## **Executive Summary**

Pennsylvania Turnpike Commission MPA31-A38 Wetland and Stream Mitigation Category E

A.D. Marble & Co., Inc. completed a mitigation plan designed to compensate for impacts to wetlands and streams associated with the construction of the MPA31-A38 project within the Perkiomen Creek watershed. A.D. Marble & Co., Inc. identified opportunities for ecological uplift in proximity to the turnpike right-of-way. The selected wetland mitigation site was a former pasture and a location that had historic fill, as confirmed by LiDAR images. To restore the site to a wetland condition, A.D. Marble & Co., Inc. prepared design plans to remove up to 10 feet of historic fill, restore the springs that feed the wetland, and allow the buried hydric soils to regenerate the wetland plant community. Several existing tree rootwads were salvaged and incorporated into small depressions to simulate a windthrow environment suitable for amphibian and reptile habitat. One year after removal of the fill, over 50 species of plants were present, including many species that returned to the wetland from the previously buried seedbank.

To mitigate for stream impacts, A.D. Marble & Co., Inc. developed a plan to remove a defunct dam on private property adjacent to the turnpike and restore 2,275 linear feet of Indian Creek to a free-flowing condition. The mitigation design also removed a hazard and improved the stream and riparian environment. Implementation of the stream restoration was completed through a partnership between the PTC, American Rivers, and the PA Fish & Boat Commission. A.D. Marble & Co., Inc. developed a two-phased natural channel design to remove the dam and stabilize the horizontal and vertical geometry of the stream channel.