

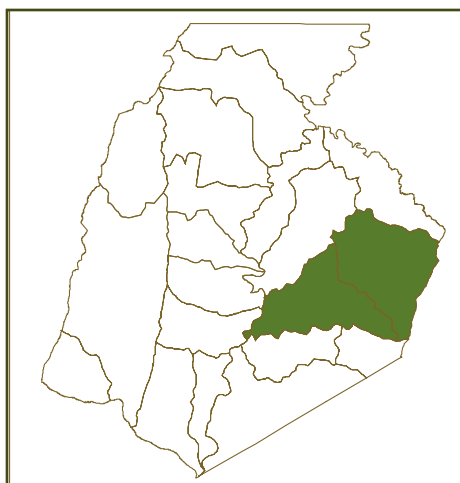
My Home in the Watershed: Linganore Creek

WATERSHED RESTORATION ACTION STRATEGY

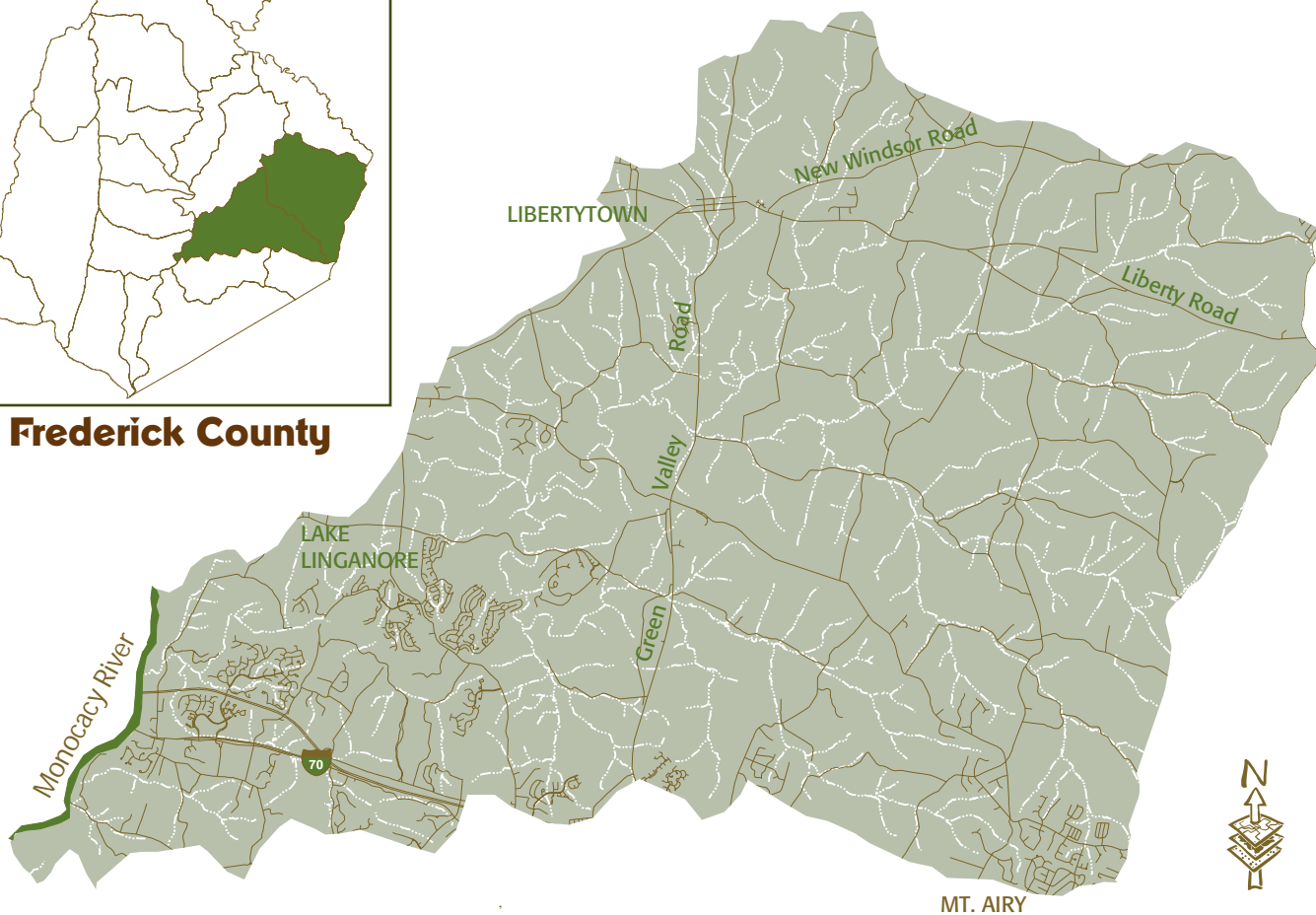
FREDERICK COUNTY, MD

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!!

