2024 MWMC Carl Weber Award – Mark Southerland

Mark is a long-serving member of MWMC and its chair during high growth period 2011-2105. He has a Ph.D. in ecology and has spent the last 30 years working as a consultant to monitor, assess, and restore ecosystems in the Chesapeake Bay watershed. He was the primary author of the EPA national program guidance on biological criteria and has been supporting healthy watersheds projects for EPA and CBP for the last 10 years. He has been the lead consultant on the Maryland Biological Stream Survey for the Maryland Department of Natural Resources (DNR) since its inception in 1993. He has supported the impaired waters, stressor identification, and TMDL programs for the Maryland Department of the Environment (MDE). Since 1996, he has helped 16 counties and cities in Maryland, Virginia, Delaware, and South Carolina develop stormwater programs and comply with the Chesapeake Bay and local TMDLs.

Mark has chaired not only the Maryland Water Monitoring Council, Patapsco Heritage Greenway, and Howard County Environmental Sustainability Boards. He is a member of the Science Council of the Maryland Academy of Sciences, Howard County Conservancy Board, Safe Skies Maryland, and Vernal Pool Partners. He is the author of legislation that ban balloon releases, allow environmental landscaping, and require bird safe buildings at state and local levels. His efforts led to MDE committing to developing statutory language for vernal pools protection.

In addition, Mark chaired and is a member of the Monitoring and Assessment Committee, Stream Restoration subcommittee, and Annual Conference Committee for MWMC.

As President of Patapsco Heritage Greenway (PHG), Mark leads this managing entity of a certified Maryland Heritage Area dedicated to preserving the natural and cultural value of the Patapsco River and its valley. PHG was founded in 1980 but at Mark's direction began collecting water quality data on the river and its tributaries in April 2021. Since September 2021, PHG has monitored 11 sites from Woodbine to Elkridge, twice a month. Parameters include air and water temperature, dissolved oxygen, pH, conductivity, nitrite, phosphorus, turbidity, and E. coli bacteria counts. Twice a year biological data is collected on the benthic macroinvertebrate community. Each year, PHG publishes a report card focused on four parameters: bacteria, conductivity, turbidity, and biology. The data are publicly available on the CMC Data Explorer website.