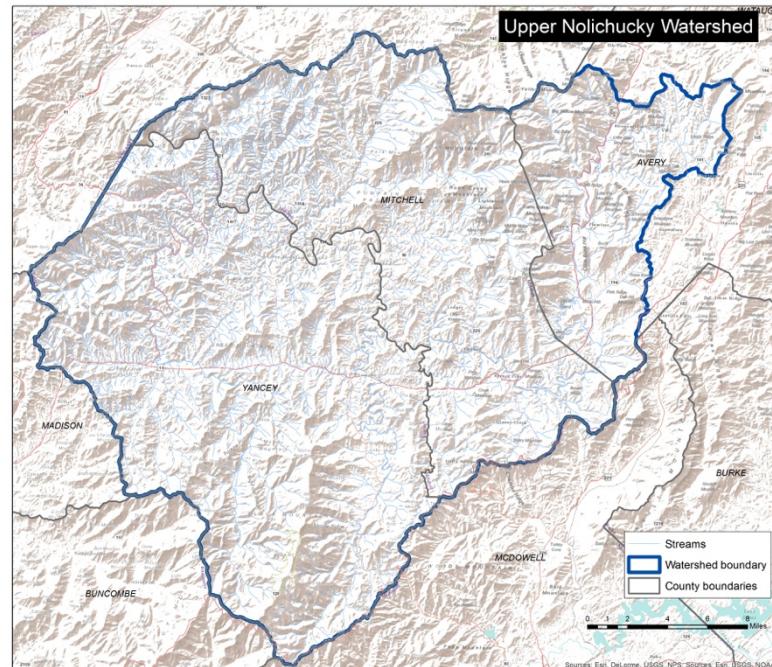


Our Community Watershed

Our mountains and valleys are divided up into different ecosystems, micro-climates, and watersheds. The flow of water is delineated by which watershed the water falls into. Picture a watershed as an enormous catchment or bowl. As water falls into the bowl's rim, it either flows down the inside of the bowl or down the outside. The edge or rim of the bowl would most likely be known as the ridgeline or watershed divide. Watersheds are separated by these ridgelines. As seen in the map below, the Toe-Cane Watershed's boundary is highlighted with a blue line indicating ridgelines. This watershed is also known as the Upper Nolichucky Watershed, and extends into three different counties; Mitchell, Yancey, and Avery. There are three large rivers which originate within this watershed, along with many small tributaries and streams. The North Toe, South Toe, and Cane are the three rivers where the watershed gets its name from. Watersheds can be within larger watersheds, for example, our Toe-Cane Watershed is within the French Broad River Basin. This basin is a larger watershed, which flows west to the Mississippi River (an even larger watershed) and ultimately into the Gulf of Mexico.



On the eastern border of the Toe-Cane Watershed, we have an extraordinary land feature known as the Eastern Continental Divide. A continental divide is a drainage divide on a continent that separates larger watersheds. In the case of the Eastern Continental Divide, one side of the divide empties into the Gulf of Mexico while the other side of the divide empties into the Atlantic Ocean. The mountains serve as the continental divide and you can see signs for it along the Blue Ridge Parkway. The western Continental Divide is along the Rocky Mountains. As stated earlier, our watershed is connected to the Gulf of Mexico by a long network of streams and rivers that flow west. Once you cross the Toe-Cane Watershed boundary into McDowell, Burke, and the northern part of Avery Counties, all of the streams and rivers flow east to empty into the Atlantic Ocean.

As anthropogenic activities alter our watershed and the ones downstream, we have to wonder how this impacts local water quality. As we continue to grow as a community, looking into how we can slow the damaging effects of many practices is vital. With development comes surfaces such as roofs, parking lots, driveways and streets. These surfaces are known as impervious

surfaces which are materials that water cannot soak into the ground. On average, landscapes with more impervious surfaces show a reduction of water absorbed or infiltrated into the ground and an increase of surface water run-off. Vegetated areas bordering streams provide protection from this surface run-off, and act like a sponge that soaks up the water before it overwhelms the creek or stream.

There are many ways that you can personally help maintain your watershed. Removing invasive/exotic plants from your own property will decrease the spread of unwanted non-native plants, and allow native plants to establish and hold soil in place. Some plants that are not native to North America or our region have no natural predators to limit their spread. These invasive species can reduce the habitat diversity of an ecosystem. Another practice is to allow native vegetation to surround water bodies along your property. These ‘buffers’ provide multiple benefits for water bodies such as; capturing pollutants and sediment from runoff, stabilizing stream banks, wildlife habitat and refuge, and enhancing the beauty of the streamside. Vegetation strips can range in size, but the bigger the better. Last but not least, is doing proper maintenance on your gravel roads by keeping your ditches clean and making sure that run-off empties over vegetated land and not directly into a creek. All of us have witnessed a steep gravel road during heavy rain and the dirty run-off that flows off it. Properly maintaining and designing your road not only keeps our waters cleaner, but it also reduces road maintenance costs and wear-and-tear on your vehicles.

By protecting our watershed, we can ensure that our local natural resources will flourish for many years to come. We all play a part in caring for our community watershed, from the headwater tributaries, down into our beautiful rivers.

Toe Talk is a monthly article series sponsored by the Toe-Cane Partnership highlighting watershed and community news. The Toe-Cane Partnership is working to improve water quality and gain associated economic benefits in the watershed by providing education and technical resources and implementing on-the-ground projects. For more information, see us on Facebook: <http://www.facebook.com/ToeCanePartnership/>

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