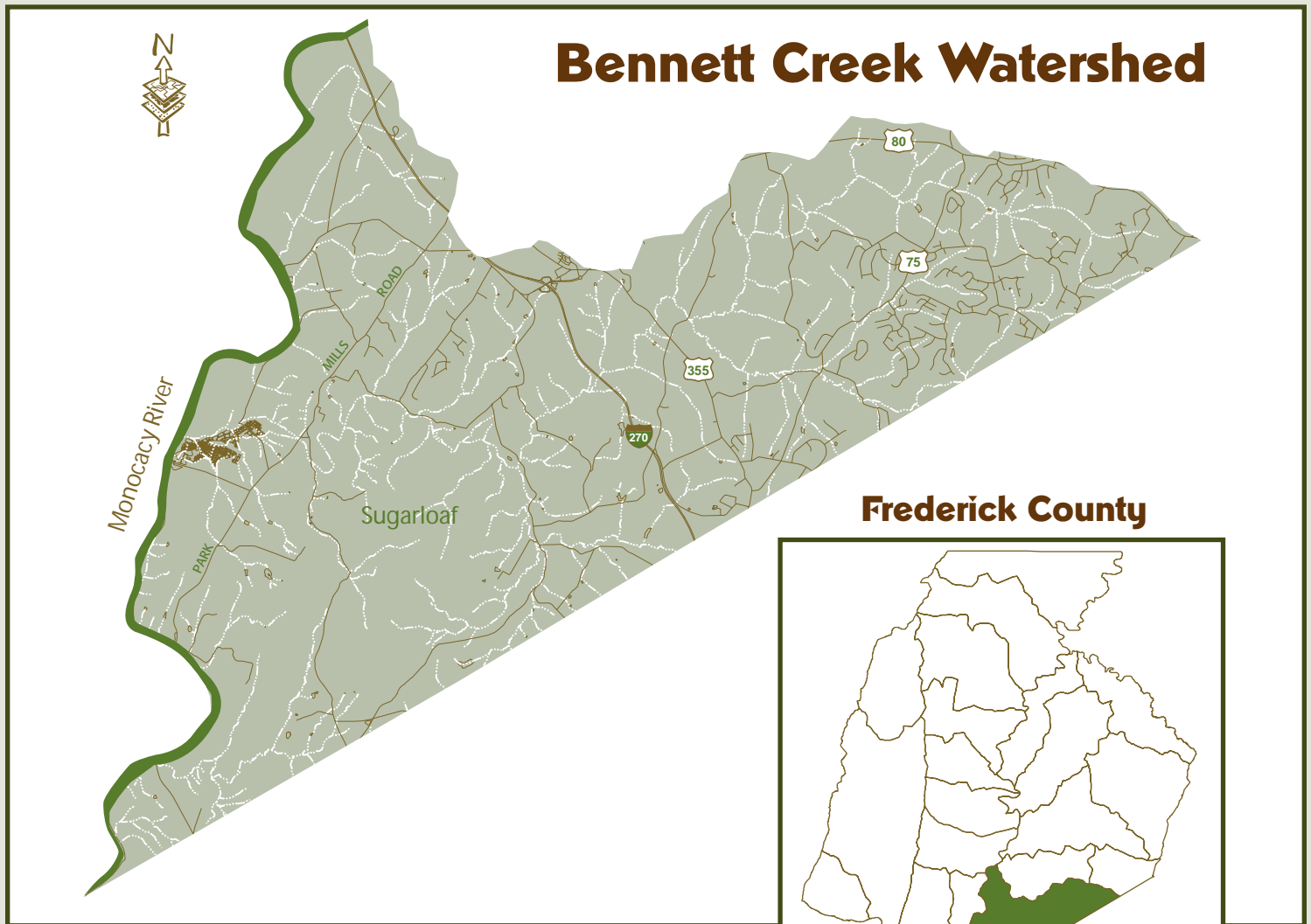


# My Home in the Watershed: Bennett Creek

WATERSHED RESTORATION ACTION STRATEGY

FREDERICK COUNTY, MD

**Yes, it's true** your address is getting a bit more complicated. You not only have a regular postal mail address anymore but perhaps an email address as well. Still, just as you were beginning to learn about email addresses, here's another important part of locating where you live: your watershed address!!



## WHERE DO YOU LIVE IN THE BENNETT CREEK WATERSHED?

Are you on Fahrney Branch near Kemptown Community Park or school? Or perhaps on Pleasant Branch, which flows south along Route 75 through Pleasant Grove and Windsor Knolls Middle School's property? Do you live south of Interstate 270 near Urbana or North Branches? Perhaps you live along Bennett Creek itself or near a small tributary, on the more than 200 miles of streams in the watershed. Ask some neighbors to join you in visiting your nearest stream to check it out. Maybe they remember how it looked 10 or 20 years ago. Although it may not have a name on the map, it likely has a name among its neighbors. It's your link with Bennett Creek, the Monocacy and Potomac Rivers, the Chesapeake Bay and Atlantic Ocean beyond.

