

Fish Blockage Removal and Improvements to Mt. Ephraim Road

-Bryan Seipp, Director of Restoration
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The Potomac Conservancy and numerous partners including Maryland DNR-Fisheries Service, NRCS, Frederick County Department of Transportation, Frederick County Watershed Management Section, the Center for Dirt and Gravel Road Studies, and Trout Unlimited are in the process of addressing two impediments to fish passage on Bear Branch, a critical tributary to Bennett Creek. Bear Branch is the sole remaining stream in the Lower Monocacy watershed that contains the native eastern brook trout. The eastern brook trout is the only trout native to Maryland, both brown and rainbow trout are introduced species for sport and recreational fishing.

As a result of population expansion and the roads that come along with development, climate change, non-native fish species, and chemical pollution from fertilizers and pesticides, the brook trout population is fractured and is now only in a small percentage of streams in its range. To combat this decline many regional partners are taking part in the Eastern Brook Trout Joint Venture and more locally, the Maryland Brook Trout Alliance and the Catoctin Antietam Brookie Initiative (CAMBI). These partnerships are made up of conservation groups, watershed associations, anglers, and others who are working to restore and protect the native brook trout populations in Maryland and regionally.

In support of this effort, the Potomac Conservancy utilized information from the Lower Monocacy Watershed Restoration Action Strategy (WRAS) to identify Bear Branch as a possible project location. Bear Branch is a high quality cold water stream that flows out of Sugarloaf Mountain, and since most of its watershed is completely forested and protected by Stronghold, Inc. the brook trout have been able to survive. However, like most streams in Maryland, Bear Branch is affected by roads, specifically Mt. Ephraim Road. Mt. Ephraim road—a rural gravel road-- runs parallel to bear branch for much of its reach, and crosses the creek at two locations. Where the stream and road intersect (a ford and a culvert) fish blockages occur and effectively eliminate more than a mile of trout habitat for much of the year. Additionally, stormwater runoff from Mt. Ephraim Road is currently entering directly into Bear Branch resulting in sedimentation of the stream, the loss of aquatic habitat, and damage to the road.

The Conservancy and its partners will be addressing both the blockage and the runoff issues associated with the road and the stream. By removing these fish blockages we will not only be providing additional habitat for brook trout, but also improving the drivability of Mt. Ephraim road, especially during wet conditions. Additionally, we will be studying how effective the project is by testing water quality, conducting fish surveys, and conducting a sediment reduction study with Penn State to evaluate the effectiveness of

the Best Management Practices on Mt. Ephraim Road. Once the project is completed, the Conservancy will host a workshop for transportation and conservation professionals, as well as interested anglers and citizens, on identifying roads that are having impacts on cold water fisheries, how to fix them, how to find funding for projects, and how to evaluate success.

We hope that this project will be a good demonstration for other localities and agencies on reducing the impacts of rural roads on fish habitat and water quality, positioning Frederick County and the MCWA as a leader in conservation of eastern brook trout.

For more information on this project and to find out how you can get involved or participate in the workshop contact Bryan Seipp, Director of Restoration for the Potomac Conservancy at seipp@potomac.org.