Linganore Creek Watershed



Frederick County



WHERE DO YOU LIVE IN THE LINGANORE CREEK WATERSHED?

Are you on Weldon Creek, a tributary of the North Fork of Linganore Creek? Or perhaps on Oldfield Branch, a tributary of Dollyhyde Creek which runs into Linganore Creek? Do you live near the Carroll County line to the eastern edge of the watershed on Woodville Branch or near the confluence of Linganore Creek and the Monocacy River at the edge of Frederick? Perhaps you live near a tiny tributary, on the more than 500 miles of streams in the Linganore Creek 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 is your link with Linganore Creek and Lake, the Monocacy and Potomac Rivers, the Chesapeake Bay and Atlantic Ocean beyond.

Watershed Facts

Size & Location: The Linganore watershed is very big! It is 83 square miles or 12.5% of Frederick County. Linganore Creek and its many tributaries total more than 500 stream miles! The watershed is a triangle to the east of Frederick, generally the land north of Interstate 70 and south of Route 26 continuing to the Carroll County line.

What Does the Landscape Look Like? More than half of the watershed is agricultural. Forests comprise 29% and development, 17%. The developed portion of the County includes the municipalities of New Market and a small part of Mt. Airy as well as the communities of Libertytown and the several villages of Lake Linganore at Eaglehead.

Protected Lands: A variety of agricultural preservation programs have helped protect several area farms from future development. Park lands and wildlife sanctuaries in the area include the Libertytown Community Park, and the natural areas of the Mt. Airy Izaak Walton League north of Mt. Airy and the Audubon Society properties north of New Market and northwest of Mt. Airy. Do you feel enough areas are protected?

Green Infrastructure: Maryland's Department of Natural Resources has looked at forests in the County and identified large forest blocks, called hubs. DNR has proposed that hubs be protected from development and connected by corridors of trees along stream valleys. These corridors can provide cover for wildlife passage as well as help improve stream health. The trees filter out sediment and other pollutants washed off the landscape and help stabilize stream banks and limit erosion. The trees also shade the stream, helping keep the water cool and contribute leaves and branches, food for small aquatic insects that fish feed upon. Roughly 2/3 of the stream corridors in Frederick County do not have enough trees along both sides to improve water quality and limit erosion.

Why Is My Stream Important? Portions of Linganore Creek are considered recreational trout waters or waters that should be able to support a stocked cold water fish. The lake and creeks are also used for recreation and for public water supply. Because Lake Linganore is a drinking water source for Frederick City and County, a Task Force was assembled to create a Source Water Protection Plan nearing completion (2/2004). The lower half of the Linganore watershed was assessed by Frederick County in 2002. The resulting Watershed Water Quality Plan is available from www.co.frederick.md.us/NPDES. The plan proposes sites for restoration and protection and recommends changes to certain County programs and practices.

How clean is our water? The State found that certain portions of the Linganore Creek system are impaired or in poor health including a tributary to the south fork of Linganore Creek, and portions of Talbot and Woodville Branches and Weldon Creek. Water quality in Lake Linganore is polluted by sediment and phosphorus and the Department of the Environment has capped the allowable pollution in the lake by negotiating a Total Maximum Daily Load (called a TMDL). MDE studies showed that 75% of the phosphorus and 80% of the sediment flow into the Lake from agricultural lands. Residential and other developed properties generate 11.5% of the phosphorus and 7.6% of the sediment. Wastewater Treatment Plants in the watershed contribute 13.5% of the phosphorus and 12.4% of the sediment.

Measuring Stream Health By What Can Live Here: 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



*This view shows a healthy riparian buffer as well as wonderful fish and macroinvertebrate habitat within the stream.
Photo Courtesy of Kai Hagen*

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

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. Linganore samplings in 1990 – 95 were 75% good and 25% fair. Half of the samplings during 1996 – 2000 were either poor or very poor. The County's fish sampling in 2002 found 50% of locations showing poor or very poor health. This shows a troubling trend in the last decade.

Who is Responsible for Fixing Linganore Creeks Pollution Problems? Everyone! Everyone who lives in the watershed shares responsibility and has a role to play in helping improve water quality. Public facilities 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. Small actions by many individuals add up to undrinkable and unswimmable water. Positive actions by everyone can restore water quality again. The County's 2002 study found problems with livestock access to streams, cropland runoff, failing septic, new construction, extent of roadways and roofs, inadequate stormwater management, and landowner practices (including fertilizer use, mowing, etc.).

Soil Erosion? Roughly a quarter of the soils in the Linganore 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, 1,628 acres of wetlands remain in the Linganore subwatershed or 3% of the area. In addition, more than 2,800 additional acres in the Linganore Creek watershed are hydric soils or areas that hold moisture and were 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.