## Watershed Facts

**Size:** The Bennett Creek watershed is very big - 48 square miles or 7% of Frederick County. It is a triangular area to the south and east - the portion of the County adjoining Montgomery County and the Interstate 270 corridor and extends south to Sugarloaf Mountain.

**What Does the Landscape Look Like?** The Bennett Creek watershed has the largest proportion of forest cover in the Lower Monocacy with 45% of the land forested. Roughly 40% of the remaining watershed land use is agricultural with the balance of land, 15% in development (2000 state planning data). The developed portion of the watershed does not include any incorporated municipalities. Instead it includes primarily 1970's residential development in the Kemptown and Pleasant Grove communities and current development in the Urbana area.

**Protected Lands:** A variety of agricultural preservation programs have helped protect some of the farms in the watershed from future development. The Bennett watershed has three significant park lands including the private Sugarloaf Mountain Park, the State of Maryland Monocacy Natural Resources Management Area along the Monocacy River and the federal Monocacy National Battlefield. Do you feel enough areas are protected?

**Green Infrastructure:** Maryland's Department of Natural Resources (DNR) has looked at forests in the County and identified large blocks called hubs. DNR has proposed that hubs be connected by corridors of trees along stream valleys for wildlife passage and water quality benefits. Streams are healthiest whose banks have trees, since a border of trees (at least 50 feet wide on each side of the stream) helps filter out soil or pollutants washed off the landscape and helps stabilize stream banks and limit erosion. The trees also shade the stream, helping keep the water cool, and they drop leaves and branches, food for small aquatic insects that fish feed upon. Roughly 2/3 of the streams in the County do not have vegetation growing along the stream banks to protect water quality and limit erosion.

**Why Is My Stream Important?** Most of the streams in the watershed are used for recreation and public water supplies; however, two small creeks flowing out of Sugarloaf Mountain area, Bear Branch and Furnace Branch, are clean and cold enough for trout to reproduce naturally; as is one of Bennett Creek's tributaries located primarily in Montgomery County, Little Bennett Creek.



*This view shows a healthy riparian buffer as well as wonderful fish and macroinvertebrate habitat within the stream.*

*Photo Courtesy of Kai Hagen*

**How clean is our water?** The State found that certain portions of the Bennett Creek system are unhealthy. One measurement tool to assess a stream's health is to collect fish and small bugs that live in streams and analyze them. Some species require very clean water and will not live in polluted water. So the species in the stream show a pretty reliable picture of stream health.

The state assesses every stream in Maryland at least every three years. Volunteer samplers are trained and gather samples from additional locations. Two sites that were studied along Bennett Creek revealed that the natural stream life including stream "bugs" and fish were either poor or very poor. In other words, only very pollution tolerant species were found. Bennett Creek samplings in 1996 and 2000 showed mixed results. 25% of the sampling sites ranked good, 46% ranked fair and 29% ranked poor.

*A watershed is an area of land that drains to a specific body of water – a stream, river, lake, bay or wetland.*

### **Who Is Responsible for Fixing Bennett Creek's Pollution Problems?**

Everyone! Everyone who lives in the watershed shares responsibility and has a role to play in helping improve water quality. Certain public sewage treatment plants treat wastewater and release the treated water into our creeks. Certain industries and businesses are regulated in how they manage their water and waste. Farmers must have nutrient management plans. Septic systems require inspection and maintenance. Small, often careless actions by many individuals can add up to undrinkable and unswimmable water. Positive actions by each of us can restore water quality again.

**Soil Erosion?** Almost a third of the soils in the Bennett Creek watershed are considered highly erodible. In some parts of the watershed, steep banks along stream corridors make erosion a bigger problem than it might be in less steep terrain. It is especially important to have adequate vegetation in these areas.

**Wetlands?** Although many wetlands have been drained and filled over the past 100 years, 2,404 acres of wetlands remain in the Bennett Creek watershed or 8% of the area, the highest proportion of wetlands in the Lower Monocacy watershed. More than 2,000 additional acres in the Bennett Creek watershed are hydric soils that hold moisture and were likely once wetlands.

**Fish Consumption Limitations:** The state has studied fish from our streams, ponds, and lakes to see what pollution they contain. Because of Methyl-Mercury concentrations, they recommend that no one eat more than 8 servings of Bluegill per month from lakes and impoundments and no one eat more than 4 servings of bass, pickerel, pike or walleye per month from lakes or impoundments. Usually fish in rivers and streams can be eaten by the general population and should be limited to 4 – 8 servings by pregnant women or children.



*An example of an inadequate buffer due to recent subdivision development.*

*Photo Courtesy of Shannon Moore*